

INFLUENCE OF IBN AL-HAYTHAM ON VISION, OPTICS, AND EXPERIMENTAL SCIENCES

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Year 2015 marks the thousandth anniversary of the publication of the first volume of the seven-volume treatise on optics, Kitab al-Manazir (Book of Optics) in 1015, by Ibn al-Haytham, which drastically transformed our understanding of the vision and paved way for the emergence of optics as well as marked the advent of the modern science. Beyond the contributions this book made to the field of optics, it was a remarkable work in that it is based on conclusions on meticulous experimental evidence rather than abstract reasoning, the first major publication to do so. Right from what may appear today as a very simplistic claim, light travels in a straight line from the objects that emit light, he established fundamental properties of light and what we today call as geometrical optics. This shift in the emphasis on experiments rather than 'words of wisdom' of ancient scholars was an important epistemic rupture that was furthered by Galileo Galilee few centuries later, paving the way for the modern epistemological foundations for science.

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