

The Renaissance – A Rebirth of Ideas

History, Influence, Legacy

By Paul Conn

The Renaissance period in Western Europe was a rebirth of humanist values, thought, art, music, and even politics. It was an awakening from the slumbers of the Middle Ages, or Dark Ages, as many refer to it. Instead of looking to the Church for direction, the philosophers and artists of this period looked to individual achievement and oneself for direction of what is good. The study of humanism also played into this “rebirth” of the arts and sciences.

The Renaissance period covers the 14th to 17th century but many historians place the date of 1341 as the ‘official’ start of the Renaissance period. Why this year? This was the year that Petrarch, a writer and philosopher, was crowned Italy’s Poet Laureate. Petrarch became well known for seeking out writings from the ancient classical authors of Greece and Rome (Strathern 19).

The Renaissance was dominated by Italian personalities for several reasons. One, the emergence of Italy into wealthy city-states because of their advantages in trade; two, many Greek Christians settled in Italy after the fall of Byzantine Empire and brought with them knowledge and writings of Ancient Greece; and three, they were constantly reminded of the greatness of Rome by all the structures that remained and they yearned for a return to that classical era. (reference.com)

Florence would become known as the birthplace of the Renaissance. Florence was a wealthy city, perhaps the wealthiest merchant city in Europe at the time. It was active in the dying of wool and other materials that were then exported throughout Europe. Florence was known for their craftsmanship and quality (Plumb 48,49). In addition to the dying of wool and silk, Florence had 21 different guilds specializing in various trades: banking, notaries, druggists, furriers, blacksmiths, shoemakers, and carpenters to name a few. The merchant class thrived in Florence and instead of using their money to buy land or pay armies, many of these new wealthy

families invested in the arts and humanities. Other historians have also theorized that Florence's status as a semi-democratic Republic allowed for the humanist thinking of the Renaissance to flourish compared to more authoritarian city-states in Italy (Hunt 8,9).

The artists, sculptors, writers, and thinkers of the Renaissance found work in a variety of ways. Many created art pieces commissioned by wealthy families, others were commissioned by city governments, and still others by the Church. These entities became the patrons of the Renaissance that allowed artists to express their talents and expand this rebirth throughout Europe.

The Medici's were one wealthy family known for their patronage of the arts and humanities. Like other wealthy Florentine families, supporting the arts was seen a civic duty to give back to the city. Cosimo Medici used the family's wealth to establish the Platonic Academy in Florence, he commissioned work from the architect Michelozzo, the artist Donatello, and helped Brunelleschi finish the dome of Santa Maria del Fiore. Other Medici family members were patrons of Michelangelo, Rafael, and many more (Burke 90).

Churches and by extension, religious fraternities, were another patron of the humanities, commissioning architects, sculptors, painters, and writers. The monks of San Pietro in Perugia commissioned Perugino to paint an altarpiece of the Ascension. Pope Julius II had Raphael paint the *Parnassus* in the Vatican. Guilds might also commission work as part of their duties to the Church. In Florence, the wool guild were responsible for the upkeep of the cathedral and commissioned a piece to Donatello of the prophet Jeremiah and one to Michelangelo for his famous *David* statue. Churches also needed musicians and writers to sing and write songs, so they provided a source of income to this group of artists (Burke 91-115).

Governments were also useful patrons for starving artists. The government of Florence, the Signoria, commissioned Leonardo's *Battle of Anghiari* and its companion, Michelangelo's *Battle of Cascina*. Many governments would keep a staff of artists on hand for various projects (Burke 93).

The legacy of the Renaissance has been forever forged in mankind's history. Some of this periods most famous artists, designers, scientists, and thinkers are still thought of as the best in their fields and still inspire wonder. Let us revisit some of these legendary figures in the arts, architecture, and science.

Architecture

During the time of the Renaissance, architecture was not thought of as a separate craft, so there were no guilds for this discipline. All of the famous architects of this era were trained in something else. Brunelleschi was trained as a goldsmith, Michelozzo a sculptor, and Leon Battista Alberti was a humanist with a university background (Burke 56).

Brunelleschi – Filippo Brunelleschi is considered one of the fathers of the Renaissance and recognized as the world's first modern engineer. He is also widely known for developing the linear perspective technique that allowed Renaissance artists to build depth into their paintings (Wilson 98). He learned architecture while on a fact-finding mission with Donatello in Rome to learn how they built their domes and other structures (Burke 91). He used what he had learned to help him construct his masterpiece, the dome at Santa Maria del Fiore (Cathedral of Florence) (*The Renaissance* 19,20).

Michelozzo – Michelozzo Michelozzi was an Italian architect and sculptor. Like other architects in the Renaissance, he started out in the sculpting guild, as an apprentice to Lorenzo Ghiberti. Michelozzo became good friends with Cosimo Medici and was responsible for building

the Palazzo Medici, which still stands today in Florence (Hibbert 75,76). He also worked under Donatello to build the sacristy of Santa Trinita. One of Michelozzo's most well-known architectural projects, the Medici Palace led to the development of a new architectural type: the Florentine Renaissance palace (Burke 67).

Artists

The arts of sculpting and painting are probably the most well-known subjects of the Renaissance. It is what most people think of when they think of the Renaissance. People's most revered artists came from this time period, and millions of people flock to museums every year to catch one of their paintings or sculptures.

Michelangelo – Michelangelo Buonarroti is perhaps the most celebrated artist not named Leonardo Da Vinci of the Renaissance period. Despite his father's distress at him wanting to be a painter, he began an apprenticeship in Florence under Domenico Ghirlandaio. At thirteen, his mentor marveled at his drawing ability. Around this time, Lorenzo Medici was looking for promising students for a new school he was starting up and Michelangelo was one of two students recommended by Ghirlandaio (Hibbert 165).

Lorenzo Medici recognized Michelangelo's talents while watching him make a copy of a faun's head. He was amazed at the detail of his work and his improvisation skills with the faun's mouth. Lorenzo took an immediate liking to young Michelangelo and gave him a room and a salary at the Medici Palace (Hibbert 166).

In 1497, he was given a commission for a tomb sculpture for the Roman Cardinal Villiers. He created a beautiful marble sculpture of Mary holding the impaled Jesus in her arms and mourning. The *Pieta* would become the first of his impressive works (*The Renaissance* 18). Upon his return to Florence in 1501, he was commissioned to complete a statue of David that

was never completed. Michelangelo created the magnificent *David* statue that was placed in front of the Florence town hall and is considered one of the most renowned works of the entire Renaissance period. Upon leaving Florence, he was invited to Rome by Pope Julius II and commissioned to paint the ceiling of the Sistine Chapel, which covered the ceiling with beautiful paintings of various biblical scenes. It is yet another example of Michelangelo's talent and genius. It is still considered one of the greatest pieces of art ever created (Freeman 16,17)

Leonardo da Vinci – Leonardo da Vinci has been called the quintessential “Renaissance Man” because of his talents in painting, sculpting, architecture, drawing, and science. He was always seeking knowledge, another Renaissance ideal. Like many other Renaissance artists, he got his start in Florence. He was trained in painting and sculpting, but the technical sketches and drawings he left behind showed a true genius in technical matters and understanding ‘how things work’. He moved to Milan where he worked for Duke Sforza as a painter, sculptor, as well as a technical advisor for military matters, architecture and fortifications. It was in Milan that he created his first magnificent piece, *The Last Supper* wall painting (Wilson 94).

After leaving Milan, he then spent a year as a military architect and engineer for the Papal Army under Cesare Borgia. He surveyed the lands, creating city plans and topographical maps. This was perhaps the first examples of cartography. He later returned to Florence and came up with plans for a canal that would connect Florence directly to the sea. Although the project did not come to fruition, centuries later a canal was dug using the exact route that Leonardo had initially planned. During this time in Florence, Leonardo turned his attention to more scientific pursuits. It was here that he began to study the human anatomy, observed bird

flight patterns, and even studied the flow of water. Shortly after this he created the Mona Lisa, maybe the most famous and recognizable painting ever created (Encyclopedia Britannica).

Beyond his art, Leonardo left behind notebooks full of mechanical drawings for machines that showed a man well ahead of his time. One sketch showed a design for a machine with a differential transmission, which resembles a tank. His sketches of a flying machine look like a prototype of a helicopter. He may have tried to build one if he had a portable fuel source. There is a reason why Leonardo da Vinci is thought of as the perfect Renaissance man. (*The Scientific Revolution* 15)

Donatello – Donato di Nocolo di Betto Bardi was another Florence born artist in the early Renaissance period. Donatello was originally trained as a goldsmith but his passions lied elsewhere. As a young apprentice, he had an opportunity to work on a commissioned work to create bronze doors for the Baptistery of the Florence Cathedral, but he instead decided to follow fellow artist Brunelleschi to Rome to study classical art. When he returned to Florence, he put his talents to work creating differing types of art pieces, from a coat of arms to a marble statue. His talent and genius were finally recognized when he created a bronze David statue for Cosimo Medici. It was the first free standing figure that had been cast in bronze since the classical Roman period. The piece was classical homo-erotica with a sensual looking David with soft features and in high boots standing over the head of the giant (Hibbert 90,91).

Cosimo Medici took to Donatello like a father to an adopted son. He made sure that Donatello never had a lack of work. His well-known temper sometimes got the best of him. He once created a bronze head for a merchant, but the merchant was upset at the final costs of the piece. Cosimo tried to intervene and took the piece to the roof of his palace in the light of day and told the merchant he was not paying enough for such a great work of art. After a bit of

attempted bargaining by the merchant, Donatello grabbed the head and threw it off the roof and it smashed to pieces on the street. The merchant was taken aback and offered twice the price for Donatello to create another one but he resolutely refused to do it at any price (Hibbert 92).

Donatello's brilliance was his unique style of displaying emotion in his sculptures faces and body positions. His style also used the new ideas of perspective that began to shape the Renaissance period.

Science

The scientific revolution that gave us our modern scientific theories and processes were born in the Renaissance period. Man's knowledge of the universe and how it worked took a giant leap with the advancement of instruments like the telescope, the vacuum and the barometer.

Copernicus – Before Copernicus, it was believed that the Earth was the center of the universe and all planets and stars orbited around it. In the 1500s, the astronomer Copernicus believed that the inconsistencies with this model could be better explained if the Sun was the center and the Earth and other planets rotated around it. This was a bold and risky proclamation for the Church had preached for centuries that the Earth was the center of the universe and they based it on literal explanations of biblical text (*The Scientific Revolution* 30). Copernicus began writing an account of his findings but did not have them published until after his death in 1543. His book *On the Revolution of the Celestial Spheres* was eventually banned by the Church (Supplee 60).

Galileo - Nearly a century after Copernicus theory on planetary movements, Galileo would turn the world on its head. Galileo had been teaching mathematics at the University of Pisa, but left after his increasingly critical view of Aristotle's physics that had been considered

gospel by the Church and most everyone else. So he accepted a position at Padua in 1592. He had been working on a set of essays called *De motu* which studied the laws of physics and motion to try to resolve the issues surrounding Copernicus idea of circular planetary orbits, as well as the widely held view that heavier objects fell at a faster rate than lighter ones. It was said that he was inspired when he saw both large and small hailstones hitting the ground at the same time (Bauer 70-72).

Around this time a new invention had been created called the telescope. Upon examining one, Galileo created his own telescope, said to be twenty times more powerful than current telescopes. He discovered moons orbiting around Jupiter, and in doing so, proved that not every heavenly body revolved around the Earth. After watching Venus, he noticed changes in the surface over time that was further proof it was orbiting around the Sun and not earth. He published his work in 1632 but was put on house arrest by the Church for the rest of his life (Bauer 73-75).

Johannes Kepler – Kepler helped further Copernicus idea of a heliocentric model of the universe. After years of painstaking measurements and calculations, he concluded that the planetary orbits moved in an elliptical pattern instead of a circular one. This idea more accurately explained the discrepancies many astronomers had noticed with the circular orbit theory. This one idea would allow for future scientists to prove Copernicus, Galileo and Kepler correct (Supplee 62).

Francis Bacon - The Scientific Revolution took another step forward by way of Francis Bacon. Bacon was a British philosopher who wanted to advance philosophy and knowledge. In 1620, his book *Great Instauration* intended to create a new system of philosophy and new way of thinking. While he did not quite reach these lofty goals, he did outline the steps of inductive

reasoning: come up with an idea or hypothesis, test that idea, then produce a theory based on the results. This was different from the Aristotelian way of using deductive logic where you start with a general statement and move to specific conclusions. As a result of this reasoning, he is known as the father of the Scientific Method (Bauer 56-58).

Isaac Newton – Sir Isaac Newton is perhaps the most well-known scientist of the Renaissance era. Newton was a mathematician educated at Cambridge and part of the prestigious Royal Society. His first experiments involved observing light through a prism. He discovered that light was not white, but made up of a rainbow of colors (Bauer 95). Over a decade later, he published his book *Mathematical Principles of Natural Philosophy*. His experiments confirmed the heliocentric view of Galileo that planets orbited around the sun. He also confirmed Kepler's idea that the planet's orbit were elliptical and not circular. He discovered that the force of gravity from the sun kept the planets in orbit and that a planet's gravity kept their moons in orbit around themselves. A planet's orbit was elliptical because the force of gravity weakened the further away from the sun they were. So in one fell swoop, Newton had not only explained why planetary orbits were elliptical in nature but also revealed gravity as a new force in the universe, a universal force. Not only this but Newton created a new mathematical language called Calculus to explain his theories (Bauer 97-99). Newton's discoveries continue to influence science, astronomy, and even space travel today.

The Renaissance was a time for rebirth. Like all history, it took many different people, events and inventions coming together at the right time for this to happen. Florence's love for the arts and democratic values made it a perfect place for Renaissance values to take shape. Florence's new merchant class that flourished from trade allowed new wealthy families to become patrons of these artists. In order for science to flourish, a break from the Aristotle view

of the universe that the Church held as gospel had to occur. Martin Luther's challenge to Church teachings eventually led to Renaissance scientists like Galileo and Isaac Newton publishing their findings without a fear of reprisals from the Church. The invention of the printing press spread all of these ideas to the masses in a way that had never occurred before. And perhaps none of this takes place if Constantinople doesn't fall in 1453, leading to a wealth of new knowledge from the classical texts of Rome and Greece (*The Renaissance* 35). Today, if we look closely, we can still see the ideals of the Renaissance affecting our current history.

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