

History Of Ancient To Medieval Science

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Introduction

In European history, the Medieval Period continues from the 5th to 15th century. This period started after the fall of the Western Roman Empire and then amalgamated with the Age of the Renaissance. Middle Ages are divided into three traditional divisions in which first one is classical antiquity, the medieval period and lastly, and the modern period. The medieval period is further divided into early, high and late Middle Ages. There are many historians and scientists in Western Europe who are devoid of interest due to the fall of the Roman Empire. It was the sterile desert in the history of science in the medieval age. Such conditions make the Middle Ages as Dark Ages that evoke the environment of illiterate leaders and rulers. It was the irrational gumshoe of the Roman and Greek period of intention and great philosophy.

Alexandria and Ancient Scientific Thought

Ferro, Luisa, and Giulio Magli stated that Alexander founded Alexandria in 331 BC and is noticed as the summit of many debates on the supreme town. Furthermore, Plato continually anticipates the development of the perfect city. Such sort of inspirational principles were based on the harmony that was linked to the divine laws. These inspirational principles were also mirrored in the mathematical exactitude of the design of the 'Hippodamian' city plan. Due to the involvement of 'Alexandria the Great', the city becomes the most prominent representation of supremacy of its celestial originator. The demanding order of their plan was reflected in the cosmic command in acquiescence with the principles of the orthogonal grid.

Additionally, the study stated that the Royal Library of Alexandria, which is found in Alexandria, Egypt, is one of the greatest modern libraries in the ancient world. Ptolemy I Soter kept most of the library books in papyrus scrolls. The amount was not available that how many such scrolls were maintained at that time, but it is estimated that they range from 40,000 to 400,000 in height. This library was dedicated to the muses, who were the nine goddesses of the arts. It thrived at the time of patronage of the Ptolemaic dynasty. It is considered the most important center of scholarship after it was constructed in the 3rd century BC. It endured the dominant utile Roman conquest of Egypt in 30 BC with everything of the library, including works, lecture halls, gardens and meeting rooms. The library was known as the largest educational platform where every book was available, and it was later known as the Museum of Alexandria. In the Royal Library of Alexandria, many famous thinkers have studied and added something to their knowledge after exploring many books (König, Jason, Aikaterini Oikonomopoulou, & Greg Woolf).

Science in Medieval Europe

With the conceited hindsight, the contemporary viewpoint of medieval society is barbaric Europe. In the Dark Ages, poverty and illiteracy had turned the engineering works, and the virtual unity of the Pax Romanum and mounting church stifled development. There is very little evidence of the progress of society during the period from 500 to 1400. Charlemagne tried to inaugurate literary traditions, and after that, the Middle Ages progressed in the philosophy of science and modified the scientific method (Clagett).

Ellis stated that the period of early medieval society was from 500 to 1000 AD, which is known as the period of the 'True Dark Ages.' It was the time when medieval society was moved towards barbarism and ignorance. We cannot say this time was a wide-ranging desert, but we comprehend that reading Saxons, Vikings, and many other people have stopped the advancement of science. The verdant west Ireland met the disparaging power of the gray Atlantic ascetic monks that had formed beautiful and vivacious illuminated manuscripts.

During the Medieval age, it was enticing to sack Northmen as savage, uncivilized boors, overlooking that their major longboats had stunning achievements in the field of engineering a hundred years ahead of their period. Saxons and Vikings were able to do gorgeous and eye-catching metallurgy and other sorts of metalwork. They were also expert in making fine swords and stunning jewelry that is found in Ladbyskibet. It shows that even the progress was slower in the medieval age due to the Dark Ages, but at the same time craftsmen pushed new boundaries and tried new techniques in the extended domain. Using such techniques enhanced their trading with other countries, including Greece, China, and Egypt.

Preservation of Knowledge After Rome

Additionally, it is not wrong to say that the eras after the fall of Rome remained in big but little progress from the 5th century to the 9th century. Philosophy and serious thoughts were not lost in the West in that period, and they preserved the religion and Byzantium. The larger rural and evicted population had started to reconstruct from the failure of Rome. Additionally, religious studies have kept few scientific processes alive while significant pedagogic undertakings alarmed the Bible. The monks of Western Europe had studied medicine, care for the sick, astronomy, star observation and date setting for all the crucial Easter. The science of the medieval had kept mathematics, geometry, and their methods alive (Clagett).

During the 9th century, the minor residues of the preserved gen moved towards life. The Western Europeans had strained the systematic learning process. The rulers of that period had given the realization to the individuals that education was the best way to bring unity and peace to society. That was the time when developmental progress seemed evident in many domains of science. This period was named the Carolingian Renaissance as it was the time when Charlemagne strained to

make information the foundation of medieval society. He was a ruthless Emperor but was a great believer in the power of knowledge as learning can bring the person from earth to the sky. It was the time when revitalizations in art, education, and culture were promoted through the use of the Catholic Church to convey information, knowledge, and teaching. Many Latin texts were ordered for translation, by this astronomy was expanded in the medieval ages.

In England, Alcuin of York had initiated educational schemes in theology, art, geometry, arithmetic, and astronomy. Just like the Carolingian, he promoted learning through the establishment of educational institutions. This period was a clear reflection of the classic age as they had attempted to enhance knowledge. This process was terminated because of the disintegration of the Frankish Empire after the decease of Charlemagne and the recompense of barbarian impositions. Few of the learning centers adhered obstinately to scholarly recreations throughout the social and political turmoil. The teaching of philosophy, theology, and logic would fuel the development of utmost Christian thinkers, and it was the time Western European Medieval society moved further in its developmental period.

Contributions of Ancient Civilizations to Science

Ancient Egyptians have many contributions in the development of science including medicine, alchemy, architecture, etc. These contributions are the way to enhance human knowledge in such fields. The major contribution was in ancient astronomy, and the Mesopotamians, as the primary focus of their work, were based on agriculture and predicting seasonal changes as they have done a lot of work on seasons and their predictions. In the earliest advanced citizens of the civilizations, Ancient Egypt possessed amusing religious traditions that had pervaded every aspect of society. In previous cultures, the behavioral patterns of the sky led to the creation of numerous myths to explain the phenomena of astronomy and its related endeavors. Conversely, Neugebauer stated that, for the Egyptians, the astronomical practices go beyond the legend. They have created many huge temples and pyramids that were built with a particular astronomical orientation. This thing predicts that astronomy in the medieval period has both practical and religious determinations.

The Ancient Egyptians, just like the ancient Greeks and Romans, have provided contemporary historians with extensive knowledge. They presented the evidence about the attitude towards the medicines and through using their medical knowledge. Ackerknecht and Haushofer stated that just like the prehistoric man, some of the beliefs of Ancient Greeks were based on myths and legends. Some of them have such belief systems that illness is because of some legend or such type of irrational myths, but it was just due to the human plain common sense and anatomy. With time, the developmental progress seems to be in Ancient Greece, and they have worked a lot in science, especially in medicine, and they have found the treatment of different diseases. In the Ancient Egyptians, treatment was not only cured through magicians and medicine men, instead but patients were also referred through doctors and physicians for proper treatment.

Conclusion

To conclude, it is stated that in European history, the medieval period continued from the 5th to the 15th century. Ferro, Luisa, and Giulio Magli reported that Alexander founded Alexandria in 331 BC, which is viewed as the peak of many debates on the supreme town. The Royal Library of Alexandria, which is found in Alexandria, Egypt, is one of the greatest modern libraries in the ancient world. It is considered the most important center of scholarship after it was constructed in the 3rd century BC. Ancient Egyptians made many contributions to the development of science, including medicine, alchemy, architecture etc.

References

Ackerknecht, Erwin H., and Lisa Haushofer. *A short history of medicine*. JHU Press, 2016.

Clagett, Marshall. *Ancient Egyptian science: calendars, clocks, and astronomy*. Vol. 2. American Philosophical Society, 1989.

Ferro, Luisa, and Giulio Magli. "The astronomical orientation of the urban plan of Alexandria." *Oxford Journal of Archaeology* 31.4 (2012): 381-389.

König, Jason, Aikaterini Oikonomopoulou, and Greg Woolf, eds. *Ancient libraries*. Cambridge University Press, 2013.

Neugebauer, Otto. *A history of ancient mathematical astronomy*. Vol. 1. Springer Science & Business Media, 2012.