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 Museum

Isabella Stewart Gardner

• portraits

By Sargent

By Zorn

Jan Vermeer, The Concert, 1658-60

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

Stolen artworks

Limitations

Limitations

Limitations

Limitations
**Isabella Stewart Gardner Museum**

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**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

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

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

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**Web page of the class**
- Slides
- Further reading recommendation
- In the future
  - Annotated bibliography
  - Notes of the slides

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**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
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<th>Limitations</th>
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<tbody>
<tr>
<td><strong>Personal Meeting II</strong></td>
<td><strong>Limitations</strong></td>
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<tr>
<td>• Class</td>
<td>• Specificities of the 2D medium</td>
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<td>• Compensation</td>
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<tr>
<td><strong>Plan</strong></td>
<td><strong>The viewpoint is unique</strong></td>
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<tr>
<td>• The picture is flat</td>
<td>• Accidental/general viewpoint</td>
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<td>• The viewpoint is unique</td>
<td>• Multiple views</td>
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<tr>
<td>• The image is finite, it has a frame</td>
<td>• Mirror</td>
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<td>• The picture is static</td>
<td>• Exploded views</td>
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<tr>
<td>• The contrast is limited</td>
<td>• Diverging perspective</td>
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<td>• The gamut (palette) is limited</td>
<td>• Topological drawing</td>
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<td>• Impossibility to resolve ambiguity</td>
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<td>• Generic/accidental view</td>
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Accidental viewpoint

Multiple views
- Engineering

Mirrors
- Mary Cassatt

Mirrors
- Velasquez

Exploded views
- Tacolla, 1433

Divergent perspective
- Tacolla, 1427
Divergent perspective

- Bifolio from a Gospel book: Mark
  Byzantin, 15th century

Divergent perspective

- Andrei Rublev
  The Trinity
  1408-1425

Divergent perspective

- Hasadera Enji

Divergent perspective

- 15 year old girl

Divergent Perspective

- David Hockney
  Chair

Double profile view
Limitations 31

What I see/What I know

Limitations 32

Multi-perspective

• Umberto Boccioni
  The Street Enters the House

Limitations 33

Multi-Perspective

• M. C. Escher
  Other World
  1947

Limitations 34

Multi-perspective

• David Hockney
  Mother

Limitations 35

Cubism

• Picasso
  Portrait of a Woman

Limitations 36

Cubism
Limitations 37

Best local view

Limitations 38

Best local view

Limitations 39

The image is finite, it has a frame

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

Limitations 40

Limitations 41

The Picture as a Window

• Durer

Limitations 42

The Picture as a Window
The Picture as a Window

• Magritte

Window

• Mucha
• Interaction 2D/3D

Window

• Gustav Klimt
  Judith

Verticals and Horizontals

• Burnes Jones
  Pygmalion

Verticals and Horizontals
**Distortion compensation**

**Framing**
- Hiroshige, *Car Wheel at the Sea Shore* 1857

**Framing**
- Degas

**Absence of Framing**

**Panorama**

**Modern Panorama**
- QuickTime VR
- IMAX
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<tr>
<th>Hand Rolls</th>
<th>Negative space &amp; balance</th>
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| ![Hand Rolls](image1) | • Rembrandt  
Self Portrait |  |

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<td>Gabier de Vigie</td>
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