

AHS London Lecture Thursday 15 November 2018

Sebastian Whitestone, Time before the oscillator: horology in the thirteenth-century manuscripts of the *Libros del Saber*

When, in the middle of the thirteenth century, King Alfonso X of Castile and León ordered the translation of mainly Arabic texts on astronomy and time measurement, the mechanical clock, as defined by the use of an oscillator, was unknown. The resulting books describes much of its heritage. They describe a variety of instruments including astrolabes, sundials, mercury and water clocks, derived from manuscripts, many of which are now lost, written between the ninth and twelfth centuries. They are a testament to the eastern nurture of science that was largely lost to the west after the break up of the classical world, and they are the fruit of an extraordinary synergy between Jewish, Christian and Muslim scholars at a time of religious warring.

Written in medieval Castilian rather than Latin, they were translated only once, for the Vatican into Italian in 1341. No version exists in any modern language. Nevertheless they form a large part of the narrative that traces the Renaissance back past fourteenth-century Italy to thirteenth-century Spain. Apart from two partial studies, one by F. M. Feldhaus translating the descriptions of three clocks in the *Deutsche Uhrmacher-Zeitung* in 1930, and the other by A. A. Mills describing his reproduction of the mercury clock in *Annals of Science* in 1988, horological literature has largely neglected them. However, their importance is considerable in informing the debate on the origins of the mechanical clock and the aspects of time the medieval world strove to measure.

Sebastian Whitestone is a dealer in and student of antiquarian horology and has published numerous articles on the subject over the last forty years.

TICKETS

All members and guests attending the London Lecture Series need to register for free tickets in advance of each lecture. Visit our website at www.ahsoc.org/events/london-lectures and follow the links for the lectures you require. If you have difficulties email ahs.londonlectures@gmail.com. Alternatively, book your place by calling 07733 481595 (24-hour answering machine).



A page from the first Book of the Spherical Astrolabe, in the *Libros del Saber de Astronomía*. This exceptionally rare form of astrolabe is thought to be a purely Islamic invention and not, like the common planispheric astrolabe, derived from classical antiquity.