

Animation

441720-40
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박경신

Overview

- 애니메이션의 정의
- 애니메이션의 상업성
- 애니메이션의 역사
- 애니메이션 제작기법 - cell, stop-motion, computer, etc
- 컴퓨터 애니메이션의 역사
- 한국 애니메이션의 역사

Animation

- 애니메이션의 정의
 - 애니메이션의 어원은 라틴어의 '**anima**'에서 유래된 것으로 **생명, 영혼, 정신** 등의 의미를 가지며, 움직임이 없는 정적인 그림에 사람이 인위적으로 생명을 불어넣어 움직일 수 있는 동적인 그림으로 살려낸다는 뜻이다.
 - 애니메이션은 **움직이는 그림**을 통해 수많은 사람들의 상상력과 이루고 싶었던 꿈을 아름답게 표현해 주는 수단이다.

Animation

- 애니메이션의 상업성
 - 절대 선두 주자인 미국과일본의 경우 엄청난 수익을 창출해 내고 있는 상황이다.
 - **슈렉2** 경우 6000만 달러(약 600억원)의 제작비로 극장수입만 4억 5500만 달러(약 4550억원) 캐릭터 및 기타 부가사업을 9억만 달러 약 1조원의 수익을 창출했다.
 - 애니메이션의 부가수익으로 캐릭터상품, 광고,O.S.T, 비디오 등등의 여러 매체로 그 영향력을 과시하고 있다.

Brief History of Animation

- ❑ Altamira Cave
- ❑ Magic Lantern, by Athansius Kircher (1664)
- ❑ Thaumatrope, by John A. Paris (1825)
- ❑ Phenakistoscope, by Joseph Plateau (1832)
- ❑ Stroboscope (1833)
- ❑ Zoetrope, by George Horner (1834)
- ❑ Kineograph (1868)
- ❑ Praxinoscope, by Emile Reynaud (1876)
- ❑ Maybridge (1878)



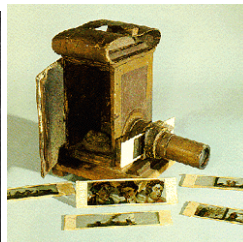
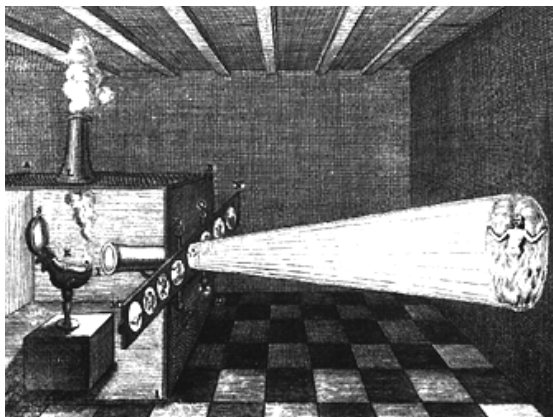
<http://www.shortcourses.com/how/flipbooks/flipbooks.htm>

Altamira Cave Painting



Magic Latern (1664)

- ❑ Athansius Kircher

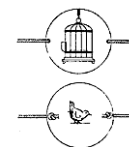


Thaumatrope (1825)

- ❑ It consists of a disc that is attached to two piece of string. When twirled, the images on the sides of the disc are perceived together as a single image.



THAUMATROPE,
1825



Phenakistoscope (1832)

- ❑ “Fen-a-kist-o-scope”, developed in 1833 by Joseph Plateau as a toy that would make stationary images appear to be animated



<http://www.mhsgent.ugent.be/engl-plat5.html>
<http://bloggernews.media.daum.net/news/323590>



Zoetrope (1834)

- ❑ Band of pictures is placed on the inside edge of a rotating cylinder.
- ❑ The viewer look down through the slits at the image on the opposite side while the cylinder is spinning, giving the pictures the illusion of motion.



Kineograph (Flipbook) (1868)

- ❑ Set of sequential drawings bound together as a book. User looks at the pages while flipping through them.

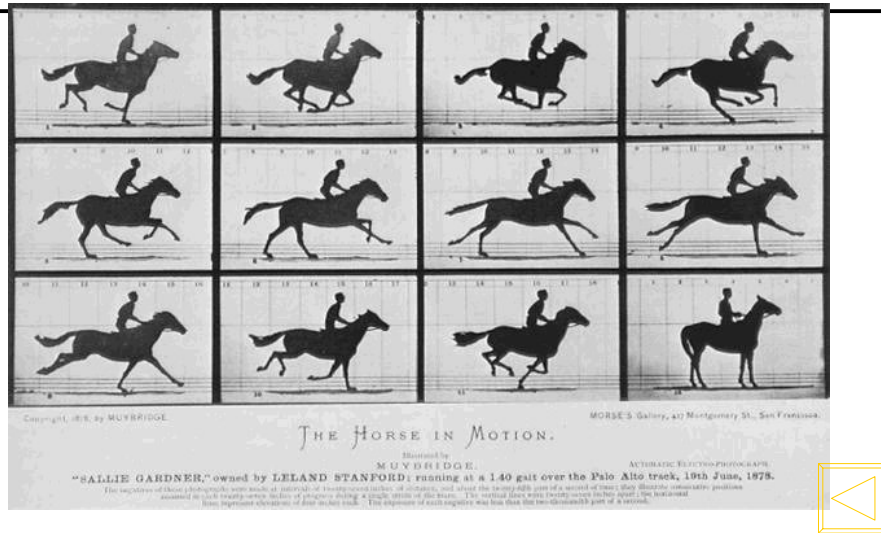


Praxinoscope (1876)

- ❑ Band of pictures is placed on the inside an outer cylinder. Each picture is reflected by a set of flat mirrors on the inner cylinder. The number of mirrors is equal to the number of pictures. The user looks down into the device at the mirrors.

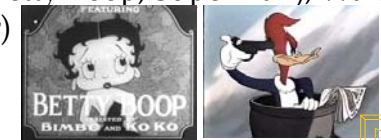


Eadweard Maybridge (1878)



Brief History of Animation

- ❑ First animated cartoon (1906) [J. Stuart Blackton](#)
- ❑ First use of translucent cells (celluloid) (1910) John Bray
 - Multiple layers of cells
 - Using grayscale drawings
 - Using pegs/peg holes to align the layers (registration)
 - Color in 1920
 - People like Max Fleischer (Betty Boop, Superman), Walter Lantz (Woody Woodpecker)
- ❑ [Rotoscoping](#) (1915)



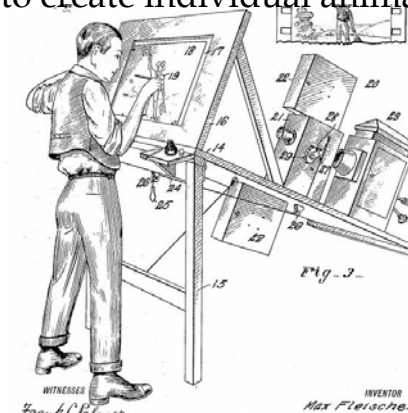
J. Stuart Blackton

- ❑ [Humorous Phases of Funny Faces](#) (1906) by J. Stuart Blackton - First animated cartoon
- ❑ The first filmmakers to use the techniques of stop-motion and drawn animation



Rotoscope

- ❑ Rotoscope, by Max Fleischer (1915) trace live action images to create individual animation frames



Brief History of Animation

❑ Walt Disney

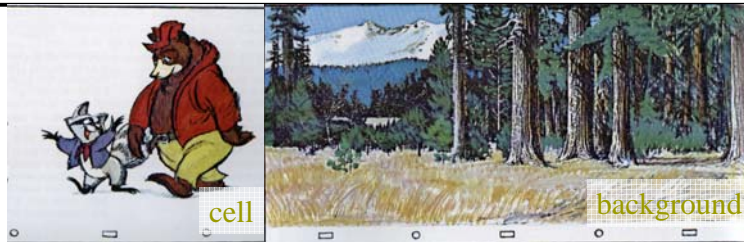
- Storyboards to review story
- Pencil drawings to review motion
- **Multi-plane camera stand**
 - ❑ instead of laying the cells directly onto the backdrop, place each element on a separate plane. Each plane can move independently from the others and the camera. Can create the illusion of depth, zooming, motion blur
- **Sound** – Steamboat Willie with Ub Iwerks (1928)
- Two-strip technicolor – Ub Iwerks, Fiddlesticks (1930)
- Three-strip technicolor – Flowers and Trees (1932)
- **First full length animation** feature – Snow White and the Seven Dwarfs (1937)
- Stereo sound – Fantasia (1940)

Animation Techniques

- ❑ Cell animation
- ❑ Stop-motion animation
- ❑ Cut-out animation
- ❑ Sand/glass animation
- ❑ Computer animation
- ❑ Flash animation
- ❑ Others..



Cell Animation



Stop Motion Animation

- ❑ Instead of generating the main frames, and then going back and creating the in-between frames, and then going and photographing them in order, here you are doing the scene straight ahead, in order, one frame at a time.
- ❑ Typically stop motion animation is being used to animate things that are not life-size.
 - Willis O'Brain, *Lost World and King Kong*
 - Ray Harryhausen, *Beast from 20,000 Fathoms*
 - Aardman Studios, *Wallace & Gromit*



Paper/Cut-out Animation

■ Cut-out animation



Sand/Glass Animation

- Sand animation
- Painting on glass animation



Computer Animation

■ Discuss more in detail later..



Luxo Jr (1986), Pixar

Tin Toy (1988), Pixar, John Lasseter



Flash Animation

- Macromedia Flash
 - Internet animation
 - E.g. Mashimaro, Woobi Boy, Zolaman



Others

Others..



Vegemite



Torn paper

Brief History of Computer Animation

- University of Utah, Ohio State University, Cornell, North Carolina State pioneered the field in the 1960s and 70s.
- Large numbers of people would begin to see computer animation in the mid to late 70s at the movies.
- Stanley Kubrick's 2001: A Space Odyssey (1968) special effects
- [Star Wars](#) (1977) vector graphics by George Lucas ILM
- [Tron](#) (1982) colored, shaded 3D graphics
- [Star Trek II](#) (1983) particle system for the Genesis effect
- [Abyss](#) (1989) first wholly computer-generated character in a motion picture, realistic natural object (water) moving in an unrealistic way (water tentacle)

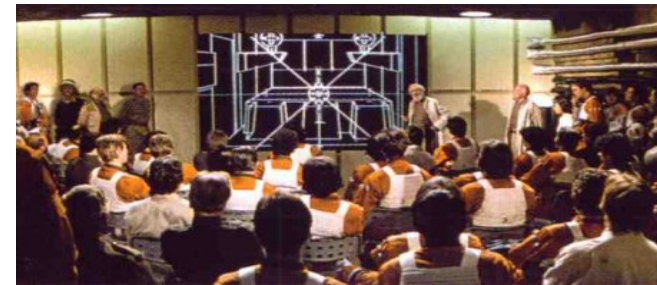
Brief History of Computer Animation

- [Jurassic Park](#) (1993) animating CG dinosaurs
- [Toy Story](#) (1995) first full 3D computer animation feature
- [Twister](#) (1996) lots of particles
- Titanic (1997) computer generated people in the background
- [Star Wars I: the Phantom Menace](#) (1999) first photorealistic computer generated main (alien) characters 'Jar Jar Binks'
- [Final Fantasy: the Spirits Within](#) (2001) realistic human characters
- Shrek (2001) face motion capture

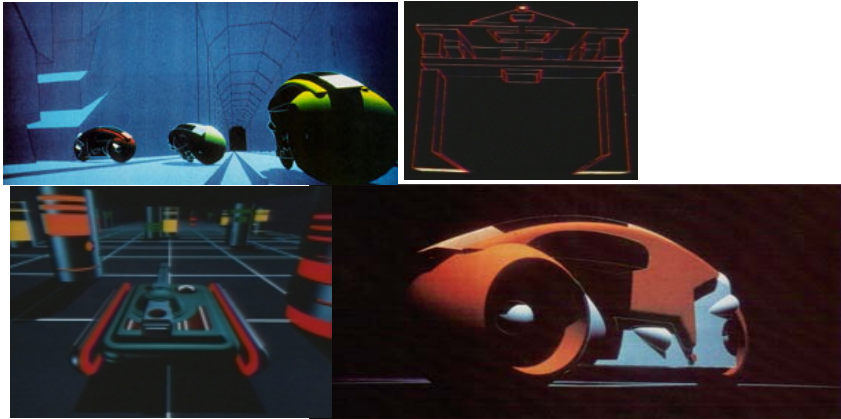


Star Wars (1977)

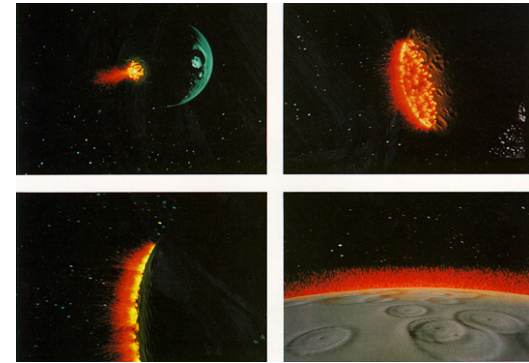
- Rebel Pilots trench briefing done with computer graphics created by EVL



Tron (1982)



Star Trek II (1983)



Abyss (1989)



Jurassic Park (1993)



Toy Story (1995)



Twister (1996)



Star Wars Episode 1 (1999)



Final Fantasy (2001)



Brief History of Korean Animation

❑ 럭키 치약 CF (1956)

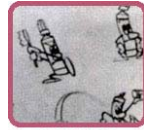
- 한국 최초 애니메이션 HLKZ TV 방송

❑ 홍길동 (1967)

- 한국 최초 극장용 애니메이션, 신동헌 감독
- 홍길동에 이은 애니메이션들 - 호피와 차돌바위, 황금철인, 손오공, 홍길동 장군

❑ 로봇트 태권 V (1976)

- 김청기 감독, 한국 최초의 OST 발매



<럭키치약 CF>



<홍길동 신문광고>



<로봇트 태권 V>

<http://www.cineseoul.com/magazine/magazine.html?magazineID=93>

Brief History of Korean Animation

❑ 로봇트 태권 V 이후 70년대

- 철인 007, 마루치 아라치, 77단의 비밀, 달려라 마징가, 별나라 삼총사, 우주소년 캐시, 도깨비 감투, 로봇터 전자인간 337



<마루치 아라치>



<77단의 비밀>



<로봇트 태권 V>



<철인 007>



<전자인간 337>



<별나라 삼총사>

<http://www.cineseoul.com/magazine/magazine.html?magazineID=93>

Brief History of Korean Animation

❑ 일본, 미국 애니메이션 하청

- 황금박쥐 (1968)를 시작으로 은하철도 999, 출동! 바이오 용사, 실버 호크, 로도스 전기, 나디아, 캔디 캔디, 아더왕

❑ 80년대 후반이후 TV 애니메이션

- 떠돌이 까치(1987)- 애니메이션 하청으로 생긴 기술력을 발판으로 한국 최초 TV 애니메이션 제작
- 달려라 하니(1989), 영심이, 머털도사, 아기공룡 둘리



<떠돌이 까치>



<달려라 하니>



<머털도사>



<아기공룡 둘리>

<http://www.cineseoul.com/magazine/magazine.html?magazineID=93>

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❑ 블루시걸 (1994)

- 45만명 관객을 동원했으나 관객들에게 혹평을 받았던 졸작

❑ 아기공룡 둘리 극장판 (1996)

❑ 바이오캡 윙고, 스피드왕 번개, 해상왕 장보고 (1998)

❑ 2000년 이후

- 오세암, 마리아이야기, 아치와 씨팍, 천년여우 여우비

❑ TV 애니메이션

- 뽀롱뽀롱 뽀로로, 나룻배, 장금이의 꿈, 검정고무신

Reference

▣ 애니메이션의 역사

<http://frame.naroot.net/world/world1.htm>

▣ 한국 애니메이션의 역사

<http://www.cineseoul.com/magazine/magazine.html?magazineID=93>