The Art and Science of Depiction

Limitations of the Medium, compensation or accentuation

Fredo Durand
MIT Lab for Computer Science

J. M. W. Turner
1843, London, Tate Gallery

Shade and Darkness – the Evening of the Deluge

Light and Colour (Goethe’s Theory) – the Morning after Deluge

Isabella Stewart Gardner Museum

Isabella Stewart Gardner
• portraits

By Sargent

By Zorn

Jan Vermeer, The Concert, 1661-62

Rembrandt van Rijn, The Storm on the Sea of Galilee, 1633

Stolen artworks
Isabella Stewart Gardner Museum

- John Singer Sargent, El Jaleo, 1882

Survey

- Scattered!
- There is too much
- You want more
  - More connections
  - Rather more practical
- Reading
  - Scattered
- Lecture
  - Rather complex
  - OK to too fast
  - More images, more films, more variety

Goals

- Broad overview
- Raise issues
- Different point of view
- Give “cultural background”

Format

- Too formal
- Active participation is not encouraged enough
- Problem: I talk too much
- Lower our expectations
- More discussion

Web page of the class

- Slides
- Further reading recommendation
- In the future
  - Annotated bibliography
  - Notes of the slides

Assignments

- Readings
  - Different choices
  - Summarize to others the next week
  - Prepare questions for the text you have not read
- Solso *Cognition and the Visual Arts*
- Essay
  - Exploratory
  - Or Picture comment
- Final project
Personal Meeting II

- Class
- Essay
- Project

Limitations

- Specificities of the 2D medium
- Compensation
- Accentuation

Plan

- The picture is flat
- The viewpoint is unique
- The image is finite, it has a frame
- The picture is static
- The contrast is limited
- The gamut (palette) is limited

The viewpoint is unique

- Accidental/general viewpoint
- Multiple views
- Mirror
- Exploded views
- Diverging perspective
- Topological drawing
- Best local view
- Cubism

The viewpoint is unique

- Impossibility to resolve ambiguity
- Generic/accidental view

The viewpoint is unique

- Impossibility to resolve ambiguity
- Generic/accidental view
Accidental viewpoint
• Mary Cassatt

Multiple views
• Engineering

Mirrors
• Velasquez

Exploded views
• Tacolla, 1433

Divergent perspective
• Tacolla, 1427
Limitations 25

Divergent perspective

• Bifolio from a Gospel book:
  Mark
  Byzantine, 15th century

Limitations 26

Divergent perspective

• Andrei Rublev
  The Trinity
  1408-1425

Limitations 27

Divergent perspective

• Hasadera Enji

Limitations 28

Divergent perspective

• 15 year old girl

Limitations 29

Divergent Perspective

• David Hockney
  Chair

Limitations 30

Double profile view
**What I see/What I know**

Multi-perspective

- Umberto Boccioni
  *The Street Enters the House*

Multi-Perspective

- M. C. Escher
  *Other World* 1947

Multi-perspective

- David Hockney
  *Mother*

Cubism

- Picasso
  *Portrait of a Woman*
Best local view

Limitations

Best local view

Limitations

Best local view

Limitations

The image is finite, it has a frame

• Window
• Verticals & frame
• Distortion compensation
• Cropping
• Panorama

Limitations

The Picture as a Window

• Durer

Limitations

The Picture as a Window

Limitations
The Picture as a Window

- Magritte

Window

- Mucha
- Interaction 2D/3D

Window

- Gustav Klimt
  Judith

Verticals and Horizontals

- Burnes Jones
  Pygmalion
Distortion compensation

Framing
- Hiroshige, Car Wheel at the Sea Shore 1857

Framing
- Degas

Absence of Framing

Panorama

Modern Panorama
- QuickTime VR
- IMAX
**Hand Rolls**

- Rembrandt
  *Self Portrait*

**Negative space & balance**

- Rembrandt
  *Self Portrait*

**Cropping**

- Boticelli

**Cropping**

- Boticelli

**Different format**

- Jean Cocteau
  *Gabier de Vigie*