16 Ways of Looking at a Photograph

Class Exercise: Chapter 3, Optics

The philosopher Aristotle (384-322 BCE) intuitively understood the fact that light bends by observing the pattern of light when sitting beneath a tree. He saw not only shadows of leaves but also designs of light, indicating that light bends in reaction to obstacles (opaque or nontranslucent and also semi-translucent objects). Even so, it was hundreds of years before scientists proved that light is a particulate wave that bends in response to obstacles. What patterns of light do you notice in the room around you? What visual clues do you see that suggest light is a substance that bends in response to barriers?