

The Mystical Origins of Modern Science and Medicine

A Book Review of

MAN AND NATURE IN THE RENAISSANCE. Debus, Allen G. 1st ed.
Cambridge: Cambridge University Press, 1978. 159 pages.

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Theoretical scientist and astronomer Stephen Hawking recently warned that the best way to ensure the survival of humanity was to “spread out into space, and to other stars, so a disaster on Earth would not mean the end of the human race” (Criss, 2016). On the brighter side, he added that the end of planet Earth would become a certainty only in the “in the next 1,000 or 10,000 years” (Criss, 2016). Still, the search for habitable planets has gained momentum with efforts led by government agencies like NASA and billionaire entrepreneurs like Elon Musk (Criss, 2016).

“Humanism” is the ethical and philosophical stance that emphasizes the value of human beings, affirmed by their ability to improve human lives through reason (“Humanism”, 2016). We do not know if Hawking and Elon Musk call themselves “humanists”, but they do believe that the challenges of this age demand new and ingenious solutions even if it goes against conventionally accepted wisdom. Interestingly, a group of alternative medical practitioners in the Renaissance Era, the Paracelsians, also believed that theirs was a “violent age”. The Paracelsians sought new sources to solve the challenges of their age—including mystical, divine, and occult sources—as Allen Debus elaborates in his book, *Man And Nature In The Renaissance* (Debus, 1978, p. 29).

Allen G. Debus (1926-2009) is a pioneering figure in the history of science and medicine. He attempted to show that the “modern science” as we know it today is more complex than a “progressive” growth of knowledge from Copernicus to Newton. Debus is most famous for his studies of the Paracelsians in England (Debus, 1966). Though less celebrated, his book *Man and Nature in the Renaissance* (Debus, 1978) offers a useful introduction to the role played by the Renaissance humanists in the development of modern science and medicine. The book is a broad survey of the earlier phases of the Scientific Revolution, spanning the period from the mid-15th century to the mid-17th century. Debus attempts to situate the progress of the “exact sciences” (mathematics and astronomy) in the context of their broader

social and intellectual context, particularly in the role played by the proponents of the mystical-occult worldview. This book invites the reader to re-evaluate the development of science not from our post-Newtonian vantage point, but from the point that there is no “single correct history of this field” (Debus, 1997, p. 277). The book’s strength lies in its discussion of how Paracelsus’ works on alchemy thrived successfully alongside the work of giants like Copernicus and Vesalius in the 1540s (Debus, 1978, p. 14). Debus examines in fair detail the legacy of alchemy in the development of modern science and medicine.

Paracelsus (1493-1541) was one of many Renaissance humanists who mistrusted the Aristotelian natural philosophy in favor of a mystical conception of nature as a “magical” force. However, Debus notes, this understanding of “natural magic” was not dissociated from religion; it sought truth in “the two divine books: the book of divine revelation—Scripture—and the book of divine Creation—nature” (Debus, 1978, p. 21). Paracelsus believed that alchemy was the basis for the new theory of medicine. After his death, followers of his printed works—the Paracelsians—hoped to replace the Aristotelian-Galenic system of medicine with that of Paracelsian chemical philosophy. This philosophy had a particular appeal for physicians who argued that the new “ravaging diseases unknown to the ancients” needed more effective medicines that only the Paracelsian chemical philosophy could provide (Debus, 1978, p. 29). Debus argues that while the Paracelsians’ advocacy of a mystical, alchemical cosmology was disturbing to many, a compromise was reached on the use of the new medicines, including at the London College of Physicians (Debus, 1978, p. 32). Debus submits that the Paracelsians can be credited with the “modern” recognition of the importance of chemistry for medicine (Debus, 1978, p. 33).

Debus also explains how Andreas Vesalius’ (1514-1564) revolutionary work on human anatomy did not question the role of the “(vital) spirits” (Debus, 1978, p. 54). Later, William Harvey (1578-1657) built upon Vesalius’ work to discover the circulation of the blood (Debus, 1978, p. 66). Harvey’s discovery was not welcomed by many, including Descartes (Debus, 1978, p. 70). What is interesting though is that the first person to come out in support of Harvey was the English alchemist-physician Robert Fludd (1574-1637). Harvey had described the heart as “the sun of the microcosm” (Debus, 1978, p. 69). Fludd had been long interested in the idea of a mystical circulation of arterial blood as a consequence of the macrocosm-microcosm analogy and Harvey’s discovery only confirmed Fludd’s search for “deeper mystical truths” about nature (Debus, 1978, p. 70). Debus shows how the motives of the Renaissance humanists were very different from that of modern scientists, even though their discoveries (such as Harvey’s) continue to serve practical benefits today. The book also surveys the influence of other mystical humanists on the evolution of modern medicine, such as the Hermeticists (Chapter 6) and the Rosicrucians (Chapter 7).

Debus submits that historical accounts of the rise of the exact sciences during the Scientific Revolution will remain incomplete if they fail to assess the role of the Paracelsians and other adherents of natural magic and mysticism. In addition, “any study of Renaissance intellectual history...must take into account the influence of humanism” (Debus, 1978, p. 132). It is important to note that the complex nature of the period contributed to the modern science we learn and practice today. Furthermore, many heroes of modern science, like Isaac Newton, were also influenced by alchemy (Dobbs, 1991). With a detailed bibliographical guide for further reading, Debus’ fully illustrated book continues to be an ideal textbook for students in the history of science and medicine.

References

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