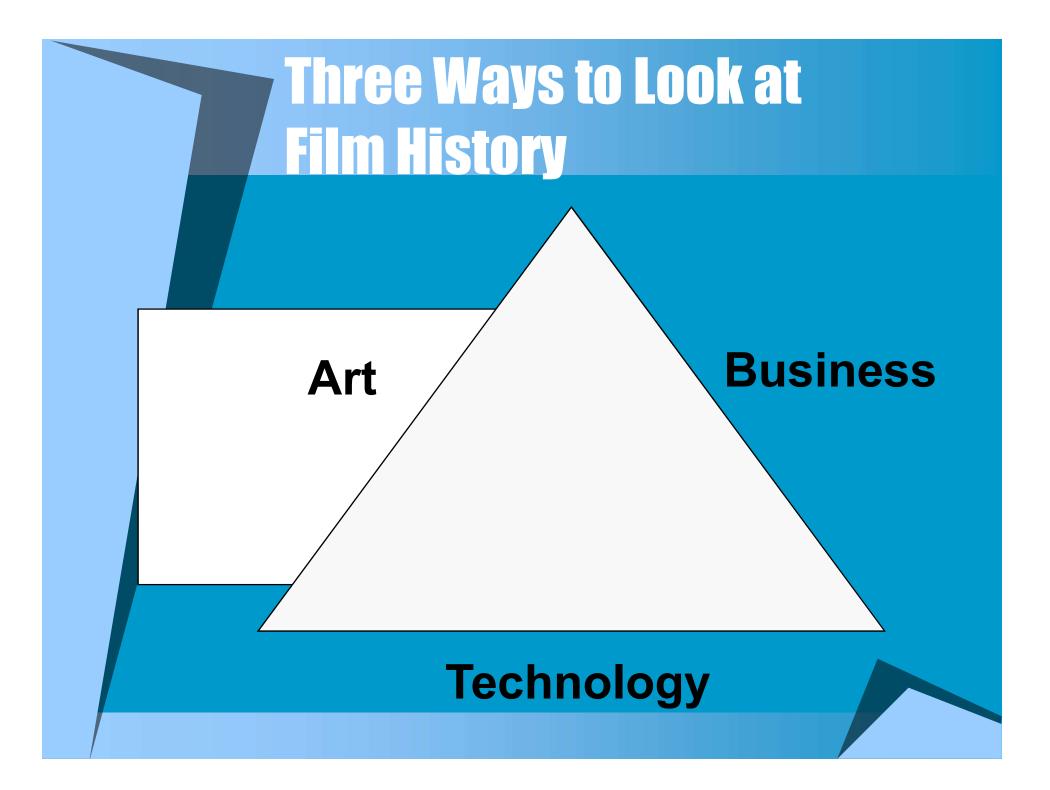
Film History The Beginnings

JUGUNU RAMAKRISHNAN DEPT.OF .MULTIMEDIA







Early film is a result of inventors, not artists.

Persistence of Vision

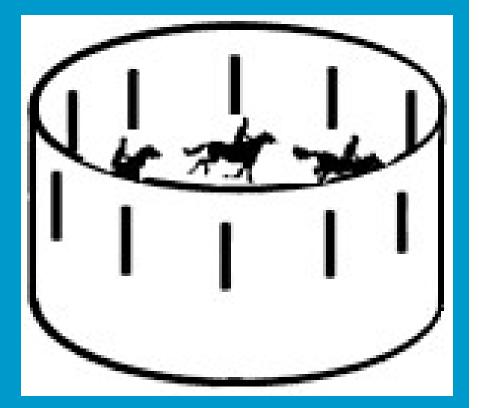
The ability of the brain to retain an image a split second longer than the eye actually sees it.
If we see 16 individual images in rapid succession the brain connects them to make a fluid sequence of movement.



 Toy makers used this theory to create hand held machines that were the basis of film development.

Zoetrope

- Circular drum with slits.
- allows moments of darkness.
- creates illusion of movement.
- 1834 by William Horner.



Experimentation

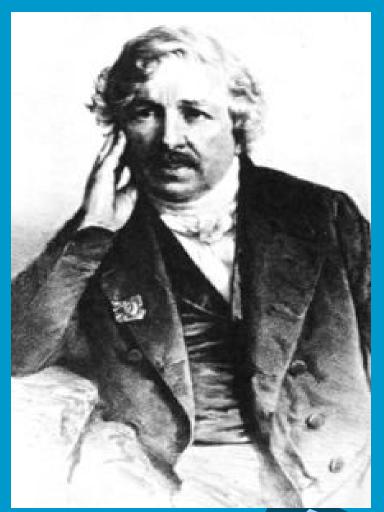
- Was going on in many countries at the same time.
- France, Germany, England, and the U.S. all claim to have invented the movies.



Photography Had to have photography before motion pictures

Important Dates

- <u>1816</u> Nicephore Niepce made first photographic images.
 <u>1839</u> - Louis Daguerre created clear, sharp images on silver copperplate.
 - Required 15 minutes exposure time.
- <u>1841</u> Only 3 minutes needed for exposure.

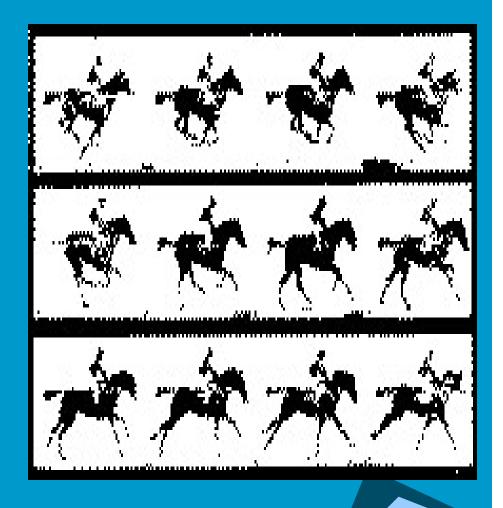


Daguerre Self-portrait

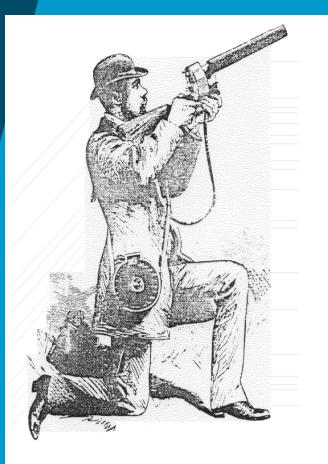
Eadweard Muybridge

 <u>1872</u> - Set up 12 cameras along a track, tied strings to the shutters which were tripped as the horse ran down the track.

 Created movement with photography.



Etienne-Jules Marey



• <u>1882</u>

- Invents "photographic gun."
- Lens in the muzzle, paper in the chamber.
- Pull trigger and have 12 rapid exposures.
- Eventually 100 exposures.

George Eastman

● <u>1884</u>

- Developed celluloid film.
- Originally created for the still camera, it made motion pictures possible.
- Flexible and allows light to pass through.



Eastman and Edison make movies

Fred Ott's Sneeze

1889 William Dickson (working for **Thomas** Edison) begins using celluloid film.

First film in America.



Motion Picture Photography Solved! Filmmakers now had to find a way to show their images.

Kinetoscope

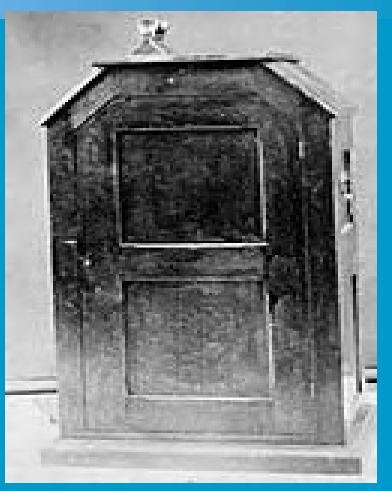


- October <u>1889</u>
 Dickson shows
 Edison projection
 with sound.
- Quality is poor.
- Edison opts for silent, individual showings of films.
- Invents Kinetoscope.

Kinetoscope Open

Kinetoscope

- Kinetoscopes were set up in parlors.
- You would see dancing, juggling, clowning, wonders of the world, a few re-enactments.
- No stories yet.



Kinetoscope Closed

Thomas Edison

- Despite Edison's shortsightedness in mass projection he did leave his mark on motion pictures.
- He contributed sprocket holes on film.
- Black Maria.
 - First movie studio.

Black Maria

- Camera could only move forward and backward.
- Roof opened to allow sunlight in.
- Building rotated to catch sun's rays.
- Camera used electricity.

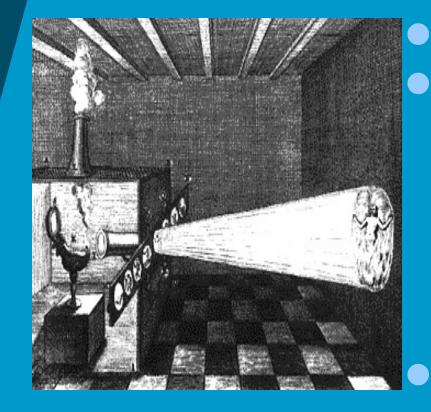


These are a few of the contributions from America. The history now goes back to Europe.

Projection

Projection was a difficult problem to solve. Its roots go back as far as 1646.

Magic Lantern



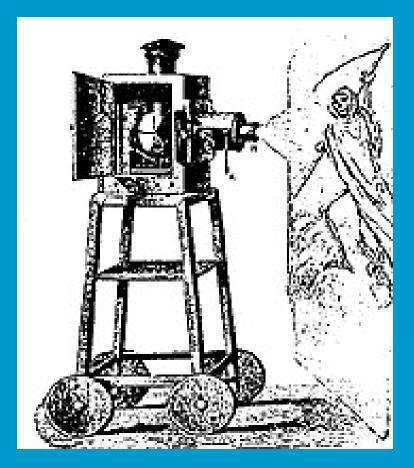
 <u>1646</u>
 Father Athanasius Kircher made drawings of a box that could reproduce an

image through a lens. Ancestor of present day slide

projector.

18th Century

- Showmen travel across Europe showing magic lantern shows.
- Used drawn images in the beginning.
- Eventually used photographs.



Phantasmagoria

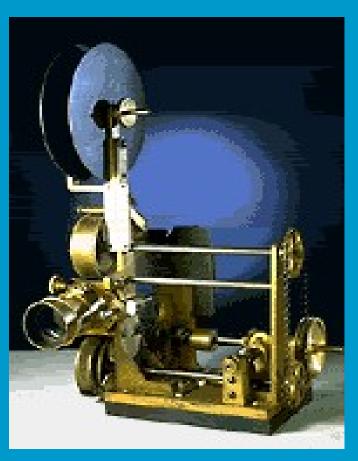
19th Century

- Photo plays drew viewers to a story just as film does today.
- Combination of magic lantern shows, live actors, and photography.
- Some lasted up to 2 hours and told melodramatic stories.
- Proved the potential of projected film.

Projection Problems

 Projector needs a powerful light source to make images clear.

 Film has to run smoothly past this light source without tearing.



Vitascope Projector

Late 19th Century

- Discovered intermittent movement was needed (similar to Zoetrope slits).
- Each frame stops briefly in front of the light source.
- Ended problem of the light source and tearing.
- Created problem of burning film.
 - Invented cooling system (similar to today's).

Lumiere Brothers

• <u>1894</u>

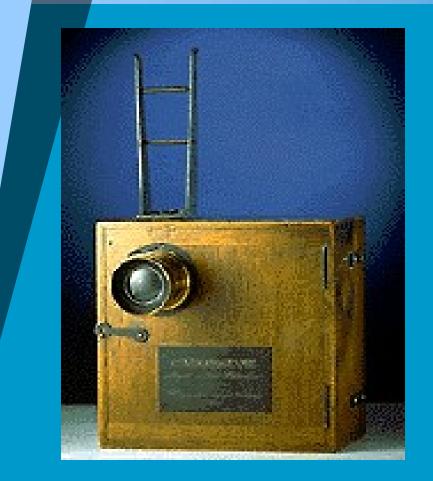
 Tinker with Edison's Kinetoscope.

Designed their own machine within a year.



Auguste and Louis

Cinematographe



- Machine shot the pictures, printed them, and projected them.
- The camera was portable.
 - A hand crank provided the power.

December 28, 1895

- First theater opens to the paying public.
- Basement of a Paris café.
- Lumieres' show:
 - Workers leaving the Lumiere Factory.
 - 🗖 Arrival at Lyon.
 - 🗖 A Baby's Meal.

