The great astronomer: nicolaus copernicus

Literature, Biography



The fifteenth and sixteenth centuries were a time period of great change. Religion was heavily important in day to day life. The printing press was developed in 1450, this increased the production of books. This pushed for the sharing of information, mainly religious, but the invention opened the door for the spreading of knowledge. This is the Renaissance, where there is a resurgence of classical learning from greek and roman times, across the globe it was a period of widespread prosperity; trade was expanding, as were empires. The Renaissance pushed people to guestion the preconceived societal norms of the time. This time period saw science take leaps and bounds in better understanding medicine, geography, astronomy, and mathematics, with increased understanding in math, architecture became increasingly complex. Traditional beliefs were completely challenged in this time period, by yours truly, Nicolaus Copernicus. The increased understanding of science created a division between religion and science, in earlier years were considered to be one in the same. The renaissance was a time period that changed the future with the innovations of the time, heavily changed by Copernicus.

Nicolaus Copernicus was born in February 1473, as Mikolaj Kopernik in Poland. He was named after his father, but upon entrance to college he took on his latin name, Nicolaus Copernicus. He lived a wealthy life, even after his father died and his uncle took up parenting duties. His uncle was also extremely wealthy, as he was the Prince-Bishop of Warmia. Nicolaus originally went to study various sciences at University of Krakow, but his uncle sent him to Italy. Under his uncle's advice, he studied to earn his Doctor of Law in order to better perform his duties as a canon, a cleric in the church. Copernicus was never truly devoted to law, he spent the majority of this time studying astronomy. After four years his uncle brought him back to Warmia to act as canon. But Copernicus had another plan, he convinced his uncle to send him back to Italy to become a Doctor of medicine, claiming that it was a needed position in Warmia. While he did focus on finishing out his studies, he continued to dabble in astrology.

Astronomy is what Nicolaus Copernicus focused on. He had a collection of books he had acquired through his travels, many of which were on astronomy. Copernicus took into consideration the distance of stars and planets, even taking into consideration their movements. I think it is important to note Nicolaus he gathering all of this by simply looking at the sky with the naked eye, the first telescope was not invented until 1608 – twenty-five years after Nicolaus Copernicus had died. He based a lot of his work on correcting errors made by previous astronomers such as Ptolemy. As he studied he found errors in earlier astronomer's work. At the time, it was common thought that the Earth was the center of the universe, the planets and even the sun revolved around Earth. Nicolaus prompted the thought that rather than revolving around Earth, everything revolved around the sun.

A heliocentric system was blasphemy, and declared impossible due to the heavily religious society at the time. This forced him to not publish anything officially, despite this he told a close ring of people. People were curious. Given Copernicus's position in the church many authority figures within the church were aware of this, but no one was attacking him for his heliocentric theory. Georg Joachim Rheticus, came from Germany to work alongside and learn from Copernicus. After working together for years to perfect the math and system, Copernicus wrote a book about his new theory called " Commentariolus". At the beginning of the book a note that said that the book could help people to do astronomical calculations, it doesn't matter if Copernicus new theory was true or not. Although Copernicus did not authorize the note, it is widely believed that the only reason the book allowed to be published was that note from the supervisor. It is important to note that the book was written mathematically based, meaning very few common people would even understand the text. The note and the advanced writing style prevented a total outrage from the public people.

Nicolaus Copernicus's book received high praise from the scientific community. His peers complimented his math and precise measures; they also applauded him for replacing more outdated forms of calculation. Despite all that, very few supported the heliocentric theory, many still had faith in the earth being the center of the universe. The theory did not spread like wildfire until more scientists became invested in his theory, such as Galileo and Kepler, thus created a scientific revolution. As the heliocentric system gained fame, the church felt threatened to the point of banning the book, and all heliocentric concepts. At this point Copernicus has been dead for over half a century.

Nicolaus Copernicus died after dedicating his life to science at the age of seventy in 1543. Copernicus never married or had children, but his legacy goes on. When he died, very few supported his theory, it was not until much later scientists began to look into and elaborate upon the heliocentric theory.

Scientists continued to spread his theory, perfecting it to where it is today, fact.