AHST 4342-001 (87272) History of Media and New Media Art Fall 2019 Dr. Charissa N. Terranova University of Texas at Dallas Arts & Humanities T-Th 10:00-11:15

Thursday 09/19/19

Discussion Experimentalism: From Film to Montage



MAINFRAME EXPERIMENTALISM

EARLY COMPUTING AND THE FOUNDATIONS OF THE DIGITAL ARTS

EDITED BY HANNAH & HIGGINS AND DOUGLAS KAHN

E.H. Gombrich, in *The Story of Art*, characterizes the first half of the twentieth century by the term *Experimental Art*. In this broader sense innovations in process and material involve an experimental attitude linking the futures of art to the past through a changing sense of art as linked to artists' ever-changing worlds.

Hannah B. Higgins and Douglas Kahn, Mainframe Experimentalism, p. 4

experimentalism

artists' ever-changing worlds

Experimentalism: From Film to Montage

Persistence of Vision – Biological/Wet

Frames Per Second – Mechanical/Dry

Rise of Cinema and Time-Based Art

Principles of Animation

- Animation is possible because a biological phenomenon known as persistence of vision and a psychological phenomenon called as phi.
- An object seen by human eye remains chemically mapped on the eye's retina for a brief time after viewing.
- This makes it possible for a series of images that are changed very rapidly to blend together into illusion of movement.







24 movie frames with a triple shutter to create 72 images per second

Frames Per Second FPS

24 movie frames with a double shutter to create 48 images per second



Muybridge conceptualized the zoopraxiscope in 1879 and then it was built for him by January 1880 to project his chronophotographic pictures in motion. Muybridge used the projector in his public lectures from 1880 to 1895. The projector used 16" glass disks onto which Muybridge had an unidentified artist paint the sequences as silhouettes.

zoopraxiscope





August 31 1897, Thomas Edison received a patent for his kinetograph, also known as the kinetoscope, a camera which used celluloid film, and which was the forerunner of the movie camera



Eadweard J. Muybridge, Galloping horse (Sallie Gardner running), 1878

An encounter with the work and ideas of photographer Eadweard Muybridge appears to have spurred Edison to pursue the development of a motion picture system. On February 25, 1888, in Orange, New Jersey, Muybridge gave a lecture using the zoopraxiscope which projected sequential images drawn around the edge of a glass disc, producing the illusion of motion. The Edison facility was very close by, and the lecture was likely attended by both Edison and his company's official photographer, William Dickson. Two days later, Muybridge and Edison met at Edison's laboratory in West Organge; Muybridge later described how he proposed a collaboration to join his device with the Edison phonograph—a combination system that would play sound and images concurrently.



The word "kinetoscope" is derived from the Greek roots *kineto* ("movement") and *scopos* ("to view"). The machine creates the illusion of movement by conveying a strip of perforated film bearing sequential images over a light source with a highspeed shutter.

Thomas Edison, Kinetoscope, 1891-97







Interior of the Kinetographic Theater, Edison's Laboratory, Orange, N J, Showing Phonograph and Kinetograph Drawing of Edison's Black Maria film studio by E. J. Meeker, June 1894



Kinetoscope parlor, San Francisco, ca. 1894–95 The machines were purchased from the new Kinetoscope Company, which had contracted with Edison for their production.





Evolution of the Nickelodeon

WKL Dickson and Hermann Casler, Mutoscope, 1890-95

Flipped pictures while cranked





Edison Cylinder Phonograph



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Thomas Edison, Kinetophone or Phonokinetoscope, 1893

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C. Francis Jenkins with Phantoscope 1895 In 1894, Jenkins staged the first "movie" show. He shipped his motion picture projector, which he called a phantoscope, from Washington to Richmond. In the jewelry store of his cousin, Charles Jenkins, at 726 Main in Richmond, Indiana, he projected pictures of a dancer performing a "butterfly dance" onto the wall,



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Later, in 1924, Charles Jenkins invented a mechanical television system he called radiovision.



The Edison Manufacturing Company agreed to manufacture the phantascope and to produce films for it, but on the condition it be advertised as a new Edison invention named the Vitascope. The Vitascope's first theatrical exhibition was on April 23, 1896, at Koster and Bial's Music Hall in New York City. Other competitors soon displayed their own projection systems in American theaters, including the re-engineered Eidoloscope, which copied Vitascope innovations; the Lumière Cinématographe, which had already debuted in Europe in 1895; Birt Acres' Kineopticon; and the Biograph which was marketed by the American Mutoscope Company.





Thomas Edison, Vitascope, 1896

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Thomas Edison, Projecting Kinetoscope, 1896



Edison Film, Enchanted Drawing, 1900 https://www.youtube.com/watch?v=8230qZn IVNM



Edison Film, Gordon Sisters Boxing, 1901 https://www.youtube.com/watch?v=CPG Ona-Aemk



Auguste Lumière [1862-1954] Louis Lumière [1864-1948]





Much smaller and lighter than Edison's Kinetograph, le cinématographe Lumière weighed around 11 pounds and operated with the use of a hand-powered crank.

Lumière Brothers, 10 Early Films, 1895 <u>https://www.youtube.com/watch?v=4nj0vEO4Q6s</u> <u>https://www.youtube.com/watch?v=JGugm8Dzmuc</u>

- 1. Leaving the Lumière Factories in Lyon
- 2. Horse Trick Riders
- 3. Fishing for Goldfish
- 4. The Disembarkment of the Congress of Photographers in Lyon
- 5. Blacksmiths
- 6. The Gardener, or The Sprinkler Sprinkled
- 7. Baby's Breakfast
- 8. Jumping Onto the Blanket
- 9. Cordeliers Square in Lyon
- 10. The sea (Bathing in the Sea)





Edison Film, Gordon Sisters Boxing, 1901 https://www.youtube.com/watch?v=CPG0na-Aemk



Lumiere Brothers, Arrival of a Train, 1895 https://www.youtube.com/watch?v=RjtXXypztyw





Al Jolson in *The Jazz Singer*, first talky, film with sound, 1927; Directed by Alan Crosland <u>https://www.youtube.com/watch?v=UYOY8dkhTpU</u>





Optical Sound-on-Film

Motion Picture Sound, Sound-on-Disc technology, 1910-1929 http://www.youtube.com/watch?v=0ekWozMjFW0





Al Jolson in *The Jazz Singer*, first talky, film with sound, 1927; Directed by Alan Crosland <u>https://www.youtube.com/watch?v=UYOY8dkhTpU</u>





Minstrelsy and Blackface





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experimentalism

artists' ever-changing worlds

• What can computer art tell us about creativity and experimentalism?

• Does experimentalism in the digital arts negate the presence of the artist?

• Does fear dissuade progress?

Dr. Terranova's related questions

• How do we define experimentalism generally? How is it defined in the context of the reading?

• Does each genre of art embody a unique spirit of experimentalism? Or is experimentalism identical to avant-gardism, and thus always selfsame? Experimentalism in the context of the reading often involved collaborations between artists and scientists. What is the avant-garde within art? Is there an avant-garde in science?

• Does randomness in art cancel out skill?

• Can you have iterative randomness and can it be art?

• Is computer art truly soulless?

• Does the emergence of experimentalism in the 1960's invalidate art?

 Should computer art be defined as "art" or should it fall under technology as a subcategory?

• Did the invention of the computer revolutionize the meaning of "art"?

 If Mainframe Experimentalism and computers can be considered art then is it incorrect to also describe science as a whole as another form of art?

• Dr. Terranova's related questions: Are computers in and of themselves "art"? Or are they design? ART + SCIENCE ... and the origins of digital art

• Is all computer generated art simply mathematics?
Students Questions

• Why are the arts and sciences considered separated from the computer and not united?

• How is computer art and engineering both related and separate?

Students Questions

• Did the origins of digital art influence the public perception of it?

 How has institutional access to computers shaped definitions of computer art?

• What factors contributed to the initial resistance and eventual acceptance of computerized art?

Students Questions

• Is digital decay one of the reasons digital works are valued less than traditional art?

• How did artists' access equipment that was inaccessible to them?

Student Question

• Did art inadvertently facilitate the relationship between man and computer?

Student Questions

- Would modern art be different if digital art were more accepted in the 60s and 70s?
- How has modern digital art changed in relation to its roots with the Mainframe Experimentalism movement of the 1960s?

Film: Effects on Painting



The Rise of Cubism

Photography

Film

Photograph of Pablo Picasso, 1916



Analytical Cubism

Pablo Picasso, Portrait of Kahnweiler, 1910



Pablo Picasso, Guitar, sheet metal and wire, 1912







Reliquary figure and mask from Gabon, Africa. 19th-20th Centuries



Pablo Picasso, Houses on the Hill, Horta de Ebro, 1909





Above: Pablo Picasso, Houses on the Hill, Horta de Ebro, 1909 Right: Pablo Picasso, Landscapes, Horta de Ebro, 1909



Pablo Picasso, Les Demoiselles d'Avignon, 1907



Edmond Fortier, Malinké Woman, 1906

Pablo Picasso, Profile of a Woman, 1906-07





François-Edmond Fortier (1862-1928)









Edmond Fortier, Bobo Couple, 1905-06

Pablo Picasso, Two Nudes, 1906





Edmond Fortier, Malinké Girl, 1906

Pablo Picasso, Nude with Hands Behind Back and Profile of Nude, 1907





Edmond Fortier, Bambara Woman, 1906

Pablo Picasso, Head and Shoulders of a Woman, 1907





Edmond Fortier, Types of Women (detail), 1906

Pablo Picasso, Nude with Raised Arms Seen from the Front, 1907







L: The American Photo Company, Head of a Maori Man, 1880 R: Pablo Picasso, Head of a Man, 1906





Pablo Picasso, Sketch of André Salmon, 1907



Edmond Fortier, Malinké Woman, 1906

Pablo Picasso, Nude with Raised Arms, 1908





Edmond Fortier, Types of Women, West Africa, 1906



Pablo Picasso, Les Demoiselles d'Avignon, 1907



Pablo Picasso, Female Nude, 1911



An advertisement for the cinematograph, an early movie projector.



George Méliès, Under the Sea, 1907

"Picasso appropriated Méliès's techniques of jarring multiple perspectives, fragmented bodies and body parts, a comic selfconscious dialogue between apparent art and apparent reality," according to critic André Salmon.



George Méliès, The Astronomer's Dream, 1898 https://www.youtube.com/watch?v=g8SMliQZUcs



Fernand Léger, Le mecanicien, 1918



Fernand Léger, Ballet mécanique, 1923 http://www.youtube.com/watch?v=9SgsqmQJAq0



Charles Sheeler, City Interior, 1936 Aqueous adhesive and oil on composition board



Andrew Moore, Rolling Hall, Ford Motor Company, River Rouge Complex, Andrew Moore, 2008



Charles Sheeler, Wheels, 1939 – gelatin silver print



Charles Sheeler, Rolling Power, 1940 – oil on canvas



Paul Strand and Charles Sheeler, Manhatta, 1921 http://www.youtube.com/watch?v=kuuZS2phD10



Charles Sheeler, Church Street El, 1930



228. (above) Charles Sheeler and Paul Strand, frame from the film Monhutta, 1920. 229. (below) Charles Sheeler, *Church Street El*, 1920. Oil on canvas, 16 × 19¹/⁴⁷ (40.6 × 48.5 cm). The Cleveland Museum of Art; Mr. and Mrs. William H. Marlatt Fund.





Director Luis Buñuel and Painter Salvador Dali, Un chien andalou, 1929 <u>https://www.youtube.com/watch?v=jJZ-fmjDQRw</u>



Salvador Dali, The Persistence of Memory, 1931 Oil on Canvas 24 cm × 33 cm (9.5 in × 13 in)


Director Luis Buñuel and Painter Salvador Dali, Un chien andalou, 1929 <u>https://www.youtube.com/watch?v=jJZ-fmjDQRw</u>







Hans Richter, Orchestration of Colors, 1923 Serigraph on Linen, 54 x 16"



Hans Richter, Stalingrad (Victory in the East), 1943–46 oil and **collage** on shade cloth, 35 3/4 x 188 7/8 in. (90.7 x 479.6 cm)





Filmic Montage

Generativeness of Editing

Generativeness of Nonlinearity

<u>montage</u>, noun

1. the technique of combining in a single composition pictorial elements from various sources, as parts of different photographs or fragments of printing, either to give the illusion that the elements belonged together originally or to allow each element to retain its separate identity as a means of adding interest or meaning to the composition.

- 2. photomontage
- 3. Movies, Television. juxtaposition or partial superimposition of several shots to form a single image.
- a technique of film editing in which this is used to present an idea or set of interconnected ideas.
- 4. any combination of disparate elements that forms or is felt to form a unified whole, single image, etc.



Dziga Vertov, Man with a Movie Camera, 1929

Man with a Movie Camera

Directed by	Dziga Vertov
Written by	Dziga Vertov
Cinematography	Mikhail Kaufman
Edited by	Elizaveta Svilova

Dziga Vertov (né David Kaufman) and brother Mikhail Kaufman





Yelizaveta Ignatevna Svilova



Four Soviet cities — Kharkiv, Kiev, Moscow and Odessa — were the shooting locations.

















Recursion and Self-reflexivity

KINO-EYE from "WE: Variant of a Manifesto"

- double exposure
- fast motion
- slow motion
- freeze frames
- jump cuts
- split screens
- Dutch angles
- extreme close-ups
- tracking shots
- footage played backwards
- stop motion animation
- self-reflexive style



Dziga Vertov, Man with a Movie Camera, 1929 https://www.youtube.com/watch?v=_xPLt2qnMyA





In the face of the machine we are ashamed of man's inability to control himself, but what are we to do if we find the unerring ways of electricity more exciting than the disorderly haste of active people [...]

I am an eye. I am a mechanical eye. I, a machine, I am showing you a world, the likes of which only I can see.

Dziga Vertov



Charlie Chaplin, Modern Times, 1936 https://www.youtube.com/watch?v=DfGs2Y5WJ14



MONTAGE

Dziga Vertov

Sergei Eisenstein



Sergei Eisenstein, Battleship Potemkin, 1925 – "Odessa Steps Sequence" https://www.youtube.com/watch?v=VMWMq4AEyjU



