

Lecture 'Computer Graphics'

INTRODUCTION

Images

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Visual Computing (<https://vc.w-hs.de>)

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Images

What are they?

Brainstorm!



Albrecht Dürer: Unterweysung der Messung mit dem Zirckel
und Richtscheit in Linien Ebenen unnd gantzen corporen. 1525.

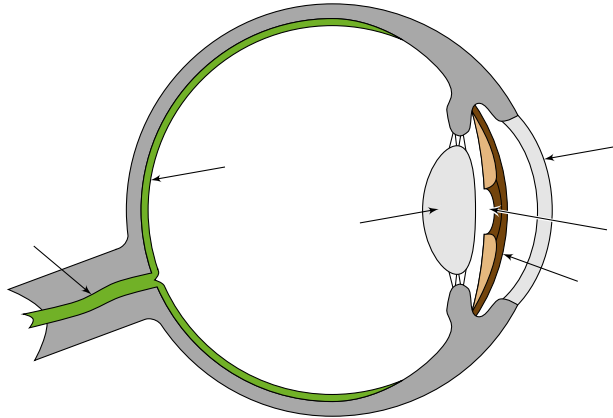
Images

What are they?

Definition-y:

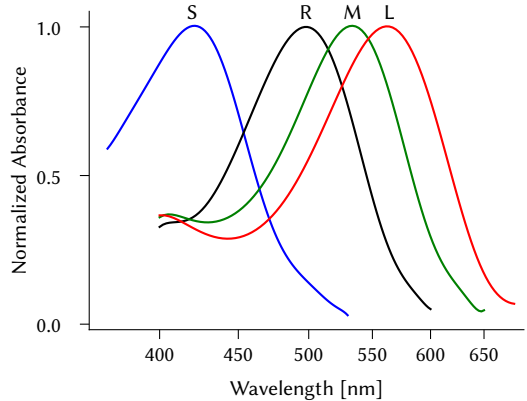


The Eye



Our 'Light Senosors'

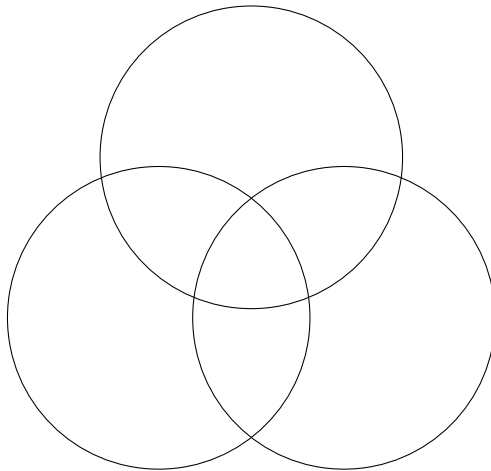
The Retina



after: J.K. Bowmaker, H.J. Dartnall: 'Visual Pigments of Rods and Cones in a Human Retina'.
The Journal of Physiology, 298, 1980. DOI: 10.1113/jphysiol.1980.sp013097.

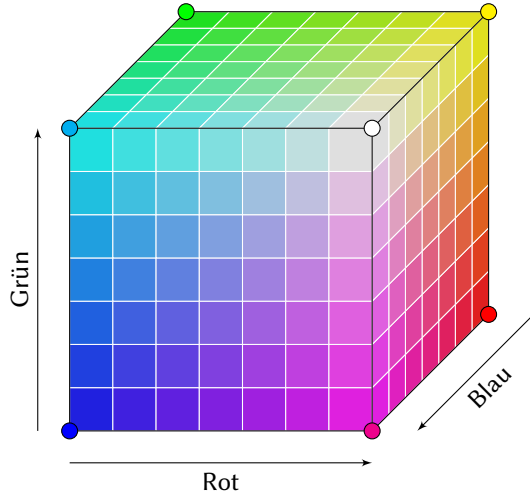
Colour

additive colour



Farbe

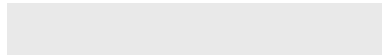
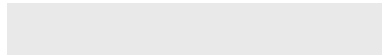
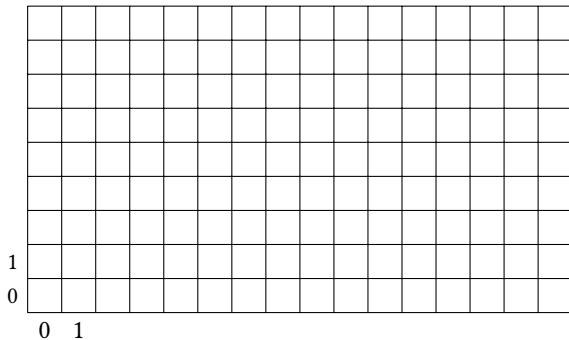
Additive Mischung im RGB-Farbraum



Images

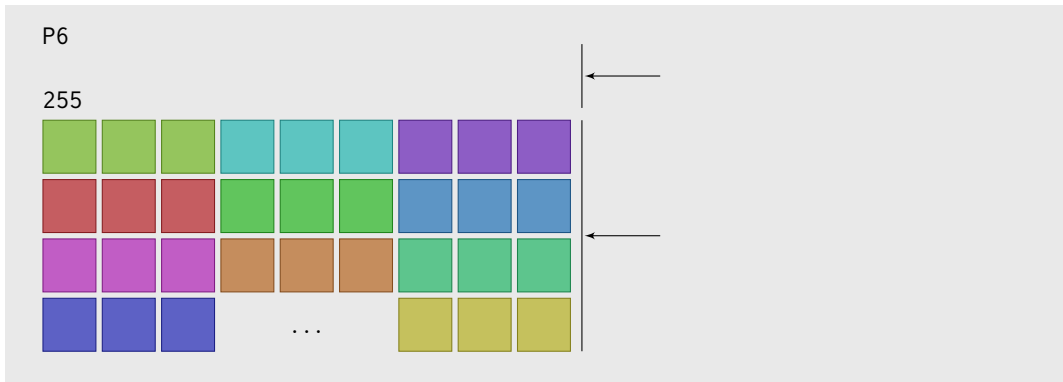
slightly more accurate

on screen:



A Simple Image Format

PPM – Portable Pixel Map



- ▶ P6 in header: colour values as binary
- ▶ P3 in header: colour values as numbers (0 ... 255) in ASCII

Summary



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