

The playwright's notes to *Illuminations*.

The turn of the first millennium of the Common Era was an age of enlightenment outside of Europe. The monk, Rodulfus Glaber, was a chronicler of the times and, as a character in *Illuminations*, introduces us to some eccentric, inquisitive and historically significant individuals. As he points out, this was a time when men and women traveled relatively freely along trade routes from China and India to the Middle East and southern Europe. Out of interest and necessity they spoke many languages. Books served as valuable currency.

At no time before or since had science and religion appeared so compatible. The most vibrant religion of the time was that of Islam, which promoted science as a way of understanding Allah. Great centers of learning were being created in Baghdad, Cairo and Cordoba, which would eventually convey scientific knowledge and the scientific spirit to European Christendom.

We are introduced to two scientists of the period, their Latinized names being Avicenna and Alhazen. Avicenna became known in Europe as "The Prince of Physicians;" Alhazen created the foundations for classical physics. More than anyone else, they were the model for the following millennium of what it meant to practice science. For example, in the thirteenth century, Albertus Magnus, "the bishop with the boots," walked thousands of kilometers across Europe making detailed observations of plants, minerals and animals. His experiments and theories took inspiration from our protagonist's books, which he carried on his back!

Franciscan scholars Roger Bacon and John Duns Scotus gave credit to Avicenna for what became known as the scientific method. Interestingly, Avicenna and other Arabic philosophers argued that controlled observations, while necessary, were not sufficient to explain in-depth interactions in nature. In *Illuminations*, a Sufi, Fatima al-Kashf, teaches that understanding of complex systems ultimately requires that the researcher take camouflage while striving to understand himself and his role in the system.

Glaber explains that we can only speculate about the historical meeting of our protagonists. They meet at Alhazen's adopted home of New Cairo, a pleasant asylum that restricts his freedom of movement to a place ideally suited to freedom of thought. In the final scene, set at the gala opening of the first public library, our audience experiences Alhazen's theory and application of optics: the camera obscura with magnifying lenses.

The Egyptian Caliph of the period, el-Hakim, was intelligent, tyrannical, and progressively demanding of the respect traditionally afforded to Allah. In *Illuminations*, at the gala opening the Caliph offers to fulfill Avicenna's most cherished desire. Against such a powerful and manipulative foe, our heroes do battle for their souls, armed only with a camera obscura and the belief that there is no greater healer than love, freedom of mind and a good sense of humor.

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