

*The Art and Science of Depiction*

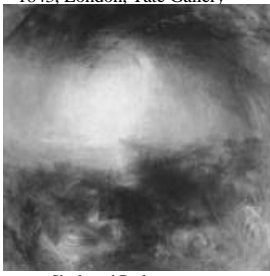
***Limitations of the Medium,  
compensation or accentuation***

Fredo Durand  
MIT- Lab for Computer Science

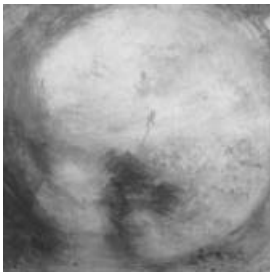
***J. M. W. Turner***

---

1843, London, Tate Gallery




Shade and Darkness  
– the Evening of the Deluge



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

Limitations 2

***Isabella Stewart Gardner Museum***




Limitations 3

***Isabella Stewart Gardner Museum***




Limitations 4


***Isabella Stewart Gardner***

---

- portraits



By Sargent



By Zorn

Limitations 5

***Stolen artworks***



Jan Vermeer, *The Concert*, 1658-60



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

Limitations 6

## *Isabella Stewart Gardner Museum*

- John Singer Sargent, *El Jaleo*, 1882



Limitations

7

## *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

Limitations

8

## *Goals*

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

Limitations

9

## *Format*

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

Limitations

10

## *Web page of the class*

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

Limitations

11

## *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

Limitations

12

## *Personal Meeting II*

---

- Class
- Essay
- Project

Limitations

13

## *Limitations*

---

- Specificities of the 2D medium
- Compensation
- Accentuation

Limitations

14

## *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

Limitations

15

## *The viewpoint is unique*

---

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

Limitations

16

## *The viewpoint is unique*

---

- Impossibility to resolve ambiguity
- Generic/accidental view



Limitations

17

## *The viewpoint is unique*

---

- Impossibility to resolve ambiguity
- Generic/accidental view



Limitations

18

### *Accidental viewpoint*

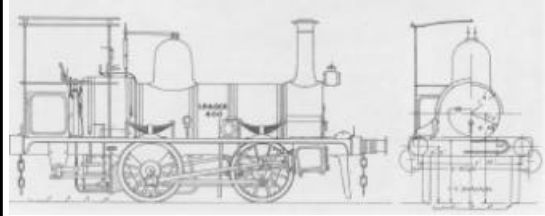


Limitations

19

### *Multiple views*

- Engineering



Limitations

20

### *Mirrors*

- Mary Cassatt



Limitations

21

### *Mirrors*

- Velasquez

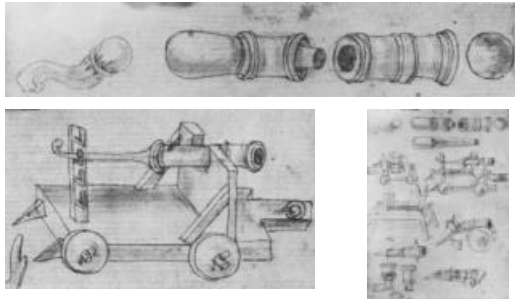


Limitations

22

### *Exploded views*

- Tacolla, 1433

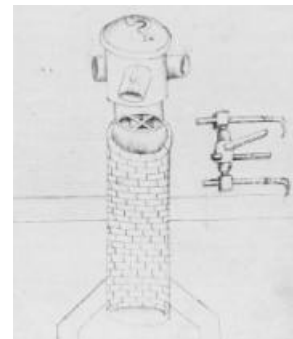


Limitations

23

### *Divergent perspective*

- Tacolla, 1427



Limitations

24

*Divergent perspective*

- Bifolio from a Gospel book:  
Mark  
Byzantin, 15<sup>th</sup> century



Limitations

25

*Divergent perspective*

- Andrei Rublev  
*The Trinity*  
1408-1425



Limitations

26

*Divergent perspective*

- Hasadera Enji



Limitations

27

*Divergent perspective*

- 15 year old girl



Limitations

28

*Divergent Perspective*

- David Hockney  
*Chair*



Limitations

29

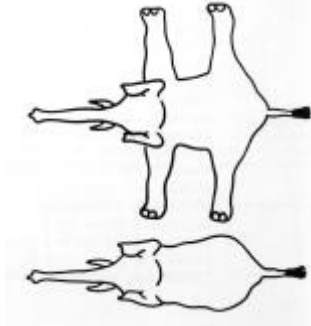
*Double profile view*



Limitations

30

*What I see/What I know*



Limitations

31

*Multi-perspective*

- Umberto Boccioni  
*The Street Enters the House*



Limitations

32

*Multi-Perspective*

- M. C. Escher  
*Other World*  
1947



Limitations

33

*Multi-perspective*

- David Hockney  
*Mother*



Limitations

34

*Cubism*

- Picasso  
*Portrait of a Woman*



Limitations

35

*Cubism*



Limitations

36

*Best local view*



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

*The Picture as a Window*

- Durer



Limitations

41

*The Picture as a Window*



Limitations

42

### *The Picture as a Window*

- Magritte



Limitations

43

### *Window*



Limitations

44

### *Window*

- Mucha
- Interaction 2D/3D

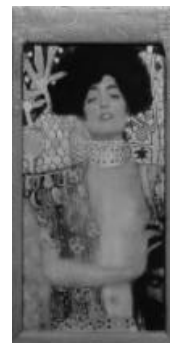


Limitations

45

### *Window*

- Gustav Klimt  
*Judith*



Limitations

46

### *Verticals and Horizontals*

- Burnes Jones  
*Pygmalion*



Limitations

47

### *Verticals and Horizontals*



Limitations



48



### *Distortion compensation*



Limitations

49

### *Framing*

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



Limitations

50

### *Framing*

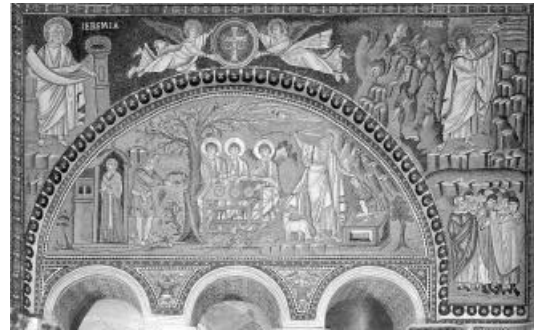
- Degas



Limitations

51

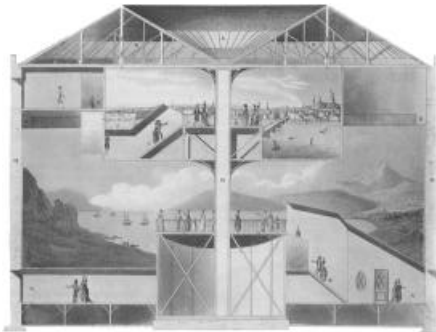
### *Absence of Framing*



Limitations

52

### *Panorama*



Limitations

53

### *Modern Panorama*

- QuickTime VR
- IMAX



Limitations

54

## *Hand Rolls*



Limitations

55

## *Negative space & balance*

- Rembrandt  
*Self Portrait*



Limitations

56

## *Cropping*

- Botticelli



Limitations

57

## *Cropping*



Limitations

58

## *Different format*

- Jean Cocteau  
*Gabier de Vigie*



Limitations

59