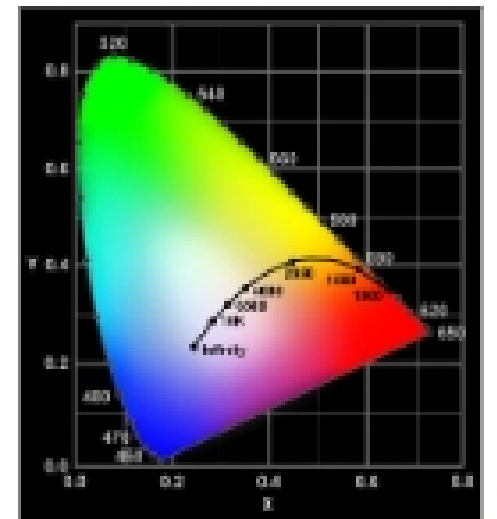


Color and Texture





The Appearance of Colors

- Color appearance is strongly affected by (at least):
 - other nearby colors,
 - adaptation to previous views
 - “state of mind”
- We show several demonstrations in what follows.



The Appearance of Colors

- Hering, Helmholtz: Color appearance is strongly affected by other nearby colors, by adaptation to previous views, and by “state of mind”
- Film color mode: View a colored surface through a hole in a sheet, so that the colour looks like a film in space; controls for nearby colors, and state of mind.
 - Other modes:
 - Surface colour
 - Volume colour
 - Mirror colour
 - Illuminant colour
- By experience, it is possible to match almost all colors, viewed in film mode using only three primary sources - the principle of **trichromacy**.
 - Other modes may have more dimensions
 - Glossy-matte
 - Rough-smooth
- Most of what follows discusses film mode.