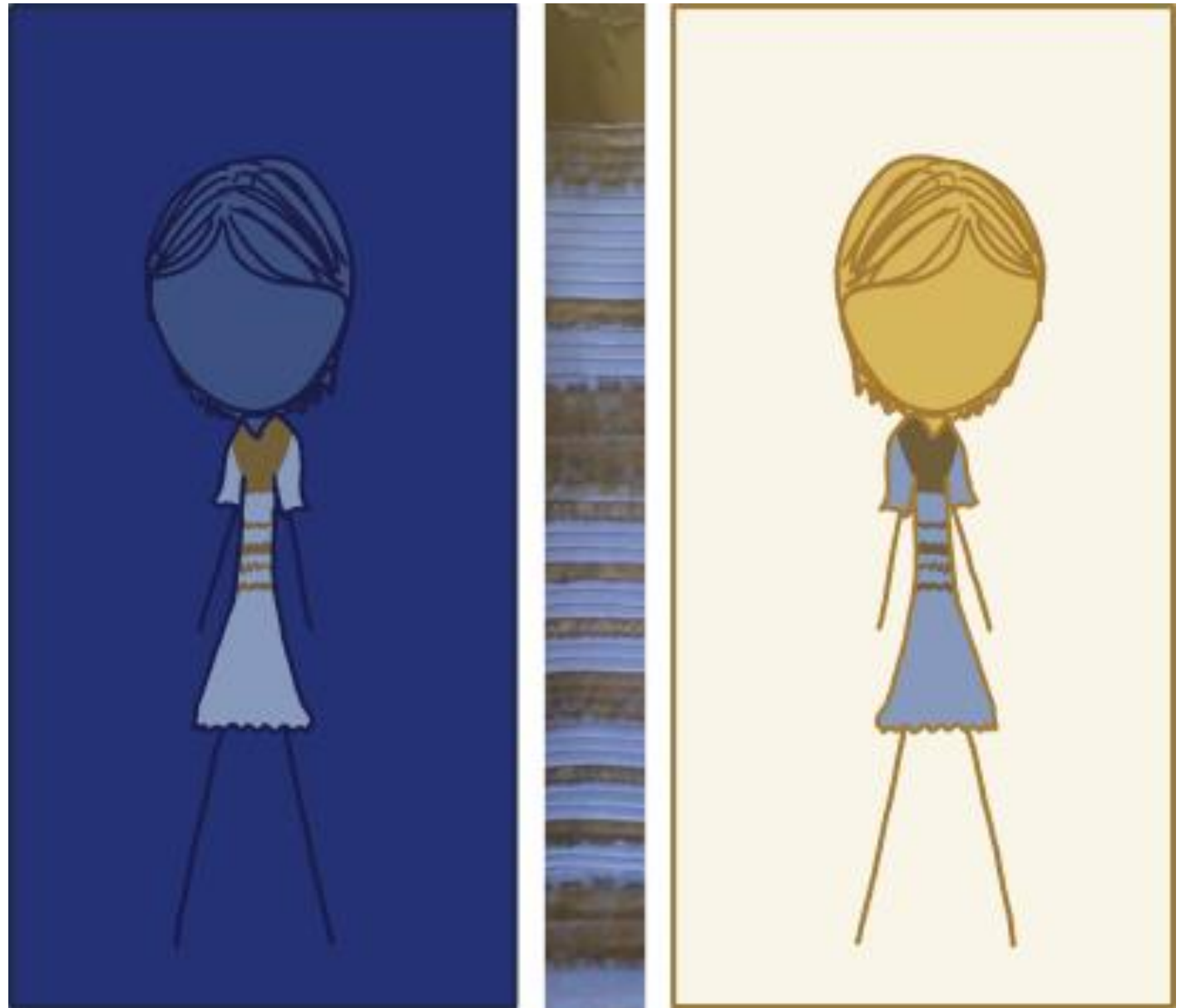


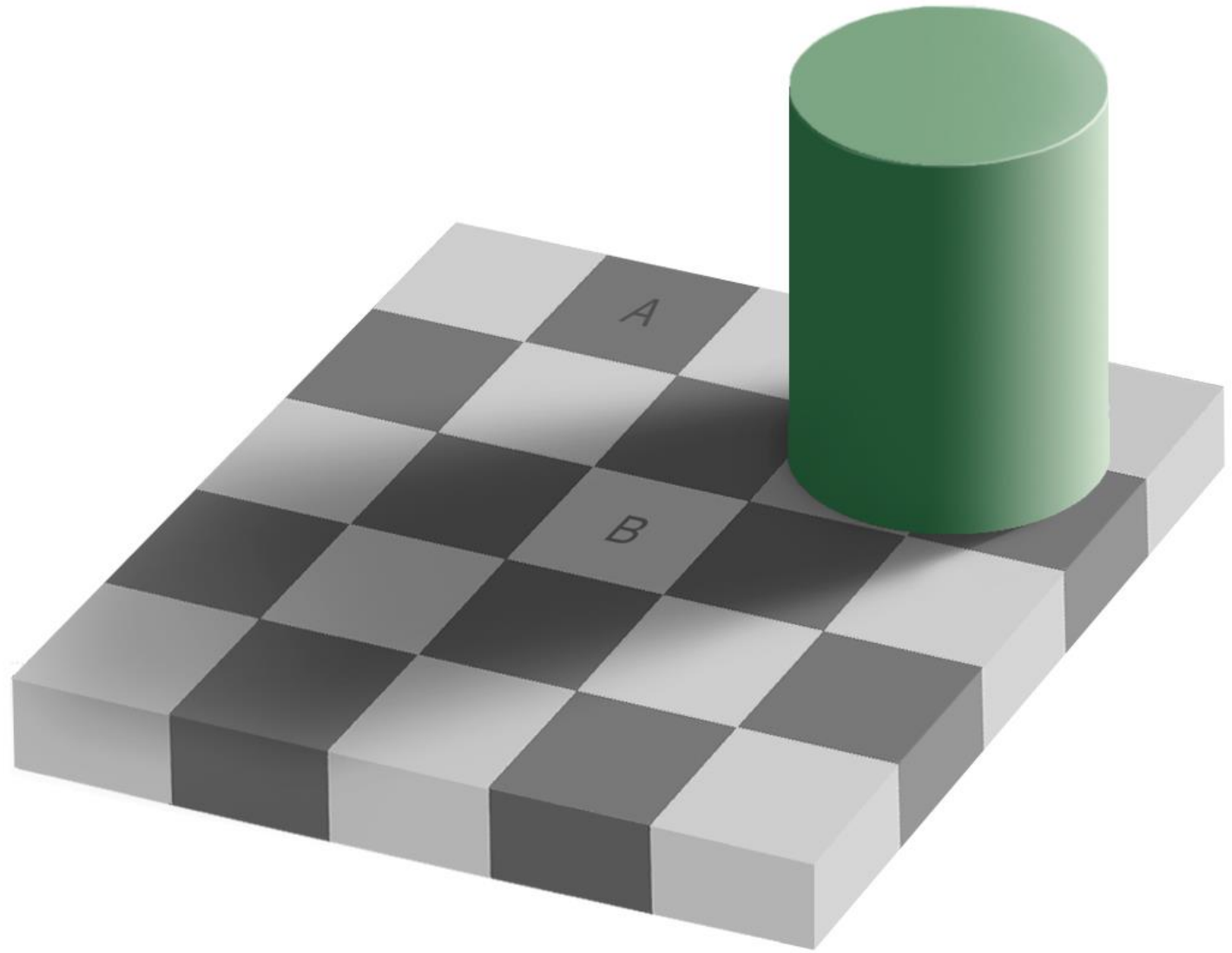




Colour appears differently
according to context
Cartoon: xkcd.com/1492/



Ditto for intensity



Colour Table

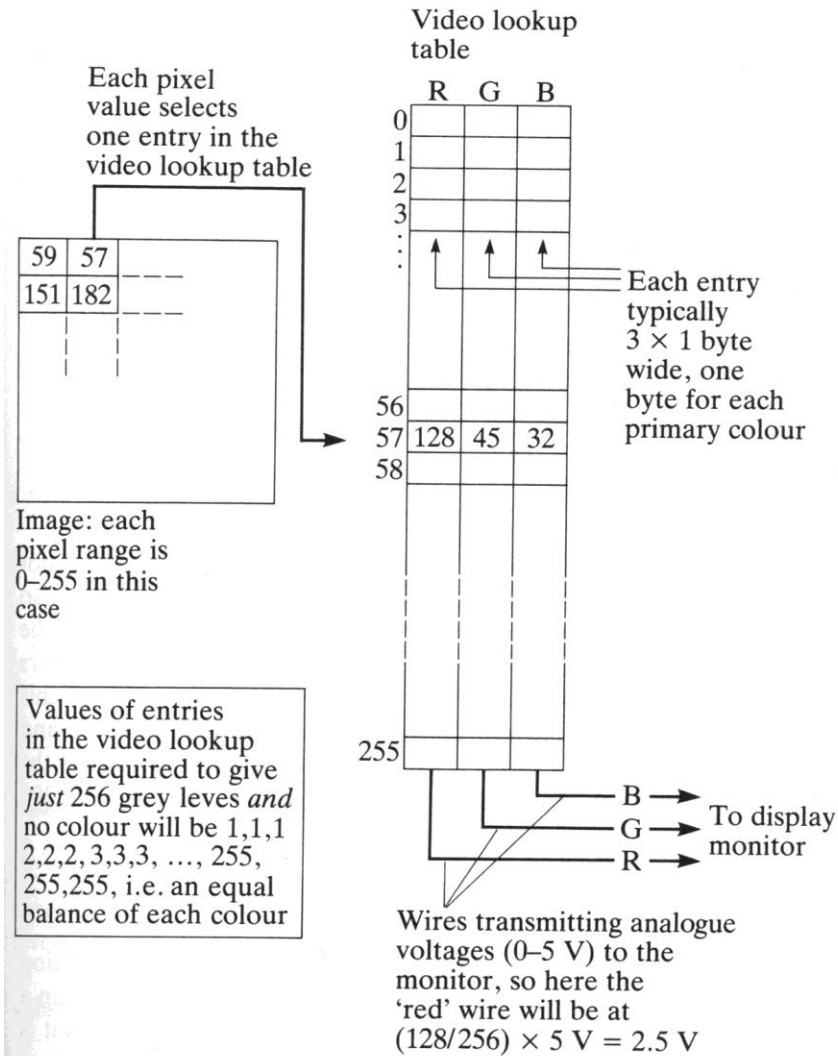
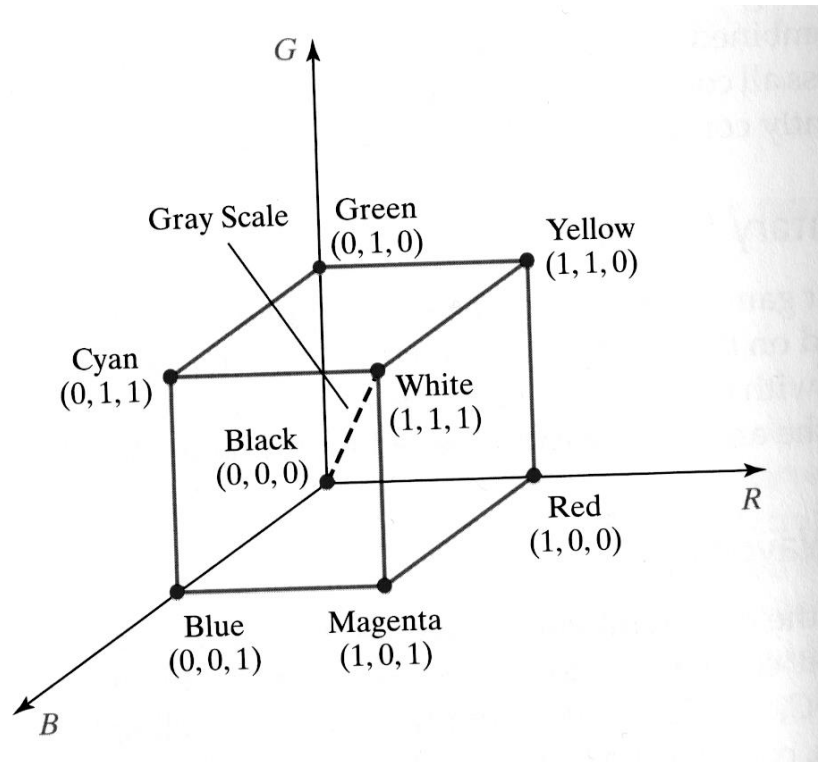


Figure 4.2 Video lookup table.

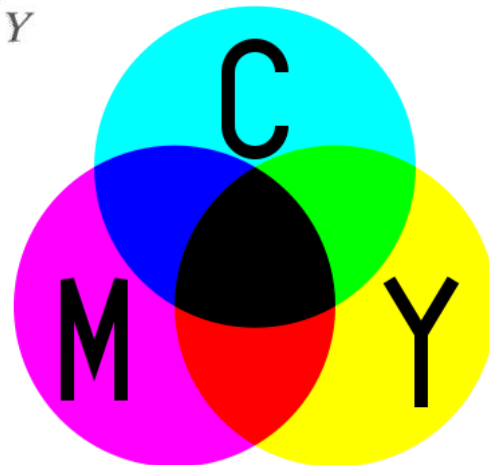
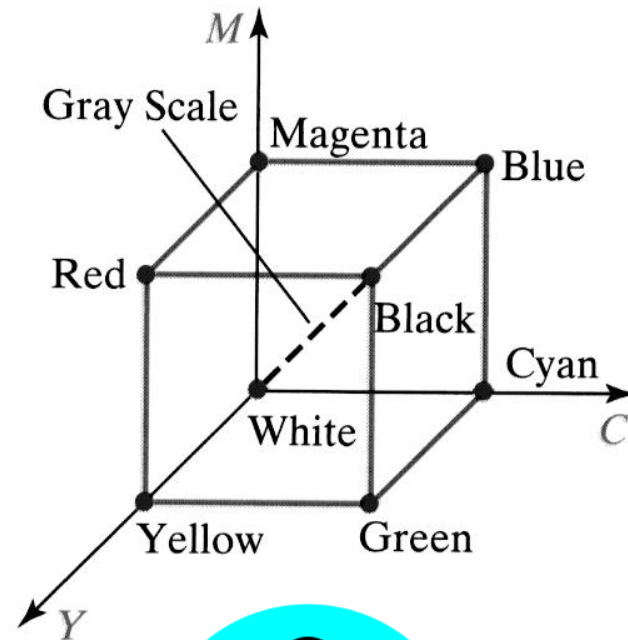
- From p35, Introductory Computer Vision and Image Processing, Adrian Low, McGraw-Hill, 1991
- GIF
- Quantization: Reduces Colour
- Mach banding
- Problem reduced by dithering

RGB Colour Model



- From Hearn and Baker
- RGB Colour Cube
- (r,g,b) triples plotted on R,G,B axes in 3D
- Point in unit cube represents a colour
- Additive colour model

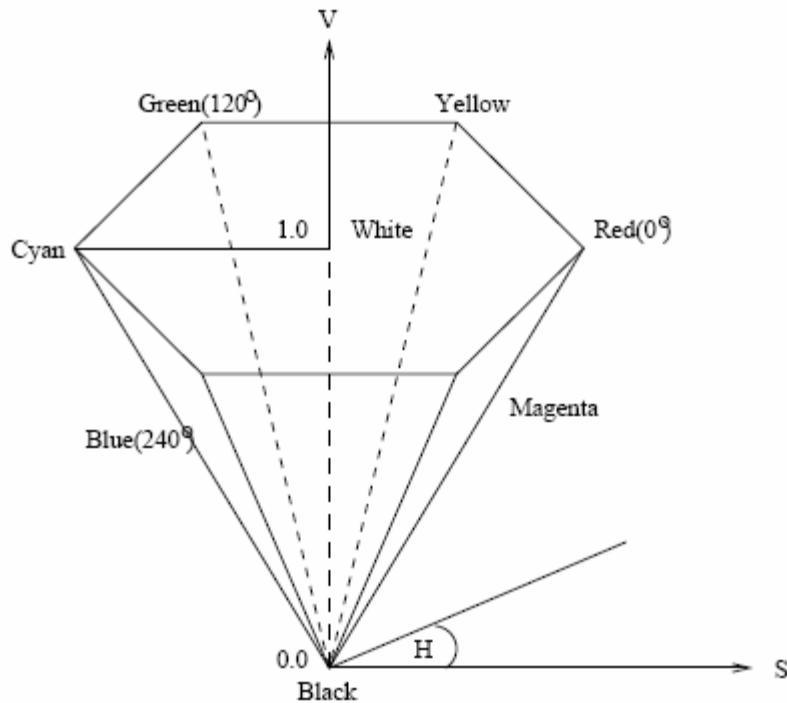
CMY Colour Model



- From Hearn and Baker
- CMY Cube
- (c,m,y) triples plotted on C,M,Y axes in 3D
- Point in unit cube represents a colour
- Subtractive colour model (print)
- More
https://en.wikipedia.org/wiki/Subtractive_color

Image: Wikipedia

HSV Colour Model



- Hue, Saturation, Value
- (Sometimes HSB=brightness or HSI=intensity)
- H=Hue, angle, 0-360
- S=Saturation, 0-no colour, 1-pure colour
- V=Value, 0=black, 1=brightest
- Best for user interaction (for selecting colours – see Photoshop)