

Geography 572

Lecture #7: Art and Aesthetics (11/15 & 11/20)

Outline

1. Art and Emotion

- a. Cartography: Art or Science?
- b. Art and Emotion: The Basics
- c. Semiotics + Art: Motivating Emotions?

2. Art and Aesthetics

- a. Aesthetics, Style, and Taste: The Basics
- b. Aesthetic Styles and Maps

Readings

- Norman (2004) *Emotional Design* (Ch6)
- Tufte (1983) *The visual display of quantitative information*

1. Art and Emotion

a. Cartography: Art or Science?

Poll: Is Cartography an Art or a Science?

- there was an active debate in the UW Cartography Lab about this very topic in April, 2011
 - blog post: [On Art & Science in Web Cartography](#) (Wallace)
 - journal article: [Reasserting Design Relevance in Cartography](#) (Field & Demaj)
 - figure: Art and Cartography [1](#), [2](#), and [3](#) (Wallace)
 - figure: [Art and Cartography](#) (Huffman)
 - figure: Art and Cartography [1](#), [2](#), and [3](#) (Woodruff)
 - figure: [Art and Cartography](#) (Auer) **#Fitness**

- **Cartography** (from 370): the art, science, and ethics of mapmaking and map use
 - framework: [Integrative Cartography](#)

b. Art and Emotion: The Basics

- **emotive aspect** (again): to stimulate a particular emotional response **#Art**
 - example: Unemployment [1](#), [2](#), and [3](#)
- **emotion**: a holistic human response, involving physiological arousal, expressive behavior, and conscious experience
 - i.e., experienced meaning, lived knowledge, feelings
 - framework: Emotions [1](#) and [2](#)
- **affect**: the experience of emotion
 - example: [Mental Map](#)
 - example: [Light At Night](#)
 - example: [Perceptions of Athens](#)
- **Emotional Design Take-home #1**: The experience of emotion produces short-term and long-term responses; design with this in mind

Norman's Levels of Affect / Emotional Design (3)

1. **visceral**: your immediate physiological arousal
 - i.e., your gut reaction, your snap judgment
 - important for setting the mood **#VisualStorytelling**
 - example: [Poetic Traditions of the Arabs](#)
 - example: [BOOMsys](#)

- produces a physical reaction: heart rate, blood pressure, breathing rate, sweating, pupil dilation, shaking
 - example: [Lie Detector Test](#)
 - example: [Visceral Response + Aesthetics](#)
- 2. **behavioral**: the immediate actions you take in response to your physiological arousal
 - i.e., what does it *feel* like to use the map
 - engineers often couch in terms of clear/confusing (**usability**) and valuable/invaluable (**utility**)
 - example: [Poetic Traditions of the Arabs](#)
 - example: [BOOMsys](#)
 - but maps also need to be intriguing, provocative, fun, entertaining
 - example: [Laconic History of the World](#)
 - example: [Mental Map](#)
- 3. **reflective**: the long term emotional impact of your experience
 - i.e., will you *feel* differently now in future situations?
 - example: [Poetic Traditions of the Arabs](#)
 - example: [BOOMsys](#)
 - example: [Laconic History of the World](#)
 - example: [Islands of Mankind](#)
[#RadicalCartography](#)
- **Emotional Design Take-home #2**: Color evokes our emotions differentially, but this difference is culturally dependent
 - figure: [Colours in Cultures](#) **#Connotation**
 - **red**: anger, courage, danger, desire, excitement, heat, love, passion, radicalism

- **yellow**: cowardice, energy, fun, happiness, peace.
 - **green**: good luck, growth, jealousy, natural,
 - **blue**: cold, decadence, freedom, healing, intelligence, loyalty, mystery, rational, unhappiness
 - **purple**: beauty, cruelty, decadence, flamboyance, power, virtue
 - **white**: heaven, luxury, marriage, purity, truce
 - **black**: authority, death, eternity, evil, mourning, style
- figure: ColorBrewer.org
- example: [BOOMsys](#)
- **Emotional Design Take-home #3**: Typeface sets the tone for how the reader *reacts* to what is labeled (perhaps more so than *sees, reads, understands*, etc.)
 - figure: [Typefaces and Mood](#)
 - figure: [Nice Sans](#)
- **humanistic geography/cartography**: a situated perspective on art, science, and ethics that emphasizes the active role of human consciousness, human agency, and human creativity in creating **#Meaning**
 - framework: [Periodic Table of Typefaces](#)
 - framework: [Integrative Cartography](#)
 - **for science**: IMHO, this is user-centered design
 - **for ethics**: IMHO, this is your **#Obligations** to your colleagues, funders, employers, and yourself **#Ethics**
 - **for art**: IMHO, this is designing with your map readers' emotions in mind; caring about how people will feel when they read your map
- **Emotional Design Take-home #4**: **#Iconicity** evokes our humanity

- example: [A War Without Humans](#)
- example: IED Iconicity [1](#), [2](#), and [3](#)
- example: [Death Penalty Executions Since 1976](#)
- example: [Esri Chernoff Legends](#)

c. Semiotics + Art: Motivating Emotions?

- **Claude Lévi-Strauss** (CE 1908-2009):
 - Chair of Social Anthropology, Collège de France (1959-1982)
 - image: [Lévi-Strauss](#)
 - Saussurian semiotician **#Dyadic**
 - primary proponent of the **structuralism**, a theoretical paradigm supposing that universal cultural meaning can be revealed through reducing a concept into its elementary units **#Ethics**
- **art** (alternative definition): products of human emotion/expression that serve essential cultural functions

Semiotic Functions of Art (11)

1. **balance & harmony**: the creation of art in appreciation of order and beauty **#Aesthetics**
 - example: [New York & Paris Deconstructed](#)
2. **mystery**: the creation of art in appreciation of the unknown
 - example: [T-O Map](#)
 - example: [Here be dragons](#)
3. **imagination**: the creation of art in expression of the unreal
 - example: [Errant Isle of Manhattan](#)

- example: [Panem](#)
- 4. **ritual**: the creation of art to facilitate cultural practice
 - example: County Collecting [1](#), [2](#), and [3](#)
- 5. **communication**: the creation of art to encode a message
 - example: [ANSI INCITS 415-2006](#)
- 6. **entertainment**: the creation of art to amuse
 - example: [Ohio is a Piano \(Encore\)](#)
 - example: [Laconic History of the World](#)
 - example: [Mental Map](#)
- 7. **therapy**: the creation of art to heal
 - example: [Bogus Art Maps](#)
 - example: [On Salvation](#)
- **Emotional Design Take-home #6**: It only partially matters that you evoke the intended emotion with your design; what really matters is your design helped you to understand your own emotions **#SituatingKnowledge**
- 8. **fitness**: the creation of art to impress
 - example: Valentinography [1](#) and [2](#)
- 9. **politics**: the creation of art for social/political change **#Ethics**
 - i.e., the *avant-garde*
 - example: [Choice≠Access](#)
- 10. **propaganda**: the creation of art to influence **#Ethics**
 - example: [Treaty of Versailles](#)
 - example: [The American Dove](#)
 - example: [Scott's Great Snake](#)

11. **subversion**: the creation of art to in radical protest **#Ethics**

- example: [The Nuclear War Atlas](#) **#CounterMapping**

2. Art and Aesthetics

a. Aesthetics, Style, and Taste: The Basics

- **aesthetic aspect** (again): to stimulate a sense of beauty **#Art**
- **aesthetics**: a branch of philosophy dealing with the nature and appreciation of beauty
 - theories of aesthetics date to Plato
 - **beauty**: ‘what looks right’
 - example: [Gall-Peters & Mercator Projections](#)
 - example: [Orthophanic Projection](#)
- **Aesthetics Take-home Point #1**: An emphasis on aesthetics takes a holistic perspective on map design, looking at overall visual harmony, composition, and clarity
 - example: [Kenai Fjords National Park](#)
 - example: [Bikes, Buses, and Boston](#)
- **Aesthetics Take-home Point #2**: A beautiful map inspires confidence, improves the user’s reaction at all three affective levels
 - example: [Laconic History of the World](#)
- modern aesthetics has its origins in Immanuel Kant’s *Critique of Judgment* (1790)
 - focused on reflective judgments, or the importance of subjectivity in experiencing and knowing **#SituatingKnowledge**
 - beauty as a subjective judgment: ‘beauty is in the eye of the beholder’

- **style**: an aesthetically cohesive set of design characteristics/qualities that is distinct from other aesthetically cohesive sets of design characteristics/qualities
 - i.e., graphic **#Motifs**
- **taste**: subjective judgments regarding preferences in style
 - website: [Taste and Cartography](#) (Demaj & Field, 2012)
- **Aesthetics Take-home Point #3**: You own taste will be improved as you hone your design eye through map critique
- **Aesthetics Take-home Point #4**: Just because you developed a consistent style does not mean your map will be successful
 - figure: [The Mapping Pyramid](#)

b. Aesthetic Styles and Maps

- **pastiche**: An aesthetic style that imitates that of a other artists

Some Mainstream Styles in Graphic Design (5)

1. **Antique**: An aesthetic style defining the pre-modern era (prior to defined by decoration and an organic patterning (pre-1900s)
 - covers multiple periods in graphic design: **Baroque, Victorian, Art Nouveau**
 - example: [Baroque Floral](#)
 - example: [Champenois Imprimeur-Editeur](#) (Mucha, 1897)
 - example: [Swiss Relief](#) (Unknown, 1712)
 - example: [The York Factory Express](#) (Peterka, 2012)
 - example: [Paris Monumental Metropolitan](#) (Unknown, 1920)

- example: [Poetic Traditions of the Arabs](#) (Jarocki, 2012)
- **visual forms:** thin lines with subtle, hand-drawn variation; multiple, whimsical curves
- **colors:** restrained, commonly in black/white only; use of small palette of colors with Art Nouveau
- **textures:** complex, intricate patterns and heavy ornamentation
- **typography:** blackletter and script typefaces (Baroque/Victorian), grotesque (Art Nouveau)
- framework: [Periodic Table of Typefaces](#)

2. **Surrealism:** An aesthetic style characterized by elements of hyper-realism, fantasy, and surprise (1900-1930)

- example: [The Persistence of Memory](#) (Dali, 1931)
- example: [Scott's Great Snake](#) (Elliot, 1861)
- example: [Angling in Troubled Waters](#) (Rose, 1899)
- example: [How To Lie With Maps](#) (Monmonier, 1996)
- example: [Swiss Relief](#) (Imhof)
- example: [Yellowstone National Park](#) (Berann, 1986/1995)
- **visual forms:** high degree of realism without photography
- **colors:** bright, saturated colors; complex palette of colors
- **textures:** heavy use of blended color gradients to produce illumination and shadow for realism
- **typography:** custom typefaces; rounded rather than block characters

3. **Art Deco:** An aesthetic style defined by opulent qualities in response to war period austerity (1914-1940)

- example: [Chrysler Building](#)
- example: [View and Map of New York City](#) (Bollmann, 1962)
- example: Carl Sack Final Project [1](#) and [2](#)

- example: [Mare Nostrum](#) (Khuan Caveman Co, 2010)
- **visual forms:** geometric shapes and regular curves, systematic zigzags and rays, inclusion of motion lines and streamlined forms
- **colors:** large blocks of uninterrupted color
- **textures:** subtle color variation within color blocks from printing
- **typography:** geometric, slab serif; loud typography
 - framework: [Periodic Table of Typefaces](#)
- part of the larger **modernist** movement in Art, or an aesthetic style acknowledging the Industrial Revolution and Machine Age
 - example: [ISOTYPE](#)
 - **constructivism:** A Russian artistic/architectural movement focused on functionalism, or that art should meet the needs of society
 - “form follows function”
 - example: [Soviet Cities](#)
 - **Bauhaus:** An early graphic design school in Germany integrating motifs Russian constructivism and American modernism
 - the mass production of visual culture
 - example: Map for the London Underground [1](#) and [2](#)
- 4. **Pop Art:** An aesthetic style that challenges mass produced visual culture, such as advertising, magazines, and cartoons (1950-1980)
 - example: [Marilyn Pop Art Map](#) (after Warhol, 1962)
 - example: [Che Guevara Pop Art Map](#) (after Malanga, 1968)
 - example: [Cartoon Pop Art Map](#) (after Lichtenstein, 1965)
 - **visual forms:** high contrast linework; collages and photomontages

- example: [London's Olympic Headaches](#) (Sherwin, 2012)
 - examples: [Map Collages](#) (Cusick, 2010)
 - **textures**: use of dotting or dashing to mimic news print
 - **colors**: b colors; palette of colors based on art theory
 - **typography**: comic letter; 'print' handwriting
 - example: [Laconic History of the World](#)
5. **Minimalism**: An aesthetic style focusing on efficient communication through design clarity and information density (1970-2000)
- example: [Russian Campaign, 1812-1813](#) (Minard, 1869)
 - example: [Willamette River, Oregon](#) (Coe, 2012)
 - **visual forms**: simple, generalized linework; information dense and visually complex
 - **economy of design**: the map should convey the maximum amount of information with the minimal amount of ink
 - **data ink ratio**: the amount of this data-ink devoted to the data itself divided by the total amount of ink used in the graphic (Tufte, 1983)
 - example: [Tufte Box Plots](#)
 - example: [Tufte Histogram](#)
 - **colors**: originally restrained and desaturated; increasing use of bold colors when designing for screen
 - **textures**: minimal; extreme restriction of ornamentation
 - **chart junk**: graphic marks that do not represent information and inhibit other graphic marks that do represent information (Tufte, 1983)
 - example: [Map Junk](#)
 - example: Thematic Mapping [Choropleth](#) & [Proportional Symbol](#)

- *typography*: humanistic
 - framework: [Periodic Table of Typefaces](#)
- *Swiss Style/International Style*: A form of minimalism emphasizing cleanliness, readability, and objectivity
 - popularized of asymmetry in layout and the **#Grid**
 - example: Wired Magazine [1](#) and [2](#)
- *Aesthetics Take-home Point #5*: A particular aesthetic style often is developed to do opportunities/limitations in available media