

1/. Human Vision - is it a  
model? (2-12).

a). physical model

- evolved for survival

- form image on retina

- shape lens.

- many sensors

rods

$10^8$

Black-white

cones

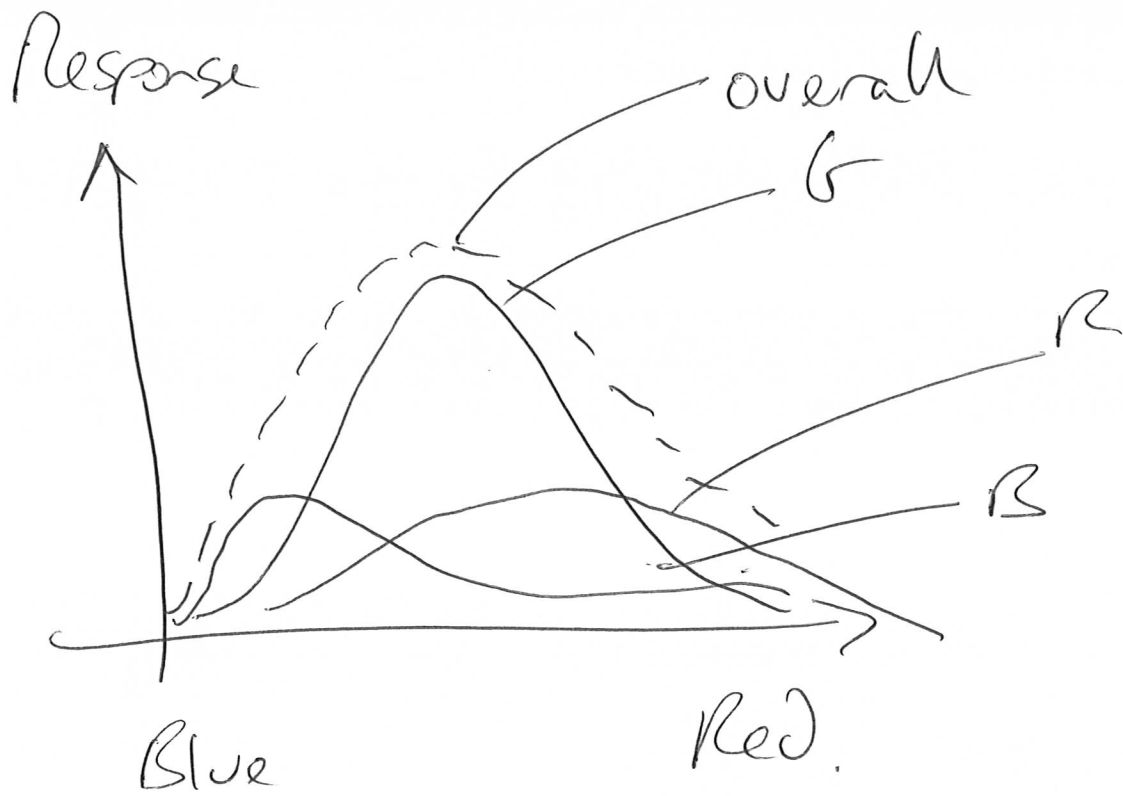
$10^7$

colour

R - red - Long wavelength

G - green - medium "

B - blue - short -



- not enough bandwidth  
(must be coding or compression).
- Mach bands are introduced  
by human vision

b). experimental model

- combine signals together
- use weighting functions & bias  
chosen by experiment
- e.g. is brightness =  $\frac{R+G+B}{3}$

## c/. Psychology

Occipital  
cortex

associative cortex

patterns

connections

needs training

subject to illusion/delusion

Is <sup>human</sup>~~computer~~ vision a good  
model for computer  
vision?