

A Brief History of Photography

REALLY brief. There is a LOT of cool stuff I have to leave out because we don't have time to cover it all. Go read about it!

It All Starts with Light.

OPTICS is the scientific study of the behavior of light.

For a long time, humans have been fascinated by light.

How does it work? Can we touch it? How fast does it move? Why does it move the way it does? Can we catch it?

Well, it turns out we CAN catch it--not in our hands, but in a different way.

Smart People Who Thought About Light a Long Time Ago

The earliest mention of what would eventually become the camera is from Mozi, a Chinese philosopher from around 400 B.C.

He recorded the creation of an inverted image formed by light rays passing through a pinhole into a darkened room. He called this darkened room a "collecting place."

This good looking gentleman is Mozi.



Smart People Who Thought About Light a Long Time Ago

Greek scholar Aristotle also noticed that light behaved in interesting ways when it passed through a small space around 350 B.C.

Other Greek philosophers Euclid and Theon of Alexandria noticed too and wrote about this light behavior.

This is Aristotle.
It's actually a statue of Aristotle, I guess.
You know what I mean.

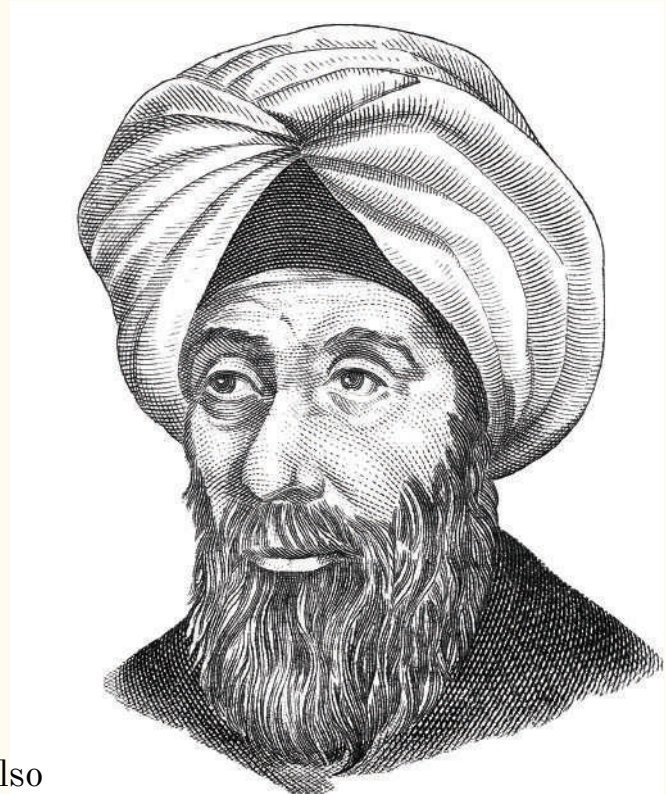


Smart People Who Thought About Light a Long Time Ago

In 1021 A.D., an Arab physicist named Ibn al-Haytham published his *Book of Optics*.

He described how when light travels through a tiny hole, an image of what is on the other side will be projected upside down on the surface where the light hits. He also figured out how the human eye works and made a lot of other cool discoveries.

In addition to being brilliant, he also may have had a majestic beard.



Smart People Who Thought About Light a Long Time Ago

Other notable smart people:

Leonardo DaVinci (1485) wrote about how to study perspective in drawing by projecting an image using the method Ibn al-Haytham described.

German astronomer Johannes Kepler (1604) finally gave this idea a name: *camera obscura* (that's Latin for “dark room”)

In the 1600s and 1700s, artists such as Johannes Vermeer used the camera obscura to project images that they then traced to create artwork. This was the main use of the camera obscura UNTIL...

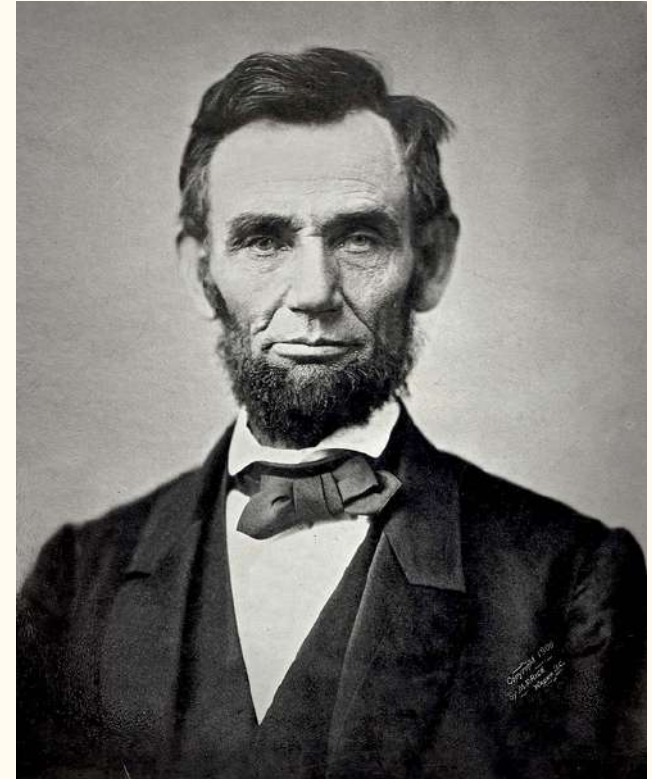
Making It Permanent

1816: Frenchman Nicéphore Niépce combined the camera obscura with light-sensitive paper.

1834: British scientist Henry Fox Talbot created more reliable permanent images using paper soaked in silver chloride and fixed with a salt solution.

1837: French artist Louis Daguerre created images on silver-plated copper, coated with silver iodide and developed with warmed mercury called “Daguerreotypes.”

U.S. History fact: Abraham Lincoln was the first president to be photographed at his inauguration.



Evolution of Cameras

1889: First Kodak camera with film

1963: Polaroid invents instant color film

1975: Steve Sasson at Kodak invents the first digital camera

1990: Adobe releases Photoshop

2000: Sharp (Japanese company) introduces the camera phone

2004: Kodak stops producing film cameras



How Do Cameras Work?



Breaking Down the Digital Camera

https://www.youtube.com/watch?v=YxXi-_R3YTQ