

Russell Abraham



Mastering Light

Introduction by Clifton Stanley Lemon
January 24, 2019

Mastery, Painting and Photography



“Camera”- Latin for ...?

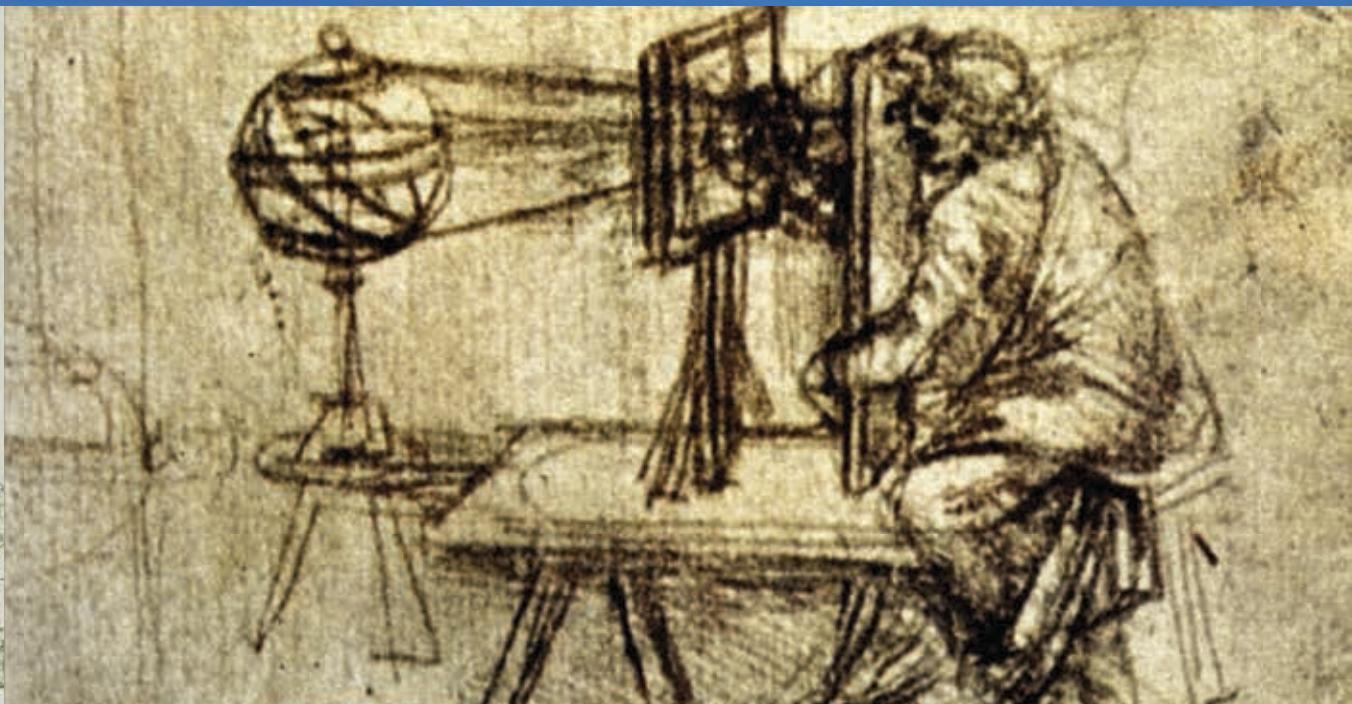
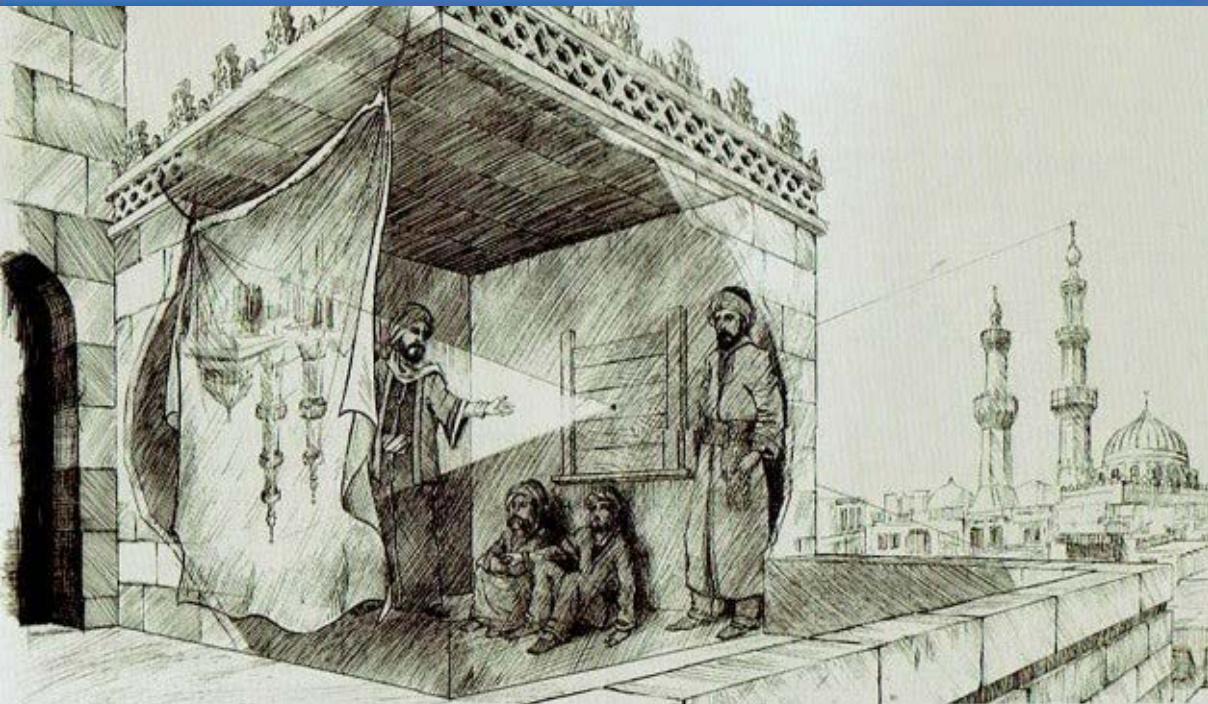


NOT Double dromedary!

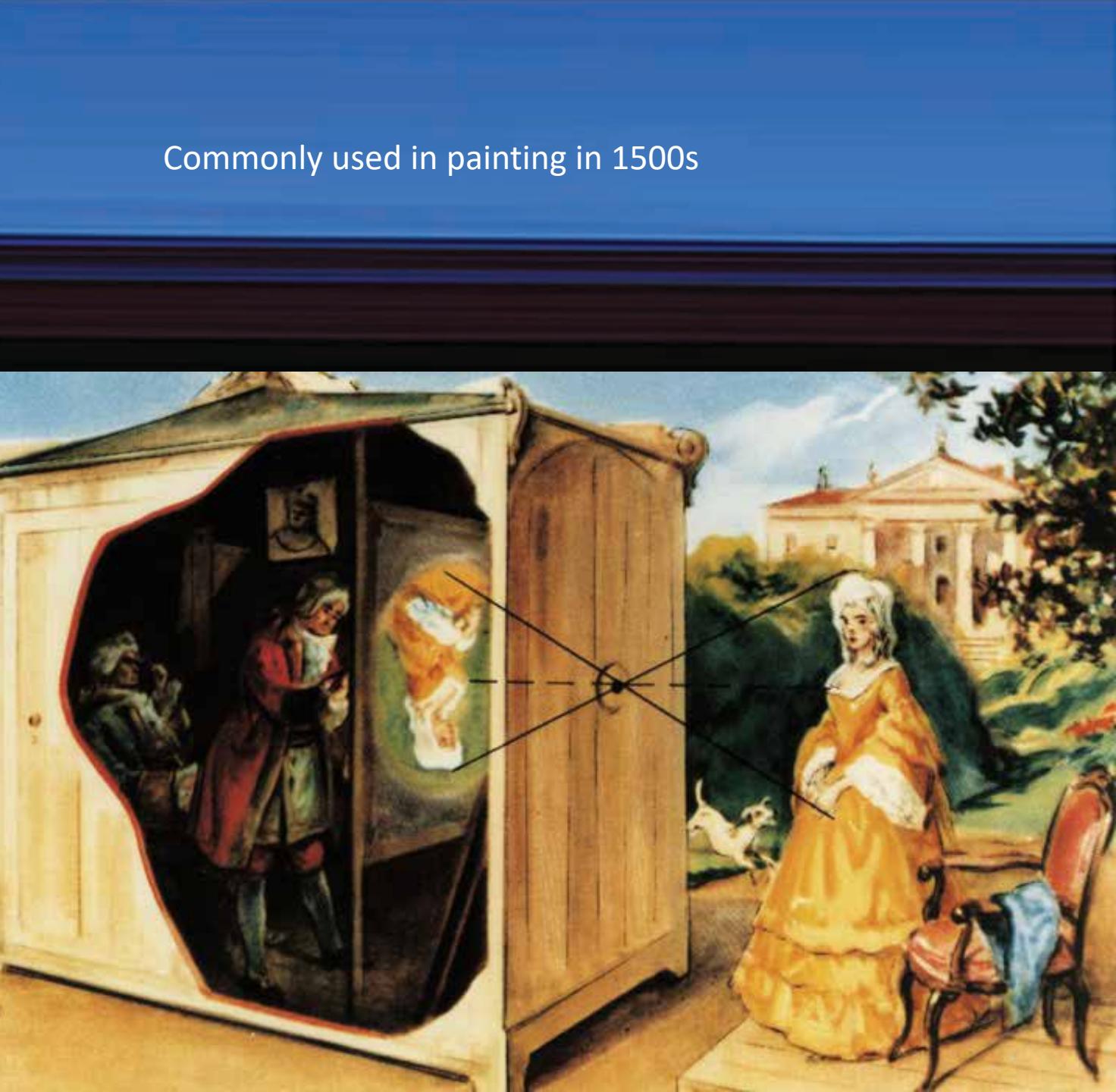
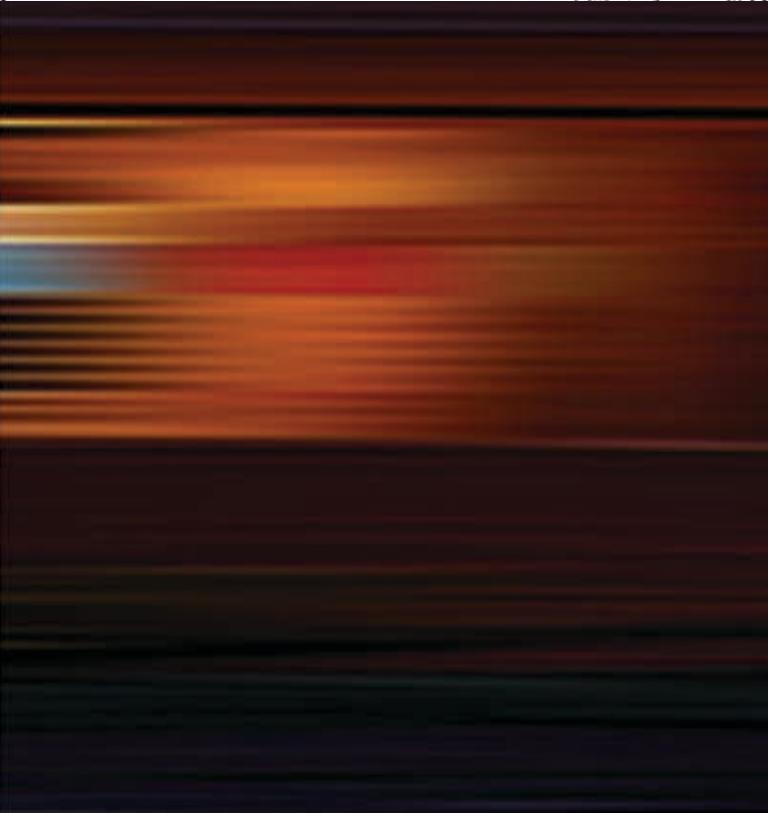
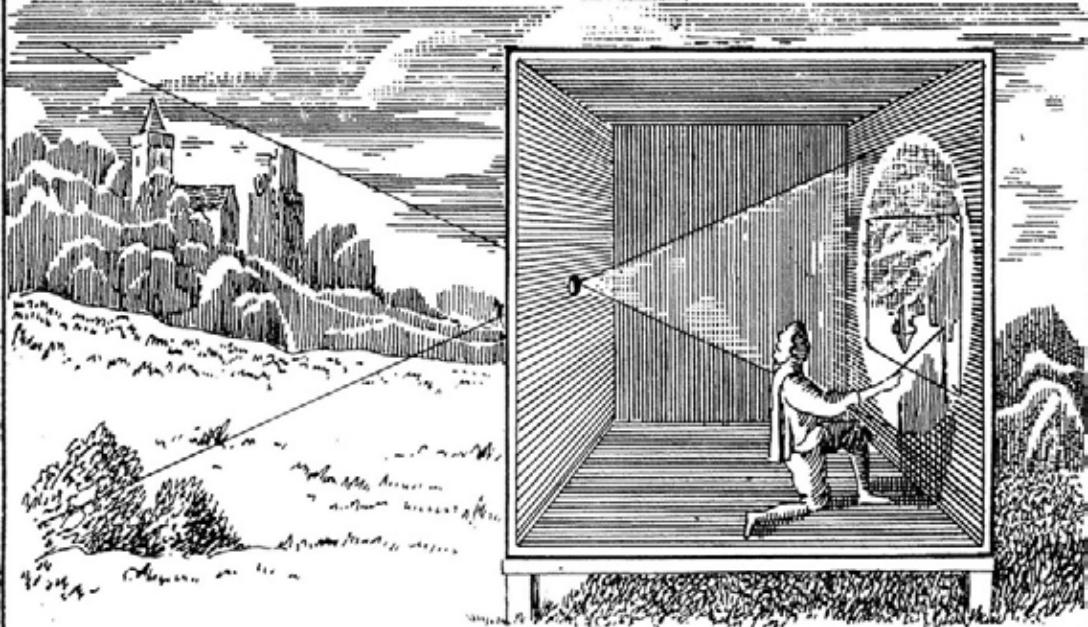


Bicameral legislature- Two “Chambers” or houses

Early Camera Obscura



From DaVinci codex



Commonly used in painting in 1500s

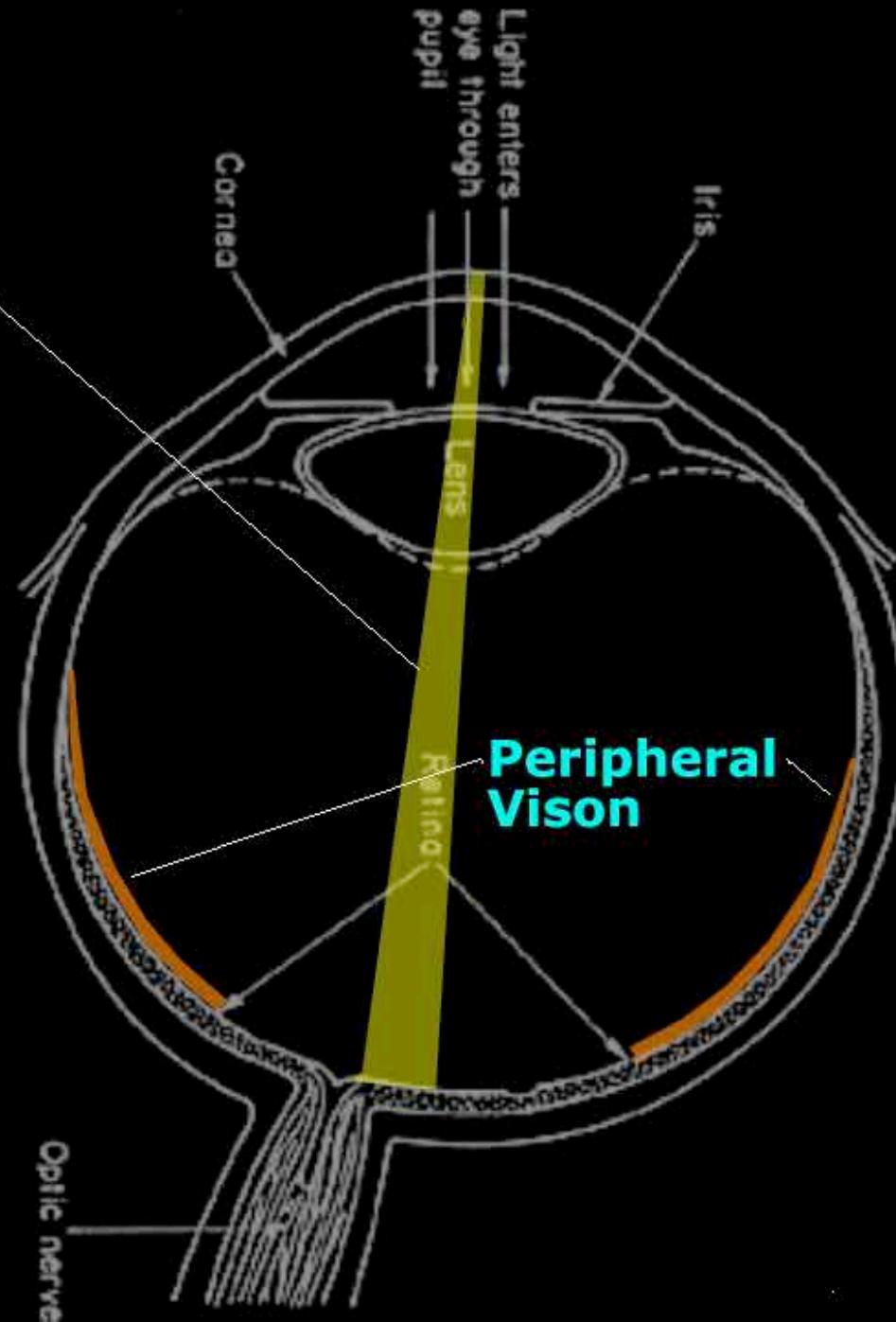
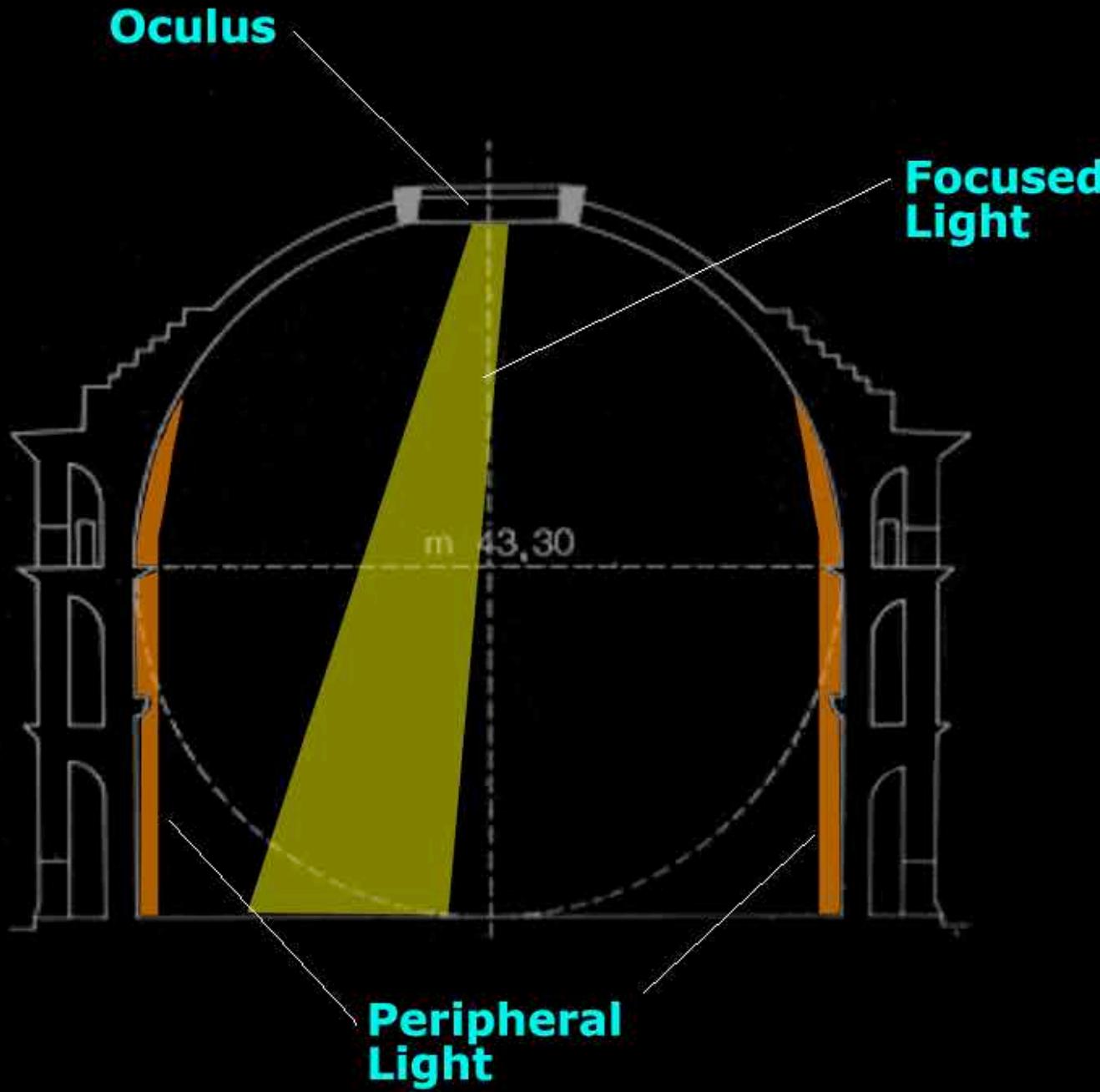


First daguerreotype,
1837



Work of Clifton Royal Adams,
My grandfather,
Pioneering color photographer
for National Geographic in the
1920s & 30s

Similar geometry at different scales





Foveal Vision

"Normal" Collapsed Vision

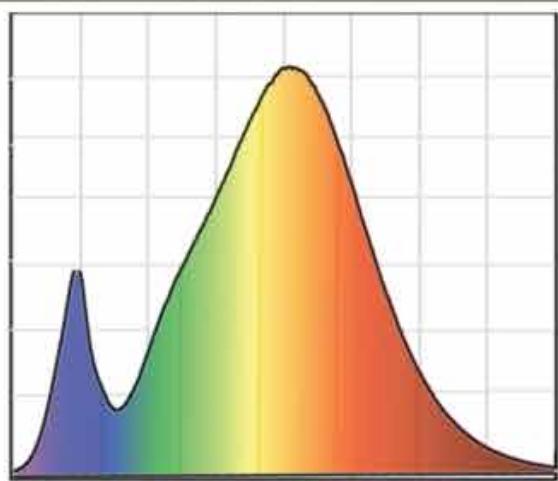
80 CRI



Histogram



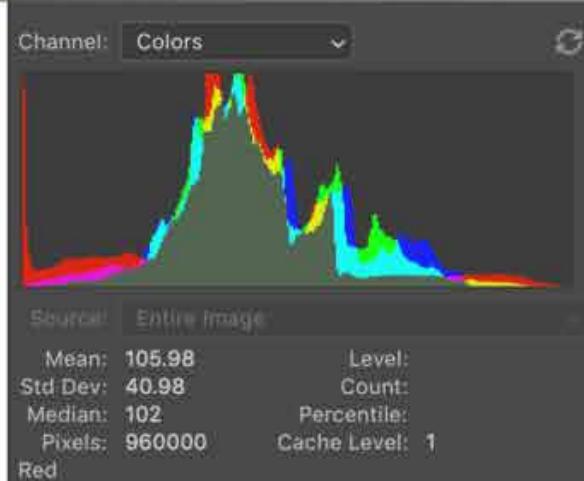
SPD



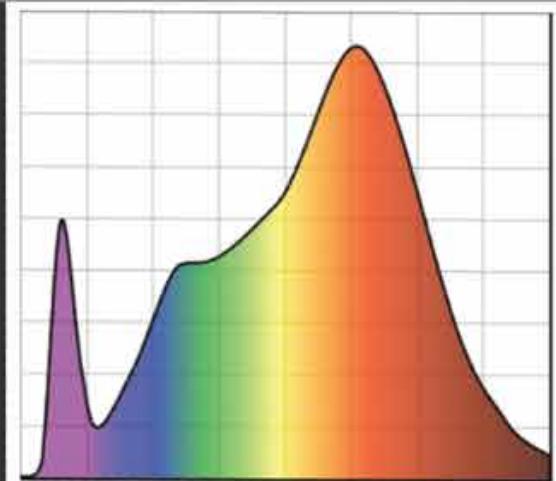
95 CRI



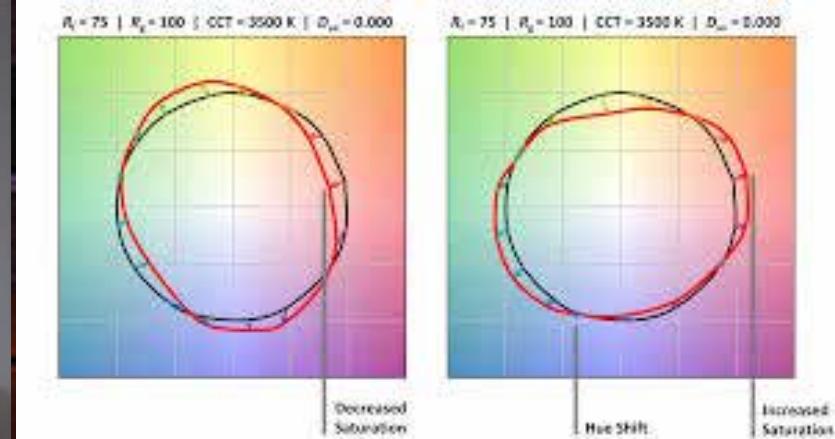
Histogram



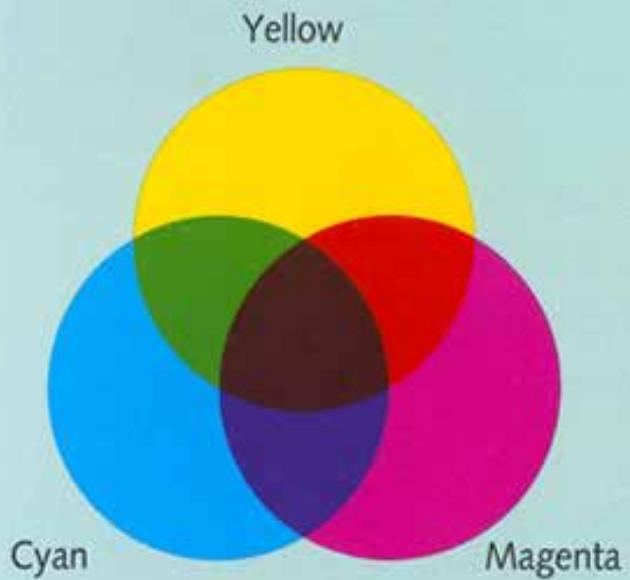
SPD



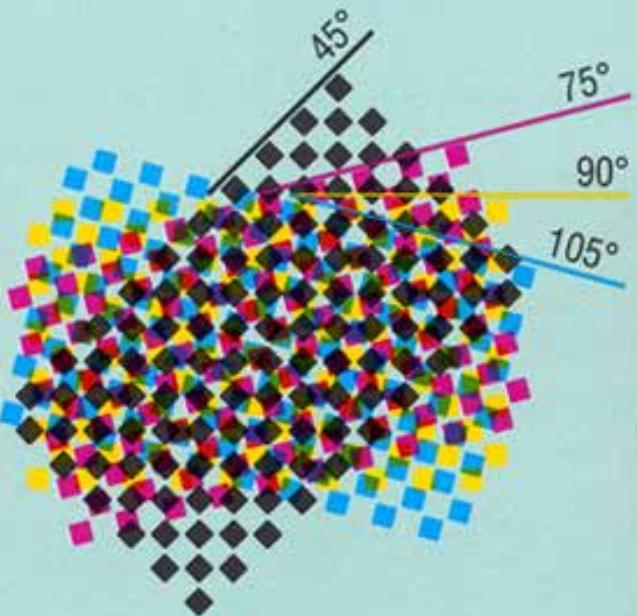
Gamut warning in Photoshop and gamut graphs from TM30



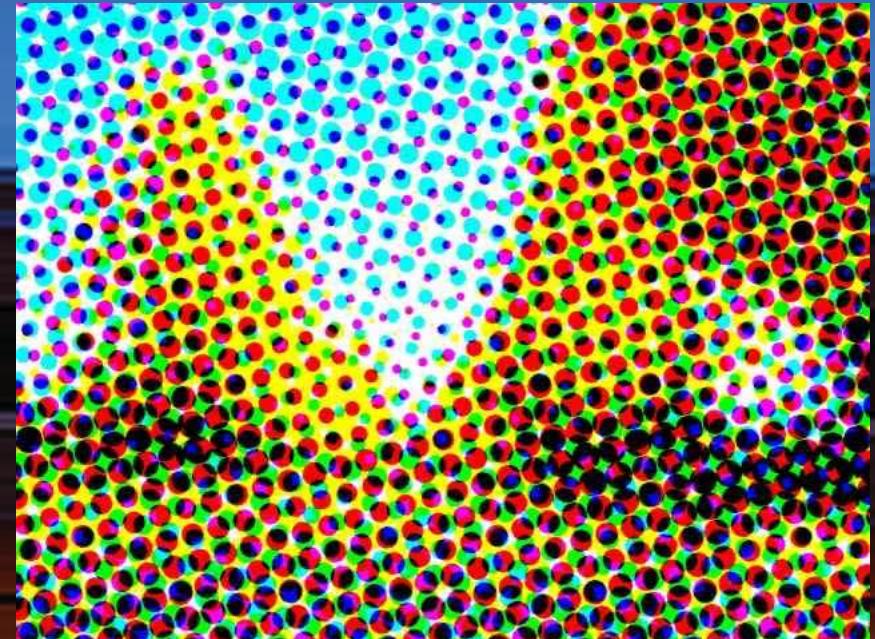
Subtractive colour



Cyan, magenta and yellow filters or pigments subtract varying quantities of red, green and blue from white light to produce a limited gamut of spectral colours.

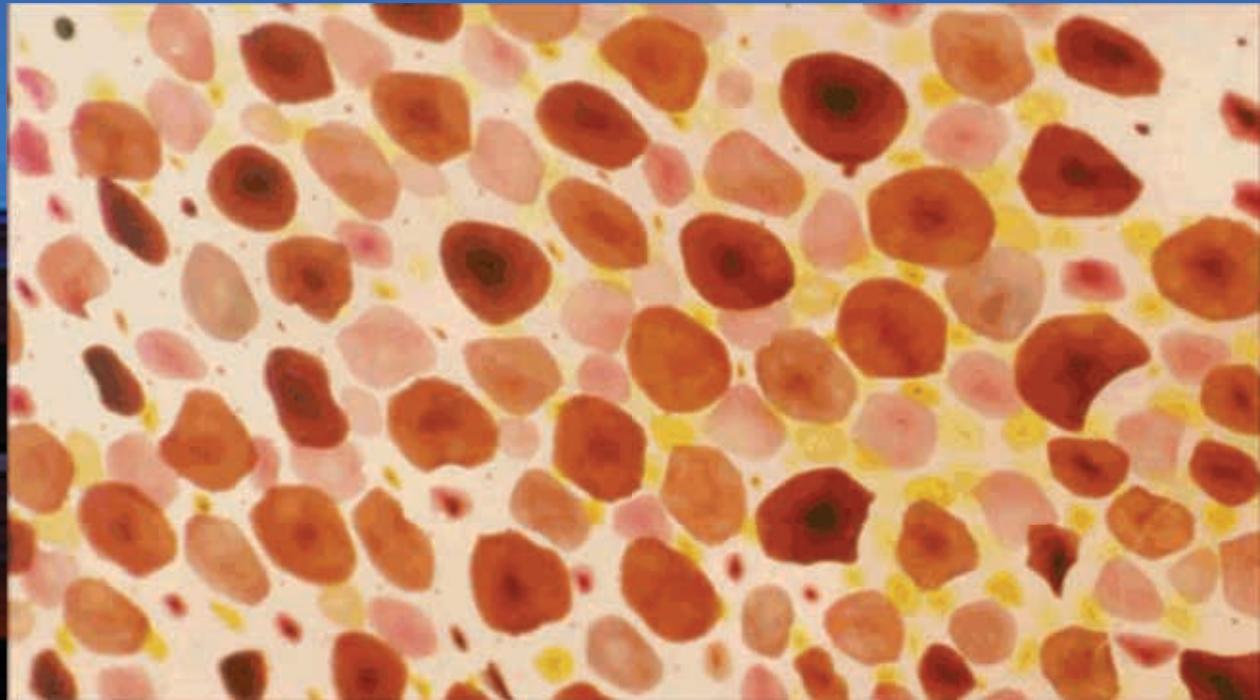
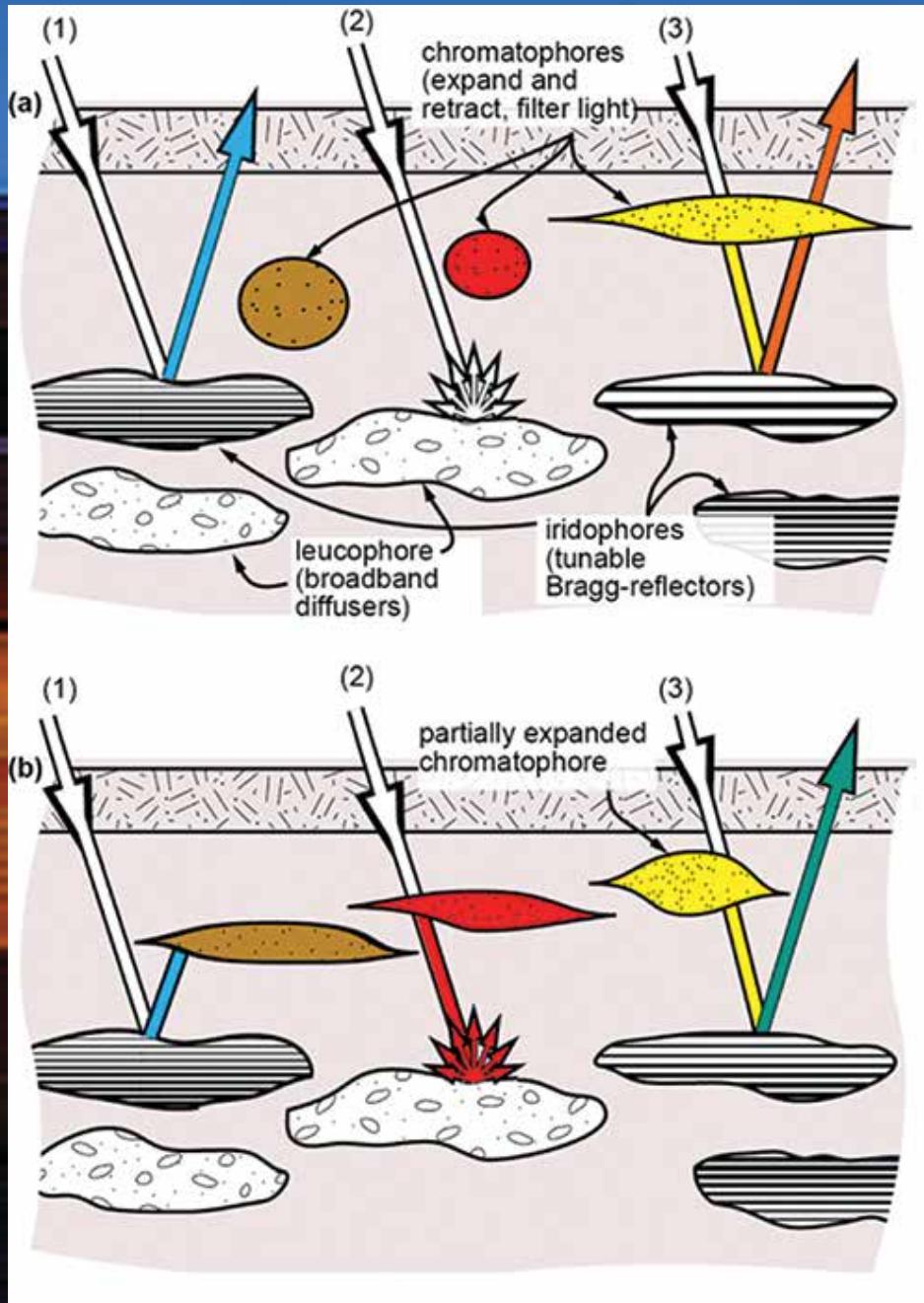


Halftone colour printing normally employs four overlapping grids of dots (CMYK), which subtract differing amounts of RGB light in proportion with dot size.



Offset printing technology with transparent inks and reflective “subtractive” color, uses a matrix of dots





The cuttlefish, master of camouflage, has skin with a variable matrix of different colored dots embedded in different levels of the skin that activate to reproduce the conditions of its environment

LED monitor also work with light-emitting matrices of dots

