Chapter 21
Humanism and the Allure of Antiquity: 15th Century Italian Art

The 15th century witnessed the flourishing of a significantly new and expanded artistic culture - the Renaissance. The continued maturation of this culture was due to several factors, among them the spread of humanism, political and economic fluctuations throughout Italy, and an abundance of artistic activity.

The humanism which was presented during the 14th century had greater impact as the 15th century progressed. Increasingly, Italian elites embraced the underlying tenets of humanism - an emphasis on education, and on expanding knowledge (especially of classical antiquity), the exploration of human potential and a desire to excel, and a commitment to civic responsibility and moral duty.

For humanists, the quest for knowledge began with the legacy of the Greeks and Romans - the writings of Plato, Socrates, Aristotle, Ovid, and others. The development of literature based on a vernacular (commonly spoken) Tuscan dialect expanded the audience for humanist writings. Further the invention of movable metal type by the German Johann Gutenberg around 1445 facilitated the printing and wide distribution of books. Italians enthusiastically embraced this new printing process. Among the first books printed in Italy with this new process was Dante’s vernacular epic *Divine Comedy*. Editions produced in the many city states and republics in Italy testifies to the widespread popularity during the 15th century of Dante’s epic poem about Heaven, Purgatory, and Hell.

The humanists did not restrict their learning to antique writings. They avidly acquired information in a wide range of fields. Science (botany, geology, geography, and optics), medicine, and engineering were among these. Leonardo Da Vinci’s phenomenal expertise in many fields serves to define the modern notion of a “Renaissance man.”

Humanism also fostered a belief in individual potential and encouraged individual achievement, along with civic responsibility. Whereas people in medieval society accorded great power to divine will in determining the events that affected lives, those in Renaissance Italy adopted a more secular stance. Humanists not only encouraged individual improvement but also rewarded excellence with fame and honor. Achieving and excelling through hard work became moral imperatives.

Fifteenth century Italy witnessed constant fluctuations in its political and economic spheres, including shifting power among the city states and the rise of princely courts. Condottieri (military Leaders) with large numbers of mercenary troops at their disposal played a major role in the ongoing struggle for power. Princely courts, such as those in Urbino and Mantua, emerged as cultural and artistic centers. The association of humanism with education and culture appealed to accomplished individuals of high status, humanism had its greatest impact among the elite and powerful, such as those associated with these courts. It was these individuals who were in the best position to commission art. As a result, much of Italian Renaissance art was infused with humanist ideas. The intersection of art with humanist
doctrines during the Renaissance can be seen in the popularity of subjects selected from classical history or mythology, in the increased concern with developing perspective systems and depicting anatomy accurately, in the revival of portraiture and other self-aggrandizing forms of patronage, and in citizen’s extensive participation in civic and religious art commissions.

Because high level patronage required significant accumulated wealth, the individuals and families who had managed to prosper economically came to the fore of artistic circles. Among the best known was the Medici family, which acquired its vast fortune from banking. Although they were not a court family, the Medici used their tremendous wealth to yield great power and to commission art and architecture on a scale rarely seen, then, or since. The Medici were such lavish patrons of art and learning that, to this day, the term *Medici* is widely used to refer to a generous patron of the fine arts.

The historical context that gave rise to the Renaissance, along with the importance of patronage, accounts for the character of 15th century Italian art. In addition, the sheer serendipity of the abundance of exceedingly talented artists must be considered. Renaissance Italy experienced major shifts in artistic models, such as increased interest in perspective and illusionism. In part, these shifts were due to a unique artistic environment in which skilled artists, through industriousness and dialogue with others, forever changed the direction and perception of art.

**Florence**

**Sculpture and Civic Pride in the Renaissance**

Our discussion of 15th century Italian art begins with a competition in 1401 for a design for the east doors of the Florence baptistery. Artist and public alike considered this competition particularly prestigious because of the intended placement on the baptistery’s east side, facing the cathedral entrance. Even at this early date, many of the traits that characterized Renaissance art were evident. These include the development of new pictorial illusionism, patronage as both a civic imperative and a form of self promotion, and the esteem increasingly accorded to artists.

Andrea Pisano (1270 - 1348), unrelated to the 13th century Italian sculptors Nicola and Giovanni, had designed the south doors of the same structure between 1130 and 1335. In 1401, the Arte di Calimala (wool merchant’s guild) sponsored the competition for the second set of doors, requiring each entrant to submit a relief panel depicting the sacrifice of Isaac. This Biblical event centers on God’s order to Abraham that he sacrifice his son Isaac as a demonstration of Abraham’s devotion to God. This event was often linked with the Crucifixion of Christ. Both refer to covenants, and given that the sacrament of baptism initiates the convert into the possibilities of these covenants.

The selection of this theme may also have been influenced by historical developments. In the late 1390’s Giangaleazzo Visconti of Milan began a military campaign to take over the Italian peninsula. By 1401, when the directors of the cathedral’s artworks initiated this campaign, Visconti’s troops had virtually surrounded Florence, and its independence was in jeopardy. Despite dwindling water and food supplies, Florentine officials exhorted the public to defend the cities freedom. The population was urged to adopt the Roman republican ideal of civil and
political liberty associated with ancient Rome. The people continued their resistance and were rewarded when Visconti suddenly died, ending the invasion threat. The theme of sacrifice in the story of Abraham and Isaac was appropriate for what the sacrifices the Florentines were going through.

There were seven semifinalists from the many that entered. Only the panels of two of the two finalists, Lorenzo Ghiberti (1378-1455) and Filippo Brunelleschi (1377-1446), have survived. Both artists used the same French Gothic quatrefoil frames Andrea Pisano had used for the baptistery’s south doors, and depicted the same moment of the narrative.

Abraham’s Sacrifice
Brunelleschi’s panel shows a sturdy and vigorous interpretation of the theme with some of the emotional agitation favored by Giovanni Pisano. Abraham seems to suddenly have summoned the dreadful courage to kill his son at God’s command - he lunges forward, draperies flying, exposing Isaac's throat to the knife. Matching Abraham’s energy, the saving angel darts in from the left and grabs Abraham’s arm to stop the killing of Isaac.

Where Brunelleschi’s imbued his image with dramatic emotion, Ghiberti emphasized grace and smoothness. In Ghiberti’s panel, Abraham appears in the familiar Gothic S-curve pose and seems to complicate the act he is about to perform, even as he draws his arm back to strike. The figure of Isaac recalls Greco-Roman statuary and could be regarded as the first truly classicizing nude since antiquity. Unlike his medieval predecessors, Ghiberti revealed a genuine appreciation of the nude male form and a deep interest in how the muscular system and skeletal structure move the human body. Even the altar on which Isaac kneels displays Ghiberti’s emulation of antique models. It is decorated with acanthus scrolls of a type that commonly adorned Roman temple friezes. These classical references reflect the increasing influence of humanism.

Ghiberti’s training included both painting and goldsmithing. His composition shows a greater sense of spatial illusion than does Brunelleschi’s which emphasizes the planar orientation of the surface. Ghiberti cast his panel in only two pieces (thereby reducing the amount of bronze needed, the weight of the door and costs) no doubt impressing the committee. Brunelleschi constructed his work from several cast pieces. Ghiberti won the competition.

Ghiberti took great pride in winning the competition. He completed the 28 door panels depicting scenes from the New Testament in 1424. Church officials eventually decided to move the doors to the baptistery’s north side.

Donatello (1386-1466) was another sculptor who carried forward most dramatically the search for innovative forms capable of expressing the new ideas of the Early Renaissance. Donatello shared the humanist enthusiasm for Roman virtue and form. His greatness lies in an extraordinary versatility and depth that led him through a spectrum of themes fundamental to human experience and through stylistic variations that express these themes with unprecedented profundity and force. Donatello understood the different aesthetic conventions artists routinely
invoked at the time to distinguish their depictions of the real from those of the ideal and the earthly from the spiritual. His expansive knowledge and skill allowed him to portray this sweeping range with great facility. Further as an astute observer of human life, Donatello could, with ease, depict figures of diverse ages, ranks, and human conditions. Few artists could match this range. That Donatello advanced both naturalistic illusion and classical idealism in sculpture remains a remarkable achievement.

These qualities are evident in Donatello’s bronze relief, *Feast of Harod*, on the baptismal font in the Siena baptistery. Salome (to the right) still dances even though she already has delivered the severed head of John the Baptist, which the kneeling executioner offers to Herod. The other figures recoil into two groups. At the right, one man covers his face with his hand; at his left, Herod and two terrified children shrink back in dismay. The psychic explosion drives the human elements apart, leaving a gap across which the emotional electricity crackles. The *Feast* marked the advent of rationalized perspective space, long prepared for in the 14th century Italian art and recognized by Donatello and his generation as a way to intensify the optical reality of the action and the characterization of the actors. Donatello, using pictorial perspective, opened the space of action well into the distance, showing additional arches and figures in the background. This penetration of the panel surface by spatial illusion replaced the flat grounds and backdrop scenes of the medieval past. Roman illusionism had returned.

**Linear Perspective**

Fourteenth century Italian artists, such as Duccio and the Lorenzetti brothers, had used several devices to indicate distance, but with the invention of “true” linear perspective (a discovery attributed to Brunelleschi), Early Renaissance artists acquired a way to make the illusion of distance, on a flat surface, mathematical and certain. In effect, they thought of the picture plane as a transparent window through which the observer looks to see the constructed pictorial world. This discovery was enormously important, for it made possible what had been called the “rationalization of sight.” It brought all our random and infinitely various visual sensations under a simple rule that could be expressed mathematically.

The Renaissance artist’s interest in perspective (based on principles already known to the Greeks and Romans) reflects the emergence of science itself, which is, put simply, the mathematical ordering of our observations of the physical world. The observer’s position of looking “through” a picture into the painted “world” is precisely that of scientific observers fixing their gaze on the carefully placed or located dactum of their research. Perspective, with its new mathematical certitude, conferred a kind of aesthetic legitimacy on painting by making the picture measurable and exact. According to Plato, measure is the basis of beauty. The art of Greece was based on that belief. In the Renaissance, when humanists rediscovered Plato and eagerly read his works, artists once again exalted the principle of measure as the foundation of beautiful in fine arts. The projection of measurable objects on flat surfaces influenced the character of Renaissance painting and made possible scale drawings, maps, charts, graphs, and diagrams. This means of exact representation, laid the foundation for
modern science and technology. Mathematical truth and formal beauty joined in the minds of Renaissance artists.

The Gates of Paradise
Ghiberti was among the first to embrace the mathematical perspective and utilize it in his great work commissioned from him by church officials in 1425 for the baptistery of Florence Cathedral. Michelangelo later declared these as “so beautiful that they would do well for the gates of Paradise.” Thus the name, Gates of Paradise, has been the name by which they are known.

Our example from the Gates of Paradise is Isaac and his Sons. Here we see that Ghiberti used perspective principles used in painting but also those of sculpture. In these panels, Ghiberti achieved a greater sense of depth that seemed possible in a relief. His principle figures do not occupy the architectural space he created for them; rather the artist arranged them along a parallel plane in front of the grandiose architecture. The grandeur of the architecture reflects the dignity of the events. Ghiberti’s figure style mixes Gothic patterning of rhythmic line; classical poses and motifs; and a new realism in characterization, movement and surface detail. The medieval narrative method of presenting several episodes within a single frame persists here. The group of women in the left foreground attends the birth of Esau and Jacob in the left background. In the central background, Isaac sends Esau and his dogs to hunt game; and in the right foreground, Isaac blesses the kneeling Jacob as Rebecca looks on. In spite of all this action, there is no confusion and the composition flows from one area to another.

Ghiberti’s classicism came from his study of ancient art. According to his biography, he admired and collected classical sculpture, bronzes and coins. The figure of Rebecca was based on a Greco-Roman statuary type. The emerging practice of collecting classical art in the 15th century had much to do with the appearance of classicism in Renaissance humanistic art.

Or San Michelle was an early 14th century building that a various times housed a granary, the headquarters of the guilds, a church, and Orcagna’s tabernacle. After the construction of Or San Michelle city officials assigned each of the niches on the buildings exterior to a specific guild for decoration with sculpture of its patron saint. Most of the niches languished empty. By 1406 guilds had placed statues in only 5 of the 14 niches. Between 1406 and 1423, however, guilds filled the 9 vacant niches with statues by Donatello, Ghiberti, and Nanni di Banco. Why this flurry of activity? City officials issued a dictum in 1406 requiring the guilds to comply with the original plan. Florence was again under siege, this time by King Ladislaus (1399 - 1414) of Naples. He had taken Rome and the Papal states and threatened to take Florence when he suddenly died and Florence was spared. The guilds looked at this threat as an opportunity to do their civic duty by rallying their fellow Florentines while promoting their own importance and position in society. These sculptures thus served various purposes, and their public placement provided an ideal vehicle for presenting political, artistic, and economic messages to a wide audience. Examining a few of these sculptures will reveal the stylistic and historical significance of these works.
Four Martyred Sculptures
Among the niches filled in the early 15th century was that assigned to the Florentine guild of sculptors, architects, and masons, who chose Nanni Di Banco (1380 - 1421) to create four life-size marble statues of the guild’s martyred patron saints. The four Christian sculptors had defied an order from the Roman emperor Diocletian to make a statue of a pagan deity. In response, the emperor ordered them put to death. Because they placed their faith above all else, these saints were the perfect role models for the 15th century Florentines whom city leaders exhorted to stand fast in the face of human invasion.

Nanni’s sculptural group, Four Crowned Saints, also represented an early attempt to solve the Renaissance problem of integrating figures and space on a monumental scale. The artist’s positioning of the figures, which stand in the niche that is in but confers some separation from the architecture, furthered the gradual emergence of sculpture from its architectural setting. This process began with such works as the 13th century statues of the west font of Reims Cathedral. The niche’s spatial recess permitted a new dramatic possibility for the interrelationship of figures. By placing them in a semicircle within their deep niche and relating them to one another by their postures and gestures and by the arrangement of their draperies, Nanni arrived at a unified spatial composition. Further, a remarkable psychological unity connects these unyielding figures, whose bearing expresses the discipline and integrity necessary to face adversity. While the figure on the right speaks, pointing to his right, the two men opposite listen and the one next to him looks out into space, pondering the meaning of words. Later Renaissance artists, particularly Leonardo, exploited this technique of reinforcing the formal unity of the figural group with psychological cross references.

In Four Crowned Saints, Nanni also displayed a deep respect for and a close study of Roman portrait statues. The emotional intensity of the faces of the two inner saints owes much to the portraits of the Roman emperors of the third century, and the bearded heads of the two outer saints with second century imperial portraiture. Roman models served as inspiration; by Renaissance artists did not simply copy them. Rather, they strove to interpret or offer commentary on their classical models in the manner of humanist scholars dealing with classical texts.

Donatello
Donatello also incorporated Classical Greek and Roman principles in his Saint Mark commissioned for Or San Michelle by the guild of linen drapers and completed in 1413. In this sculpture, Donatello took a fundamental step toward depicting motion in the human figure by recognizing the principle of weight shift.

As the saint’s body “moves,” its drapery “moves” with it, hanging and folding naturally from and around bodily points of support so that the viewer senses the figures as a draped nude, not simply an integrated column with arbitrarily incised drapery. This separates Donatello’s Saint Mark from all medieval portal statuary. It was the first Renaissance figure whose voluminous drapery did not conceal but accentuated the movement of arms, legs,
shoulders, and hips. This development further contributed to the sculpted figure’s independence from its architectural setting.

Elevated Figures
Between 1416 and 1435, the officials in charge of cathedral projects commissioned from Donatello five statues for niches of Giotto’s campanile adjacent to the Florence Cathedral, a project that had begun in the preceding century. These figures were not meant to be seen from just above eye level, as the figures at Or San Michelle, rather, they were intended to be seen from niches 30 feet above the ground. At that distance, delicate descriptive details (hair, garments, and features) cannot be recognized readily. The figures thus required massive garment folds that could be read from afar and a much broader summery treatment of facial and anatomical figures. In addition, he took into account the elevated position of his figures and, with subtly calculated distortions, created images that were at once realistic and dramatic when seen from below.

The most striking of the five figures is a prophet who is probably Habakkuk but is generally known by the nickname Zuccone, or “pumpkin head”. The figure shows Donatello’s power of characterization. The artist represented all his prophets with a harsh direct realism, reminiscent of the Roman veristic portraits of the Republican period. Donatello’s prophet wears an awkwardly draped and crumbled mantle with deeply undercut folds - a far cry from the majestic prophets of medieval portals. The head discloses fierce personality; the deep set eyes glare from the furrowed brows, the nostrils flare, and the broad mouth is agape, as if the prophet were in the very presence of disasters that would prompt dire warnings.

Painting, Perspective, and Patronage
The International Style, the dominant style in painting around 1400 that persisted well into the 15th century, developed side by side with new styles. Gentile Da Fabriano (1370 - 1427) produced a work representative of the International Style - Adoration of the Magi, an altarpiece in the sacristy of the church of Santa Trinita in Florence. Gentile’s patron was Palla Strozzi, the wealthiest Florentine of his day, the altarpiece is testimony to Strozzi’s lavish tastes. Gorgeous surfaces and sumptuous costumes, along with courtly pageantry characterize the work. Although the style is fundamentally Late Gothic, Gentile inserted striking bits of radical naturalism. The animals are depicted from a variety of angles with foreshortening, as are the human figures. On the right side of the predella, Gentile placed the Presentation scene in a “modern” architectural setting. On the left side of the predella, he painted what may have been the very first nighttime Nativity with the central light source - the radiant Christ child - introduced into the picture itself. Gentile demonstrated that he was not oblivious to contemporary experimental trends and that he could blend naturalistic and inventive elements skillfully and subtly into a traditional composition without sacrificing Late Gothic coloristic splendor.

Revolutionizing Representation
A leading innovator in early 15th century painting was Tommaso Guidi (or Tommaso di ser Giovanni), known as Masaccio (1401 - 1428). Although his presumed teacher Masalino da
Panicale, had worked in the International Style, Masaccio moved suddenly, within the short span of six years, into wide open and unexplored territory. Most art historians recognize no other painter in history to have contributed so much to the development of a new style in so short a time as Masaccio, whose creative career was cut short at age 27. Masaccio was the artistic descendant of Giotto, whose calm, monumental style he revolutionized with a whole new repertoire of representational devices that generations of Renaissance painters later studied and developed. Masaccio also knew and understood the innovations of his contemporaries, Donatello and Brunelleschi, and he introduced new possibilities for both form and content.

The frescoes Masaccio painted in the Brancacci Chapel of Sant Maria del Carmine in Florence provide excellent examples of his innovations. In Tribute Money, painted shortly before his death, Masaccio depicted a seldom represented narrative from the Gospel of Matthew (17:24-27). As the tax collector confronts Christ at the entrance of the Roman town of Capernaum, Christ directs Saint Peter to the shore of the Sea of Galilee. There, as foreseen by Christ, Peter finds the half drachma tribute in the mouth of a fish and returns to pay the tax. Art historians have debated the reason for the selection of this particular Biblical narrative. Most scholars believe that Felice Brancacci, Owner of the family chapel, commissioned the fresco. They have suggested that Tribute Money, in which Christ condones taxation, served a commentary on the catasto (state income tax) whose implementation Florentines were considering at the time. However, Brancacci’s considerable wealth makes it unlikely he would have supported this. Moreover, this fresco’s placement in a private family chapel meant the public had only limited access, making it ill suited for public statements. Masaccio presented this narrative in three episodes within the fresco, reminiscent of the medieval practice. In the center, Christ, surrounded by his disciples, tells Saint Peter to retrieve the coin from the fish, while the tax collector stands in the foreground with his back to the viewers and hand extended. At the left, in the middle distance, Saint Peter extracts the coin from the fish’s mouth. On the right he thrusts the coin into the tax collectors hand. Masaccio’s figures recall Giotto’s in their simple grandeur, but they convey greater psychological and physical credibility. Masaccio realized the bulk of his figures through modeling not with a flat, neutral light lacking an identifiable source but with a light coming from a specific source outside the picture. The light strikes the figures at a angle, illuminating parts of the solids that obstruct its path and leaving the rest in deep shadow. This chiaroscuro gives the illusion of deep sculpted relief. Between the extremes of light and dark, the light appears as a constantly active but fluctuating force highlighting the scenes in various degrees, almost a tangible substance independent of the figures. In Giotto’s frescos, light is revealed only by the modeling of the masses. In Masaccio's, light has its own nature, and the masses are visible only because of its direction and intensity. The viewer can imagine the light as playing over forms - revealing some and concealing others, as the artist directs it.

Masaccio’s figures express bodily structure and movement; they suggest bones, muscles, and the pressures and tensions of joints. The Renaissance biographer Giorgio Vasari said, “The works made before his [Masaccio’s] day can be said to be painted, while his are living, real, and natural.”
Masaccio’s arrangement of the figures is equally inventive. They do not appear as a stiff screen in the front planes. Instead, the artist grouped them in circular depth around Christ, and he placed the whole group in a spacious landscape, rather than a confined stage of earlier frescos. The group itself generates the foreground space that the architecture on the right amplifies. Masaccio depicted the architecture in one point perspective, locating the vanishing point, where all the orthogonals converge, to coincide with Christ’s head. **Aerial perspective**, the diminishing of light and clarity as the distance increases, unites the foreground with the background. Although Roman painters used aerial perspective, medieval artists abandoned it. Thus it virtually disappeared from art until Masaccio and his contemporaries rediscovered it, apparently independently. They came to realize that the light and air imposed between viewers and what they see are two parts of the visual experience called “distance.”

Another example from Masaccio is **Expulsion of Adam and Eve from Eden**. It was painted in an awkwardly narrow space at the entrance to the Brancacci Chapel. Expulsion again shows Masaccio’s innovations. Strong slanted light source, chiaroscuro, aerial perspective and so on.

Masaccio’s **Holy Trinity** in Santa Maria Norvella, whose date is disputed, embodies two principle Renaissance principles. One is realism based on observation, and the other is the application of mathematical principles to pictorial organization in the new science of perspective. The artist painted the composition on two levels of unequal height. Above in a coffered barrel-vaulted chapel reminiscent of a Roman triumphal arch, the Virgin Mary and Saint John appear on either side of the crucified Christ. God the Father emerges from behind Christ, supporting the arms of the cross. The Dove of the Holy Spirit hovers between God’s head and Christ’s head. Masaccio also included portraits of the donors of the painting, Lorenzo Lenzi and his wife, who kneel just in front of the pilasters that enframe the chapel. Below the altar – a masonry insert in the depicted composition - the artist painted a tomb containing a skeleton. An inscription in Italian painted above the skeleton reminds the spectator that “I was once what you are, and what I am you will become.

Although the subject matter of Holy Trinity may not be dramatically innovative, the illusionism of Masaccio’s depiction is. He brilliantly demonstrated the principles of Brunelleschi’s perspective. This work is so much in the Brunelleschian manner that some historians have suggested that Brunelleschi may have collaborated with Masaccio. Masaccio placed the vanishing point at the foot of the cross. With this point at eye level, spectators look up at the Trinity and down at the tomb. About five feet above floor level, the vanishing point pulls the two views together, creating the illusion of an actual structure that transects the wall’s vertical plane. Whereas the tomb appears to project forward into the church, the chapel recedes visually behind the wall and appears as an extension of the spectator’s space. The adjustment of the pictured space to the position of the viewer was a first step in the development of illusionistic painting, which fascinated many artists of the Renaissance and the later Baroque period. Masaccio was so exact in his metrical proportions that it is actually possible to calculate the dimensions of the chapel (for example the span of the painted vault is seven feet; the depth of the chapel, nine feet)Thus, he achieved not only a successful illusion but also a rational
measured coherence that is responsible for the unity and harmony of this monumental composition.

Brunelleschi - Early 15th Century Architecture
Filippo Brunelleschi’s ability to codify a system of linear perspective derived in part from his skill as an architect. His biographer Manetti, reported that Brunelleschi turned to architecture out of disappointment over the loss of the baptistery commission. He continued to work as a sculptor for several years and received a commission for sculpture as late as 1416. As the 15th century progressed, Brunelleschi’s interest turned increasingly to architecture. Several trips to Rome (the first in 1402 with his friend Donatello), where he was captivated by the Roman ruins, heightened his fascination with architecture. It may well be in connection with his close study of Roman monuments and his effort to make an accurate record of what he saw that Brunelleschi developed his revolutionary system of geometric linear perspective. It made him the first acknowledged Renaissance architect.

The Dome
Brunelleschi’s broad knowledge of Roman construction principles, combined with an analytical and inventive mind, permitted him to solve an engineering problem that no other 15th century architect could solve. The challenge was the design and construction of a dome for the huge crossing of the unfinished Florence Cathedral. The problem was staggering; the space to be spanned (140 feet) was much too wide to permit construction with the aid of traditional wooden centering. Nor was it possible (because of the crossing plan) to support the dome with buttressed walls. Brunelleschi began to work on the problem about 1417. In 1420, officials overseeing cathedral projects awarded Brunelleschi and Ghiberti a joint commission. Ghiberti soon retired from the project and left the job to Brunelleschi.

Brunelleschi disregarded traditional building methods and devised new ones but also invented much of the machinery necessary for the job. Rather than design a hemispheric shape of Roman domes, Brunelleschi raised the center of his dome and designed it around an ogival (pointed arch) section, which is inherently more stable because it reduces the outward thrust around the dome’s base. To minimize the structure’s weight, he designed a relatively thin double shell (the first in history) around a skeleton of 24 ribs. The eight most important are visible on the exterior. Brunelleschi anchored the structure at the top with a heavy lantern, built after his death but from his design.

Even though Brunelleschi’s dome was an incredible feat and engineering marvel, he arrived at the solution to his most critical structural problem through what were essentially Gothic building principles. The dome, which had to harmonize with a century old building, does not really express Brunelleschi’s architectural style that was apparent in later works.

Modular Design
San Lorenzo and Santo Spirito, the two basilican churches Brunelleschi built in Florence, echo the clarity and classically inspired rationality that characterized much of his architecture. Of the two, the later Santo Spirito, begun around 1436 and completed, with some changes, after
Brunelleschi’s death, shows the architects mature style. Brunelleschi laid out this cruciform building in either multiples or segments of the dome covered crossing square. The aisles, subdivided into small squares covered by shallow saucer shaped vaults run all the way around the flat roofed central space. They have the visual effect of compressing the longitudinal design into a centralized one, because the various aspects of the interior resemble one another, no matter where the observers stand. The original plan also called for the aisles to extend across the front of the nave as well. The appearance of the exterior walls also was modified later when the recesses between the projecting semicircular chapels were filled in to convert the original highly sculpted wall surface into a flat one.

The major features of the interior are much as Brunelleschi designed them. He identified a mathematical unit that served to determine dimensions of every aspect of Santo Spirito. This unit repeated throughout the interior creates a rhythmic harmony. The nave is twice as high as it is wide. The arcade and clerestory are of equal height, which means the height of the arcade equals the nave’s width; and so on. The austerity of the decor enhances the restful atmosphere. Brunelleschi left no room for expansive wall frescos that would only interrupt the clarity of his architectural scheme. Brunelleschi’s design echoes Roman calculated logic and stands in sharp contrast with the soaring drama and spirituality of the naves of Gothic churches. Santo Spirito fully expresses the new Renaissance spirit that placed faith in reason rather than emotion.

Brunelleschi’s centralized effects were even better suited to more compact central plan style buildings such as the pantheon. The Pazzi Chapel presented Brunelleschi with an opportunity to more effectively apply his designs than did a basilican church. The chapel was the Pazzi families’ gift to church of Santa Croce in Florence and served as Santa Croce’s chapter house. Brunelleschi began to design the Chapel around 1440. It was not completed until the 1460’s, long after his death. The exterior probably does not reflect Brunelleschi’s original design. The loggia, admirable as it is, seems to have been added as an afterthought, perhaps by the sculptor, architect Giuliano da Maiano (1432 - 1490). Historians have suggested that the local chapter of Franciscan monks who held meetings in the chapel needed the expansion. Behind the loggia stands one of the first independent Renaissance buildings conceived as a central plan structure. Although the plan is rectangular, rather than square or round, the architecture placed the emphasis on the central dome covered space. The short barrel vault sections that brace the dome on two sides appear to be incidental appendages. The interior is done in gray stone, so called pietra serena (serene stone), which stands out against the white stuccoed walls and crisply defines the modular relationships of plan and elevation. As at Santo Spirito, Brunelleschi used a basic unit that allowed him to construct a balanced harmonious and regularly proportioned space. Medallions in the dome’s pendentives consist of glazed terracotta reliefs representing the Four Evangelists. These medallions, together with the images of the Twelve Apostles on the pilaster framed wall panels, add striking color accents to the tranquil interior.

The Medici as Patrons
Early in the 15th century, Giovanni de Medici (1360 - 1429) had established the family fortune. Cosimo (1389 - 1464) expanded his family’s financial control, which led to considerable
political power as well. This consolidation of power did not go unchallenged. In the early 1430’s, after a power struggle with other wealthy families, the Medici’s were expelled from Florence. In 1434, the Medici returned, but Cosimo, aware of the importance of public perception, attempted to maintain a lower profile and wield his power from behind the scenes. In all probability, this attitude accounted for Cosimo’s rejection of Brunelleschi’s design for the Medici residence because he found it too imposing and ostentatious to be politically wise. The commission was eventually awarded to Michelozzo Di Bartolommeo (1396 - 1472), a young architect who had been Donatello’s collaborator on several sculptural enterprises. Brunelleschi’s greatly architectural style influenced Michelozzo and his principles can be seen in the final work.

Later purchased by the Riccardi family (hence the Palazzo Medici-Riccardi), they expanded the facade’s length by almost double in the 18th century. Both the original and extended structure are simple and massive. Heavy rustication on the ground accentuates its strength. The building block was divided into stories of decreasing height by using a string of long unbroken stringcourses (horizontal bands), which unifies the whole. Dressed stone on the upper levels produces a smoother surface with each successive story and modifies the severity of the ground floor. The building thus appears progressively lighter as the eye moves upward. The extremely heavy cornice, acts as a lid to the building reversing the effect. The cornice was influenced by Roman structures such as “Fortuna Virilis”.

The Palazzo Medici-Riccardi is built around an open colonnaded court, which clearly shows Michelozzo’s indebtedness to Brunelleschi. The round arched arcade, although massive in proportions, closely resembles Brunelleschi’s buildings. This internal court surrounded by an arcade was the first of its kind and influenced a long line of descendants in Renaissance domestic architecture.

The Medici
The Medici were avid humanists. Cosimo began the first public library since the ancient world, and historians estimate that in some 30 years he and his descendants expended the equivalent of 20 Million for manuscripts and books. The Medici also became collectors of art. Scarcely a great architect, painter, sculptor, philosopher, or humanist scholar escaped the Medici’s notice.

Cosimo was the model of a cultivated humanist. His grandson, Lorenzo (1449 - 1492), called “the Magnificent,” was a talented poet himself. He gathered about him a galaxy of artists and gifted men. He extended the library and began an academy for instructing artists.

Poalo Uccello
Poalo Uccello (1397 - 1475), a Florentine painter trained in the International Style, received a commission from the Medici to produce a series of panel paintings. Uccello painted The Battle of San Romano, one of three wood panels (all of the same title) to decorate Lorenzo’s bedchamber. The scenes commemorate the Florentine victory over the Sienese in 1432. In the left panel which is illustrated, Niccolo da Tolentino, friend and supporter of Cosimo, leads the charge against the Sienese. The painting focuses on Tolentino’s military exploits, who was a
friend of the Medici’s and his subsequent death may have been due to that friendship. A reference to the Medici’s is in symbolic form. The bright orange fruit (appropriately placed) behind the unbroken and sturdy lances on the left were known as mela medica (medicinal apples). The name Medici means “doctor”, with the fruit as one of many fitting symbols for the family.

Uccello’s obsession with perspective appealed to the Medici. Humanists were intrigued by perspective systems because it represented the rationalization of vision. The Battle of San Romano compositionally recalls the processional splendor of Gentile Da Fabriano and other International Stylists. But in contrast, Uccello’s world is constructed from immobilized solid forms. He foreshortened broken spears, lances, and a fallen soldier and carefully placed them along the converging orthogonals of the perspective system to create a base plane like a checkerboard, on which he then placed the larger volumes in measured intervals. This diligently created space recedes to a landscape that resembles the low cultivated hillsides between Florence and Lucca. The rendering of three dimensional forms, used by other painters for representational and expressive purposes, became a preoccupation for Uccello. For him it had a magic of its own, which he exploited to satisfy his inventive and original imagination.

Donatello’s David
The Medici acquired art from the most esteemed artists. Donatello was deemed worthy of receiving one of their coveted commissions. The bronze statue David created sometime between the late 1420’s and late 1450’s by Donatello for the Palazzo Medici courtyard was the first free standing nude statue since ancient times. The nude, as such, proscribed in the Christian Middle Ages as both indecent and idolatrous, had shown only rarely - and then only in Biblical or moralizing contexts, such as the story of Adam and Eve, or descriptions of sinners in Hell. Donatello reinvented the classical nude, even though his subject was not a pagan god, or hero, or athlete but the biblical David, the young slayer of Goliath and the symbol of the independent Florentine republic. David possesses the relaxed classical contrapposto stance, proportions and sensuous beauty of Greek Praxitelean gods, all qualities absent from medieval figures. This appealed to the Medici's.

Verrocchio
Another David sculpture produced by one of the most important sculptors during the second half of the century, Andrea Del Verrocchio (1435 - 1488), reaffirms this identification of the Medici with Florence. A painter as well as a sculptor, Verrocchio directed a flourishing bottega (studio shop) in Florence that attracted many students including Leonardo Da Vinci. Verrocchio like Donatello had a broad repertoire. His David contrasts strongly in its narrative realism with the quiet, aesthetic classicism of Donatello’s David. Verrocchio’s David is a sturdy wiry young apprentice clad in a leathern doublet who stands with a jaunty pride. As in Donatello’s version, Goliath’s head lies at David’s feet. He poses like a hunter with his kill. The easy balance of weight and the lithe, still thinly adolescent musculature, with prominent veins, show how closely Verrocchio read the Biblical text and how clearly he knew the psychology of brash and confident young men.
Lornzo and Giuliano de Medici eventually sold Verrocchio’s bronze David to the Florentine signoria (a governing body) for placement in the Palazzo della Signoria. After the Medici were expelled from Florence, city officials appropriated Donatello’s David for civic use and moved it to the Palazzo as well.

Pollaiuolo
Closely related in stylistic intent to Verrocchio’s work is that of Antonio Pollaiuolo (1431 - 1498). Pollaiuolo, who is also an important painter and engraver, received a Medici commission in the 1470’s to produce a small scale sculpture, Hercules and Antaeus. In contrast to the placid presentation of Donatello’s David, Hercules and Antaeus exhibits the stress and strain of the human figure in violent action. This sculpture departs dramatically from the convention of frontality that had dominated statuary art during the Middle Ages and the Early Renaissance. Not quite 18 high, Hercules and Antaeus embodies the ferocity and vitality of elemental physical conflict. The group illustrates the Greek myth of a wrestling match between Antaeus (Antaios), a giant and son of Earth, and Hercules (Herakles). As seen earlier, Euphronios represented this story on an ancient Greek face. Each time Hercules threw him down, Antaeus sprang up again, his strength renewed by contact with the earth. Finally, Hercules held him aloft, so that he could not touch the earth, and strangled him around the waist. Pollaiuolo depicted the final excruciating moments of the struggle - the straining and cracking of sinews, the clenched teeth of Hercules, and the kicking and screaming of Antaeus. The figures intertwine and interlock as they fight, and the flickering reflections of light on the dark gouged bronze surface enhance the agitated movement. The subject matter reflects the Medici’s preference for humanist imagery. Hercules had been represented on Florence’s state seal since the end of the 13th century. As was demonstrated by the commissions of the Davids, the Medici clearly embraced every opportunity to associate them with the glory of the Florentine republic, surely claiming much credit for it.

Battling Nudes
Although not commissioned by the Medici, Pollaiuolo’s engraving Battle of the Ten Nudes further demonstrates the artist’s interest in the realistic presentation of human figures in action. Donatello and other dealt with the problem of rendering human anatomy at rest or restrained, Pollaiuolo took delight in showing violent action. He conceived the body as a powerful machine and liked to display its mechanisms, such as, knotted muscles and taut sinews that activate the skeleton as levers. To show this, Pollaiuolo depicted his figures as lean and without any apparently 0% body fat. His Battle of the Ten Nudes shows this figure type in a variety of poses and from numerous viewpoints, allowing Pollaiuolo to basically “show off.” His figures seem to be stiff and frozen even though they are engaged in violent battle. The reason that the figures appear this way is that they are all shown with each muscle at maximum tension. Not until several decades later did an even greater anatomist, Leonardo, observe that only part of the bodies muscle groups are involved in any one action, while the others are relaxed.
Pollaiuolo used engraving for the **Battle of Ten Nudes**. This medium was probably developed by northern European artists around the middle of the 15th century. German artists preferred cross hatching to develop value and define form. Italian engravers preferred parallel hatching. Northern artists tended to describe surfaces of forms rather than their underlying structures; whereas the Italian method was better suited for the anatomical studies that preoccupied Pollaiuolo and his Italian contemporaries.

**Botticelli**

Sandro Botticelli (1444 - 1510) remains among the best known artists who produced works for the Medici. One of his most famous works is his **Birth of Venus** that was painted in tempera on canvas. A poem on that theme by Angelo Poliziano, one of the leading humanists of the day, inspired Botticelli to create this lyrical image. Zephyrus (the west wind) blows Venus, born of the sea foam and carried on a cockle shell, to her sacred island, Cyprus. There the nymph Pomona runs to meet her with a brocaded mantle. The lightness and bodilessness of the winds move all the figures without effort. Draperies undulate easily in the gentle gusts, perfumed by rose petals that fall on the whitecaps. Botticelli’s nude presentation of the Venus figure was in itself an innovation. The nude was proscribed during the Middle Ages. The artist’s use of an ancient Venus statue as a model could have drawn the charge of paganism and infidelity. But in the more accommodating Renaissance culture and under protection of the powerful Medici, the depiction went unchallenged.

Botticelli’s style is clearly distinct from those artists looking to the natural world for rational and empirical order to comprehend humanity. His elegant and beautiful style seems to have ignored all of the scientific knowledge experimental art had gained. His style paralleled the allegorical pageants that were staged in Florence as chivalric tournaments but were structured around illusions to classical mythology. This same trend was also evident in poetry of the 1470’s and 1480’s. Ultimately, Botticelli created a style of visual poetry, parallel to the love poetry written by Lorenzo de Medici. His painting possesses a lyricism and courtliness that appealed to cultured patrons such as the Medici.

Careful business men that they were, the Medici were not sentimental about their endowment of art and scholarship, Cosimo acknowledged that his good works were not only for the honor of God but also to construct his own legacy. Despite this self interest, the Medici’s demonstrated a sustained and sincere love of learning.

**Portraiture**

Given the increased emphasis on individual achievement and recognition that humanism fostered, it is not surprising that portraiture enjoyed a revival in the 15th century. Commemorative portraits of the deceased were common, and patrons commissioned portraits of themselves. The profile was customary in Florence until about 1470, when three-quarter and full face portraits began to replace it. Bust length portraits based on Roman precedents also became prominent.
In the last decade of the 15th century, Sandro Botticelli painted a nearly full face, *Portrait of a Youth*. Painters in Northern Europe popularized three-quarter and full face views earlier in the century. These poses allowed greater exploration of the subject’s character, although Italian artists and patrons continued to favor an impersonal formality that concealed the private psychological person. Botticelli broke with that pattern in this portrait. The delicate pose, the graceful tilt of the head, the side long glance, and the elegant hand gesture compose an expression that is both musing and insinuating. Botticelli was the pupil of Fra Filippo Lippi, who we will see later. Lippi taught Botticelli the method of drawing firm pure outline with light shading within the contours. The effect is apparent in the portraits explicit and elegant form. Art historians recognize him as one of the great masters of line.

**Monumental Portraits**

In 1443, Donatello left Florence for Northern Italy to accept a rewarding commission from the republic of Venice to create a commemorative monument in honor of the recently deceased Venetian condottiere Erasmo da Narni nicknamed *Gattamelata* ("honeyed cat," a word play on his mother’s name.) City officials asked Donatello to portray Gattamelata on horse back in a statue to be erected in the square of Sant Antonio in Padua. **Though other equestrian statues had been erected in Italy in the late Middle Ages, Donatello’s Gattamelata is the first to rival the grandeur of the mounted portraits of antiquity, such as Marcus Aurelius, that Donatello would have seen.** The figure stands high on a lofty elliptical base, set apart from its surroundings and liberated from architecture. Donatello did not represent the Venetian commander as superhuman and larger than life size. The officer dominates the mighty steed by force of character rather than size. Together, man and horse convey an overwhelming image of irresistible strength and unlimited power. Donatello reinforced this impression by placing the horses left hoof on an orb, signifying domination over the earth. The rider displays a face of dauntless resolution and unshakable will, the Renaissance individualist who, by his own skill and qualities could rise to a commanding position in the world.

**Verrocchio’s** equestrian of another condottiere of Venice, *Bartolommeo Colleoni*, provides a counterpoint to Gattamelata. Eager to garner the fame brought by Donatello’s statue, Colleoni provided for the statue in his will. Both statues were made after the deaths of the subjects, so neither artist personally knew their subject. The result is a fascinating difference in the interpretation of demeanor of the professional warriors. Verrocchio placed the statue of the bold equestrian general on a pedestal higher than that used by Donatello so that viewers could see the dominating figure from all major approaches to the piazza. In contrast with the near repose of Gattamelata, the Colleoni horse moves with a prancing stride, arching and curving its powerful neck, while the commander seems suddenly shift his whole weight to the stirrups and rise from the saddle with a violent twist of the body. The artist depicted the figures with exaggerated tautness to convey brute strength.

**Summarizing Florentine Art**

*Domenico Ghirlandaio (1449 - 1494)* Giovanni Tornabuoni, one of the wealthiest Florentines of his day, commissioned a series of frescos from Ghirlandaio depicting scenes from the lives of the Virgin and Saint John the Baptist for the choir of Santa Maria Norvella. In the illustrated
painting **Birth of the Virgin**, Mary’s mother, Saint Anne, reclines in a palace room embellished with fine **intarsia** (*wood inlay*) and sculpture, while midwives prepare the infant’s bath. From the left comes a grave procession of women led by a young Tornabuoni family member, Ludovica, Giovanni’s daughter. Ludovica holds a prominent place in the composition, as she no doubt did in society. Her appearance in the painting is conspicuous evidence of the secularization of sacred themes - commonplace in art at this time. Artists depicting persons of high rank not only as present in Biblical dramas but also, as shown here, stealing the show from the saints.

**Ghirlandaio** composition epitomizes the achievements of Early Renaissance painting: clear spatial representation; statuesque, firmly constructed figures; and rational order and logical relations among these figures and objects

**Further Developments in Architecture**

Leon Battista Alberti (1404 - 1472) entered the profession of architecture late in life, yet made some incredible contributions to architecture. He was the first to seriously study the treatise on architecture written by Vitruvius. His knowledge of it, combined with his own investigations, made him the first Renaissance architect to understand Roman architecture in depth. Alberti’s wrote his own influential work *De re aedificatoria* (written about 1450, published 1486), although inspired by Vitruvius, contains much original material. Alberti advocated a system of ideal proportions and argued the central plan was the ideal form for a Christian church. He also considered incongruous the combination of column and arch, which had persisted since Roman times. By arguing that the arch is a wall opening that should be supported only by a section of wall (a pier), not by an independent sculptural element (a column), Alberti (with few exceptions) disposed of the medieval arcade used for centuries.

Alberti’s own architectural style represents a scholarly application of classical elements to contemporary buildings. His **Palazzo Rucellai** in Florence probably dates from the mid 1450s. Alberti organized the facade built over a number of medieval houses. Flat pilasters which support full entablatures, define each story of the Palazzo Rucellai. A classical cornice crowns the palace. The rustication of the wall surfaces between the smooth pilasters is subdued and uniform. Alberti created the sense that the structure becomes lighter in weight toward the top by adapting the ancient Roman manner of using different capitals on each story. He chose **Tuscan** (the Etruscan variant of the Greek Doric order) for the ground floor, **Composite** (the Roman combination of Ionic volutes with the acanthus leaves of the Corinthian) for the second story, and **Corinthian** for the third floor. Alberti modeled his facade on the Roman ruin the Colosseum but did not copy it. On the Colosseum’s facade the capitals employed are from the bottom up; Tuscan, Ionic, and Corinthian. Moreover, Alberti adapted the Colosseum’s varied surface to a flat facade which does not allow for the deep penetration of the buildings mass that is so effective on the Roman structure. By converting the Colosseum’s engaged columns into shallow pilasters that barely project from the wall. Alberti created a large meshed linear net. Stretched tightly across the front of his building, it not only unifies the three levels but also emphasizes the walls flat two dimensional quality.
Santa Maria Norvella
The Rucellai family also commissioned from Alberti the design for the facade of the 13th century Gothic church Santa Maria Norvella in Florence. Here Alberti took his clue from a Pre-Gothic medieval design; that of San Miniato al Monte. Following this Romanesque model, he designed a small, pseudo classical, pediment capped temple font for the facade’s upper part and supported it with a broad base of pilaster enframed arcades that incorporate the six tombs and three doors of the Gothic building. But in the organization of these elements, Alberti took a long step beyond the Romanesque planners. The height of Santa Maria Norvella (to the pediment tip) equals its width so that the entire facade can be inscribed in a square (the left diagram on our slide). Throughout the façade, Alberti defined areas and related them to one another in terms of proportions that can be expressed in simple numerical ratios (1:1, 1:2, 1:3, 2:3, and so on). For example the upper structure can be encased in a square one fourth the size of the main square. (see diagram on the right). The cornice of the entablature that separates the two levels halves the major square so that the lower portion of the building is a rectangle twice as wide as it is high. Further, the areas outlined by the columns on the lower level are squares with sides about one third the width of the main unit. In his treatise, Alberti wrote at length to promote the necessity of such harmonic relationships for designing beautiful buildings.

Alberti shared this conviction with Brunelleschi, and this dependence on classically derived mathematics distinguished their architectural work from that of their medieval predecessors. They believed in the eternal and universal validity of numerical ratios as the source of beauty. In this respect, Albert and Brunelleschi revived the true spirit of the High Classical age of ancient Greece, as epitomized by the sculptor Polykleitos and the architect Iktinos, who produced canons of proportions for the perfect statue and the perfect temple. In addition to emulating the past through ratios and proportions there was other motivations for Alberti to turn to mathematics in his quest for beauty. His contemporary, the Florentine humanist Giannozzo Manetti, had argued that Christianity itself possessed the order and logic of mathematics. In his 1452 treatise, On the Dignity and Excellence of Man, Manetti stated that Christian religious truths were as self evident as mathematical axioms.

The Santa Maria Norvella facade was an ingenious solution to a difficult design problem. On one hand, it adequately expressed the organization of the structure attached to it. On the other hand, it subjected preexisting and quintessentially medieval features, such as the large round window on the second floor, to a rigid geometrical order that instilled a quality of classical calm and reason. This facade also introduced a feature of great historical consequence - the scrolls that simultaneously unite the broad lower and narrow upper level and screen the sloping roofs over the aisles. With variations, such spirals appeared on literally hundreds of church facades throughout the Renaissance and Baroque periods.

Images of Piety and Devotion
For many artists in the 15th century humanist concerns were not of primary consideration. The art of Fra Angelico (1400 - 1455) was among those whose art focused on serving the Catholic Church. In the late 1430’s, Fra Angelico was asked by the abbot of the Dominican monastery
of San Marco to produce a series of frescos for the monastery. Those in San Marco had
dedicated their lives to prayer and work, and the religious compound was mostly spare and
austere to encourage the monks to immerse themselves in their devotional lives. Fra Angelico’s
frescos illustrated the 13th century text **The Way of Prayer**, which describes the nine ways of
prayer used by Saint Dominic, the order’s founder.

The **Annunciation**, which appeared at the top of the stairwell leading to the friar’s cells. Fra
Angelico presented the scene with the Virgin Mary and the Archangel Gabriel with simplicity
and serenity. The figures appear in a plain loggia, and the artist painted all parts with a pristine
clarity. As an admonition to heed the devotional function of the images, Fra Angelico included
a small inscription on the image that reads “As you venerate, while passing before it, this figure
of the intact Virgin, beware lest you omit to say Hail Mary.” The paint reflects Fra Angelico’s
simple and humble character.

During the later half of the 15th century, increasing demand for devotional images for private
chapels and shrines contributed to the growing secularization of traditional religious subject
matter. **Luca Della Robbia (1435 -1525)** discovered a way to produce Madonna images so that
persons of modest means could buy them. His discovery around 1430, involving the
application of vitrified of heat fused potter’s glazes to sculpture led to his production in quantity
of glazed terracotta reliefs. Inexpensive, durable, and decorative, they became extremely
popular and were the basis of a flourishing family business with his nephew, Andrea, and his
two sons, Giovanni and Girolamo. The carried on the business well into the 16th century;
people still refer to the glazed reliefs as “della Robbia ware.”

An example of Luca’s specialty is the **Madonna and Child**, commissioned by the guild and set
into the wall at Or San Michelle. The figures appear in a **tondo** (a circular painting of relief
sculpture), a format popular with painters and sculptors in the later part of the century. The
high key color introduced to the sculpture, add a certain worldly gaiety to the theme. The
imagery has lost its somber theme from the Byzantine past and is rather inviting and relating to
the masses. The distance between the observed and the observer had vanished.

**The Establishment of Papal Authority**
Production of religious art extended beyond Florence. The Pope’s presence in Rome ensured
an artistic scene. Between 1481 and 1483, Pope Sixtus IV summoned a group of artists,
including Botticelli, Ghirlandaio, and Luca Signorelli, to Rome to decorate with frescos the
walls of the newly completed Sistine Chapel. Pietro Vannucci, known as
**Perugino (1450 - 1523)**, was among this group and painted **Christ Delivering the Keys of the
Kingdom to Saint Peter**. The papacy had, from the beginning, based its claim to infallible and
total authority over the Roman Catholic Church on this Biblical event. In Perugino’s vision,
Christ hands the keys to Saint Peter, who stands amidst an imaginary gathering of the Twelve
Apostles and Renaissance contemporaries. These figures occupy the apron of a great stage
space that extends into the distance to a point of convergence in the doorway of the central plan
temple. Figures in the middle distance complement the near group, emphasizing its density and
order by their scattered arrangement. The duplicate triumphal arches in the corners of the
piazza are closely modeled on the arch of Constantine. Although an anachronism in a painting depicting a scene from Christ’s life, the arches remind viewers of the close ties between Constantine and Saint Peter and of the great basilica the first Christian emperor built over Saint Peter’s tomb in Rome.

The Princely Courts
Art production flourished throughout Italy in the 15th century, not just Florence. In particular, the princely courts that rulers established in such cities as Naples, Urbino, Milan, Ferrara, and Mantua deserve much credit for maturing the arts. The considerable wealth these princes possessed, coupled with their desire for recognition, fame, and power, resulted in major art commissions.

Mantua
Marquis Ludovico Gonzaga (1412 - 1478) ruled one these princely courts, the maquisate of Mantua in Northern Italy. A famed condottiere, Gonzaga established his reputation as a fierce military leader while general of the Milanese armies. A visit from Pope Pius II in 1459 stimulated the Marquis’s determination to transform Mantua into a spectacular city that would be the envy of all Italy.

One of the major projects Gonzaga instituted was the redesigning of the church of Sant’ Andrea in Mantua to replace an 11th century church. Gonzaga turned to Alberti for this commission. In the planned facade, Alberti locked together two complete Roman architectural motifs - the temple front and the triumphal arch. The combination was already a feature of classical architecture. Alberti’s concern for proportion led him to equalize the facade’s vertical and horizontal dimensions, which left it considerably lower than the church behind it. Because of the primary importance of visual appeal, many Renaissance architects made this concession not only to the demands of a purely visual proportionality in the facade but also to the facade’s relation to the small square in front of it, even at the expense of continuity with the body of the building. Yet structural correspondences to the building do exist in the Sant’ Andrea facade. The facade pilasters are the same height as those on the nave’s interior walls, and the central barrel vault over the main exterior entrance, with smaller barrel vaults branching off at right angles, introduces the interior system. The facade pilasters, as part of the wall, run uninterrupted through three stories in an early application of the “giant” or “colossal” order that became a favorite motif of Michelangelo.

The tremendous vaults in the interior of Sant' Andrea suggest that Alberti may have been inspired by the ruined Basilica Nova of Constantine in Rome - erroneously thought in the Middle Ages and Renaissance to be a Roman temple. He abandoned the medieval columned arcade. Thick walls alternating with vaulted chapels and interrupted by a massive dome over the crossing support the huge barrel vault. Because Filippo Juvara added the present dome in the 18th century, the effect may be somewhat different than Alberti planned. Regardless, the vault calls to mind the vast interior faces and dense enclosing masses of Roman architecture. In his treatise, Alberti criticized the traditional basilican plan (with continuous aisles flanking the central nave) as impractical because the colonnades conceal the ceremonies from the faithful in
the aisles. For this reason he designed a single huge hall with independent chapels branching off at right angles. This break with a Christian building tradition that had endured for a thousand years was extremely influential in later Renaissance and Baroque church planning.

Andrea Mantegna
Like other princes, Gonzaga believed that an impressive palace was an important visual expression of his authority. One of the most spectacular rooms in Palazzo Ducale was the so-called Room of the Newlyweds. Originally it was called the Camera Picta or “painted room” and was decorated by Andrea Mantegna (1431 - 1506) of Padua near Venice. Taking almost nine years to complete the extensive fresco program, Mantegna produced a series of images that aggrandize Gonzaga and his family, and reveal the activities and rhythm of courtly life. Standing in the room one cannot help but be thoroughly impressed by both the commanding presence and elevated status of the patron and the dazzling artistic skills of Mantegna.

Mantegna produced the first completely consistent illusionistic decoration of an entire room. Using actual architectural elements, Mantegna painted away the room’s walls in manner that foretold later Baroque decoration. It recalls the efforts of the painters in Pompeii 15 centuries earlier in the so-called second style.

Mantegna’s *trompe l’oeil* (French for “deceives the eye”) design went far beyond anything preserved from ancient Italy. His experimentalism led him to complete the room’s decoration with the first *di sotto in su* (from below upwards) perspective of a ceiling. Baroque ceiling decorators later broadly developed this technique. Inside the Room of the Newlyweds, the viewer becomes the viewed as the figures look down in the room. The oculus is itself an “eye” looking down. Cupids (the sons of Venus), strongly foreshortened, sets an amorous mood as the painted spectators (who are not identified) smile down on the scene. The peacock is an attribute of Juno, Jupiter’s bride, who oversees lawful marriages. This climaxes almost a century of experimentation with perspective.

Mantegna’s frescos in the Palazzo Ducale represent his mature style. Earlier frescos in the Ovetari Chapel in the church of the Eremitani (largely destroyed in World War II) in Padua reveal Mantegna’s early interest in illusionism and the high level of his understanding. *Saint James Led to Martyrdom* depicts the condemned saint stopping, even on the way to his own death, to bless a man who has rushed from the crowd and kneels before him (while a Roman soldier restrains others from coming forward). Yet narrative does not seem to have been Mantegna’s primary concern in this fresco. The painter strove for historical authenticity. He excerpted the motifs from the classical ornamental vocabulary. Antique attire served as the model for the soldier’s costumes.

Perspective also occupied Mantegna’s attention. Indeed, he seemed to set up for himself difficult problems in perspective for the joy of solving them. He the viewer observes the scene from a very low point, often referred to as a “worm’s eye” view. The perspective is dramatic. Using artistic license, he ignored the third vanishing point for the verticals. He used one point
perspective on the barrel vaulted arch, while using two pint on the building on the right. Disregarding perspectival facts, Mantegna preferred to work toward a unified, cohesive composition whose pictorial elements relate to the picture frame.

Mantegna’s Dead Christ, is a work of overwhelming power. At first glance, this painting seems to be a strikingly realistic study in foreshortening. Careful study, however, shows that Mantegna reduced the size of the feet because they would have blocked the view of too much of the body. He presented a study of powerful foreshortening with an intense depiction of a Biblical tragedy. Mantegna was influential not only in Italy but also in the North through engravings. Those engravings greatly influenced Albrecht Durer, a leading figure in 16th century art.

Urbino
Urbino, Southeast of Florence, was another princely court; the patronage of Federico da Montefeltro (1422 - 1482) accounted for its status as a center of Renaissance art and culture. In fact the great humanist writer Paolo Cortese described Federico as one of the two greatest artistic patrons of the 15th century (Cosimo de Medici was the other). Federico, like Gonzaga, was a well known condottiere. So renowned was Federico for his military skills that he was in demand by popes and kings across Europe, and soldiers from across the continent came to study with him. One artist who received several commissions from Federico was Piero Della Francesca (1420 - 1492). His art projected a mind cultivated by mathematics. Piero believed that the highest beauty resides in forms that have the clarity and purity of geometric figures. Toward the end of his long career, Piero, a skilled geometician, wrote the first theoretical treatise on systematic perspective, after having practiced the art with supreme mastery for almost a lifetime. His association with Alberti around 1450 probably turned his attention fully to perspective and helped to determine his later, characteristically architectural compositions. This approach appealed to Federico, a patron fascinated by architectural space and depiction. Piero deployed all his skills for the paintings commissioned by Federico. One of those works is Enthroned Madonna and Saints Adorned by Federico da Montefeltro, also called the Brera Altarpiece. The clarity of Piero’s style is evident here, as Federico, clad in armor, kneels piously at he Virgin’s feet. Directly behind him is Saint John the Evangelist, his patron saint. Where the viewer would expect to see his wife, Battista Sforza (on the lower left), there is no image present. Battista had died in 1472, shortly before this painting was commissioned. Her absence clearly signals this loss. Piero further draws attention to this by depicting her patron saint John the Baptist in the far left. The ostrich egg hanging suspended from a shell over the Virgin’s head, was a common presence over altars dedicated to Mary. The figures appear in an illusionistically painted coffered barrel vault, which may have reflected the actual architecture of the paintings intended location, the church of San Bernadino degli Zoccolanti near Urbino. If this were the case, it would have enhanced the illusion, and the viewer would have been compelled to believe in Federico’s presence in such Holy company. That Piero depicted Federico in profile was undoubtedly a concession to the patron. The right side of Federico’s face had been badly injured in a tournament, and the resulting deformity had made him reluctant to show that side of his face. The number of works Piero executed for Federico and other patrons reflects his success in accommodating his patrons wishes.
Turmoil at the End of the Century
In the 1490’s, Florence underwent a political, cultural, and religious upheaval. Florentine artists and their fellow citizens responded not only to the humanist ideas but also to the incursion of French armies and especially to the preaching of the Dominican monk Girolamo Savonarola, the reforming priest dictator who denounced the paganism of the Medici and their artists, philosophers, and poets. Savonarola exhorted the people of Florence to repent their sins, and, when Lorenzo Medici died in 1492 and the Medici fled, he prophesied the downfall of the city and of Italy and assumed absolute control of the state. Together with a large number of citizens, Savonarola believed that the Medici’s political, social, and religious power had corrupted Florence and had invited the scourge of foreign invasion. Savonarola denounced humanism and encouraged “bonfires of the Vanities” for citizens to burn their classical texts, scientific treatises, and philosophical publications. Modern scholars still debate the significance of Savonarola’s brief span of power. Apologists for the undoubtedly sincere monk deny his actions played a role in the decline of Florentine culture at the end of the 15th century. But he did condemn humanism as heretical nonsense, and his banishing of the Medici, Tornabuoni, and other wealthy families from Florence deprived local artists of some of their major patrons. The spirit that moved Savonarola must have dampened considerably the neo pagan enthusiasm of the Florentine Early Renaissance.

Outside Florence, the fiery passion of the sermons of Savonarola found its pictorial equal in the work of the Umbrian painter Luca Signorelli (1445 - 1523). The artist further developed Pollaiuolo’s interest in the depiction of muscular bodies in violent action in a wide variety of poses and foreshortenings. In the San Brizio Chapel in Orvieto Cathedral, Signorelli’s painted scenes depicting the end of the world include Damned Cast into Hell. Few compositions of the 15th century have the same awesome psychic impact. Saint Michael and the hosts of Heaven hurl the damned into Hell, where, in a dense, writhing mass, they are vigorously tortured by demons. The horrible consequences of a sinful life had not been so graphically depicted since Gislebertus carved his vision of the Last Judgment in the West Tympanum of Saint Lazare at Autun around 1130. The figures - nude lean and muscular - assume every conceivable posture of anguish. Signorelli’s skill at foreshortening the human figure was one with his mastery of its action. Although each figure is clearly a study from a model, he fit his theme to the figures in an entirely convincing manner. Terror and rage pass like storms through the wrenched twisted bodies. The fiends with hair flaming and their bodies the color of putrefying flesh, lunge at their victims in ferocious frenzy.

Conclusion
Expanding humanism provided a foundation for much of the art produced in 15th century Italy. Fascination with perspective systems along with the popularity of classical subjects and mythology are evidence of the influence of humanism. Another factor in the development of 15th century art was the continued political instability, which facilitated the consolidation of power by princely courts and dominant families. Such powerful individuals and families saw themselves not just as political and economic leaders but as cultural ones as well. For this reason, art patronage was a major priority for many of them, and their commissions - in terms
of quantity, scale, choice of subject and artist, and, often, visibility - affected the direction art took in Italy. The flourishing of art during the 15th century continued the “rebirth” of Italian culture. The artworks produced served as important models for Leonardo, Michelangelo, Raphael, and other masters of the 16th century.