PART 3

Chapter 9: Camera and Computer Arts

Key Topics for this chapter include:

• **Photography:**
  Still Camera and Its Beginnings
  Photography & Art

• **Film:**
  The Origins of Motion Pictures
  Film & Art

• **Video**

• **The Internet**
Key Terms for this Chapter include:

- camera obscura
- heliograph and daguerreotype
- camera
- positive & negative images
- pictorialism
- “pure” or “straight” photography
- found images and Rayographs
- motion picture and celluloid film
- animation and editing
- auteur
- video and digital camera
- “Net” art and Webcam
Photography involves light passing through an opening into a darkened chamber. The image that is formed inside is an upside down replica of the outside world.

Camera Obscura: Latin for “Dark Room”. Developed during the Renaissance as a room in which a hole was punctured through a wall or door producing an upside down non-permanent image on an opposing wall.
The Still Camera and Its Beginnings

A **camera** is a light tight box. One end admits light, a lens focuses and refracts this light, and an image is captured on a light sensitive surface.

- **Heliograph**: “sun-writing”; first permanent photograph
- **Daguerreotype**: A light sensitive copper plate coated with silver iodide that captures a photographic image. The process creates a *positive image* that cannot be reproduced.
- **Negative Image**: Light and dark values appear in *reverse* and can be used to create repeated copies of an image.
Le Boulevard du Temple, Louis Jacques Mande Daguerre, 1839, daguerreotype
Julia Jackson, Julia Margaret Cameron, 1867, Albumen print from glass negative
Crow Camp, 1910
Migrant Mother, Dorothea Lange
Photography and Art

Western artists began to explore the artistic potential for photography to create both formal and abstract images rather than simply documentary.

- **Pictorialism**: Techniques used by photographers to create images that appeared more painterly.
- **Pure/Straight Photography**: A practice of photography where the artist does not crop or manipulate their photographs in any way.

Insert visual(s).

Suggestions:

9.9 The Steerage
9.10 Autumn Tree against Cathedral Rocks, Yosemite
Photography and Art

• **Found Images:** Images and letters clipped from other printed sources inspired by the art movement of *Dada*.

• **Rayograph (rayogram):** An image created by placing objects on top of light sensitive paper. The objects’ shadows will appear white after exposure to light on the paper. Also inspired by *Dada*.

Insert visual(s).

Suggestions:
9.11 *Cut with the Kitchen Knife*
9.12 *Champs deliciieux*
Kitchen Knife Dada through Germany’s Last Weimar Beer Belly Cultural Epoch, Hannah Hoch, 1919, collage.

Champs delicioes, Man Ray, Rayogram, 1922
Untitled #123, Cindy Sherman, 1983

Shanghai, Andrea Gursky, 2000
Substratum 12 III, Thomas Ruff, 2003, 8’
Robert Mapplethorpe

Photograph self-portrait 1 year before his death. Mapplethorpe’s controversial, offensive, and sadomasochistic work initiated NEA to decrease funding.
Film

Film depends on a phenomenon called persistence of vision. In 1878, the photographer Eadweard Muybridge used a series of cameras set off by a trigger to create the first forerunner of modern film-making.

Insert visual(s).
Suggestion: 9.16 Horse Galloping
Horse Galloping, Eadweard Muybridge, 1878
Film as art is intended to create cinematic movies that do not conform to popular storytelling techniques.

• **Auteur:** Director whose films are marked by a consistent individual style, just as a traditional artist’s paintings or sculptures are.

*Insert visual(s).  
Suggestion: 9.20 scene from Breathless*
Breathless, 1960

Empire, Andy Warhol, 1964

Dance or Exercise on the Perimeter of a Square, Bruce Nauman 1967-68
The Origins of Motion Pictures

- **Motion Picture Film:** No real motion but a series of still images projected at a speed of 24 frames a second giving the illusion of continuous action.

- **Celluloid Film:** Type of film that made it possible to string images together.

Insert visual(s).

*Suggestion: 9.17 The space capsule lands*
A Trip to the Moon, George Melies, 1902,
Exploring the Possibilities

Film allows for stories to unfold over time and in motion.

• **Animation:** Stories acted out by objects or illustrations. Animation literally means “bringing to life”. Between 12 to 24 drawings are needed *per second* to create an illusion of smooth motion.

• **Editing:** Piecing together film shots to create storytelling sequences.
Video

Video is a technology that records and plays back images in motion.

- **Video Camera**: Converts a moving image into electronic signals. The signals are transmitted to a monitor (TV).
- **Digital Video**: Information is stored digitally on a disk and can be projected onto a wall, surface, and monitor. Further manipulation is possible on computers.
Gertie the Trained Dinosaur, Winsor McCay, 1914
Battleship Potemkin, Sergei Eisenestein, 1925
Closed circuit video installation with bronze sculpture, Nam Jun Paik
Third Tape, Peter Campus, 1976

Women Without Men, 2011
Self Playing Bowling Games, 2011
The Internet

Art that uses the Internet as a medium is known as Internet art or “Net” art. It can allow viewer interaction via the computer.

• **Webcams:** Real-time cameras whose output can be viewed over the World Wide Web (www).
Key Topics and Key Terms:

- Film: Motion Picture and Celluloid film, Animation, Editing, Auteur
- Video: Video and Digital Camera, Webcams
- Internet: “Net” art