

ILT 2 WEEKS 5–6

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1. “ASTROLOGY WAS VITALLY IMPORTANT TO BOTH THE DEVELOPMENT AND SURVIVAL OF ASTRONOMY DURING MEDIEVAL TIMES.”

As an amateur astronomer, I was to an unnecessary degree opposed to the concept of astrology, especially if questioned about its scientific impact. The more I progress through the history course at Swinburne, the more I realize how naive that position was. It is too easy to underestimate the contributions of astrology from the pinnacles of modern astrophysics and freedom of thought, especially after it has been decoupled from the mainstream science. For the shift in my understanding, I am grateful to John North, in particular for his vivid description of the cosmological transitions at the era of natural philosophy in his *Cosmos*. The impact astrology has produced in medieval times echoes events occurred in ancient Greece, and those several millennia before, in Babylon. There, from the belief that everything in our world is subject to gods who exhibit arbitrary behaviors, our thought has advanced to the notion of events being governed by celestial bodies, following a system that can be analyzed and predicted. The revolution was in that celestial bodies became the acting agents of gods, rather than being the erratic gods themselves. This impulse of mundane astronomy – to observe celestial bodies because they seem to govern us all – gave support to practical astronomy of that period because the outcomes were relevant to every person in the state (Holden 1996). The application of astrology has fueled astronomical research, establishment of academies, development of instruments, as these expenses became relevant in the everyday life. The further act of breaking bonds with dogmatic religions, as we observe later in the ancient Greece, can undoubtedly be considered as an incredible step forward, even by the standards of some of our modern societies. So from this perspective, astrology gave rise to the movement in the correct direction – from arbitrary and submissive to methodical and dialectic – at least in its early times.

Parallels to that can be observed during medieval period as well. Because astrology depends on the observation and measurements of celestial bodies, as well as on the accurate predictions of their positions, its application to mundane events continued its contribution to the practice of astronomy throughout centuries. We see that the same persons who were court astrologers were actively contributing, in that period, to the development of astronomy and related sciences. Take Abū Rayḥān al-Bīrūnī (973–1048) as an example, a Persian Muslim scholar coming from area what is now Uzbekistan. Although officially serving Mahmud of Ghazni as a court astrologer and working on problems such as predicting the outcomes of his emir’s military campaigns and determining prayer times and directions to Mecca, Bīrūnī is notable for its contributions in the fields of astronomy, mathematics and geography, including defining the irrational number π as the result of division of circumference of a circle by its diameter, and the work on applications of spherical trigonometry in astronomy in his *Ketāb maqālīd ‘elm al-hay’a*, in which he defined trigonometric functions still used today (Saliba 1996). There are many more examples of early Medieval astrologers contributing to what we now may call the science of astronomy.

Were these efforts vital to the survival of astronomy during Medieval times? At the very least, they have kept the practice of astronomy relevant to the matters of the state – the ruler and those of the upper class who had means to sponsor further scientific research and establishment of institutions. This has accelerated the development of astronomy because many astrologers were contributors, and would there be no Alphonso X “the Astrologer”, Europe, perhaps, would be seeing a version of Alphonsine tables at a much later date, delaying all the further work, including that of Copernicus’s. In addition, because cosmological studies were often opposed by the church, astrology could have shielded research in that direction, bringing it under the patronage of kings or even certain progressive ecclesiastical authorities.

2. RESPONSE

Despite of all the indebtedness I now feel to astrologists, I agree with Christopher Tylor that at some point, astrology was becoming to hinder the advancement of astronomy. Instead of liberating us from being the servants of volatile and capricious gods, it brought us to the darkness of being subjects to various celestial phenomena. Universally accepted dogmas, however, are very difficult to crack, and it remains a mystery to me how astrology continued to exist in the curriculum for such a long time.

REFERENCES

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- Saliba, G. 1996, BĪRŪNĪ, ABŪ RAYḤĀN, Encyclopædia Iranica, online edn., Vol. IV

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