

The Origins of Animation

From the beginning, animation has been an important part of film history. Even before the invention of the motion picture camera, photographer Eadweard Muybridge used sequential photographs to analyze animal and human movement. Early 19th century mechanical devices such as the thaumatrope, praxinoscope and zoetrope anticipated motion picture animation by quickly flashing a calibrated sequence of still pictures past the viewer. These devices took advantage of a phenomenon called "persistence of vision" in which the brain reads a rapid series of images as an unbroken movement. Animated films work on the same principle. Each frame of an animated film is a separate still picture, individually exposed. Drawings or props are moved slightly between exposures, creating an illusion of movement when the film is projected.

In 1892, Émile Reynaud opened his popular Théâtre Optique in Paris, where he projected films that had been drawn directly on transparent celluloid, a technique that would not be used again until the 1930s. The "trick-films" of Parisian magician Georges Méliès mixed stop-motion and single-frame photography with live-action film for magical effect. By the early 20th century, animators such as J. Stuart Blackton and Winsor McCay in the U.S. and Émile Cohl in France were making animated films composed entirely of drawings. Brothers Max and Dave Fleischer, creators of Betty Boop, patented the rotoscope in 1917, enabling animators to copy the movement of live action by tracing filmed live-action images frame by frame.

Raoul Barré and Bill Nolan opened the first animation studio in New York in 1914. Soon studios in New York, California and elsewhere were producing short films that screened in theaters before the main feature. Over the next few decades, cartoon series flourished, featuring popular characters such as Felix the Cat, Disney's Mickey Mouse, Walter Lantz's Woody Woodpecker and Warner Bros.' Bugs Bunny and Wile E. Coyote. In the 1940s, George Pal's Puppatoons represented one of the few examples of commercial animation using three-dimensional materials.

In 1923, Walt and Roy Disney, Ub Iwerks, and other animators formed a company that would dominate animation for many years. Not only did the studio's animators produce finely drawn films, but they emphasized unique, specific characters and movement that revealed the characters' personalities. The Disney studio produced Steamboat Willie (1928), the first cartoon to synchronize sound with movement, and the short three-color Technicolor film Flowers and Trees, which won the first Oscar for animation in 1932. In 1938, Snow White and the Seven Dwarfs, the first American feature-length animated film, received a Special Academy Award for significant screen innovation. More than half a century later, the Walt Disney Company was still breaking new ground: 1991's Beauty and the Beast was nominated for Best Picture alongside four live-action films, a feat that was repeated in 2009, when the Disney Pixar animated film Up was one of ten Best Picture nominees. In 1995, Disney released the Pixar production Toy Story, the first feature-length computer-animated film, which the Academy honored with a special award to its creator John Lasseter.

Animated and live-action films have in common such basic film devices as scripts, camera moves, close-ups and long shots. Although many people think of animation as limited to fantasy or to children's stories, it's also an effective technique for filmmakers dealing with more complex, adult issues and themes. The 2008 animated feature Waltz with Bashir, for example, uses animation to explore soldiers' suppressed memories of events in the Middle East. What ultimately separates animated and live-action techniques (though the two are often combined in the current age of computer-generated imagery) are the different ways they are put on film. In live-action films, the camera captures an action in continuous time, as events unfold, although the film's editor may later change the continuity. In an animated film, however, it is the camera that creates the movement, frame by frame, and each step is carefully planned before filming begins.

COM1145 – Animation – Assignment #1

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Part 1

Read “The Origins of Animation” and answer the following questions.

- 1) _____ used sequential photographs to analyze animal and human movement? /1
- 2) Describe the concept of “persistence of vision.” /2
- 3) _____ or _____ are moved slightly between exposures, creating an illusion of movement when the film is projected. /2
- 4) The _____ of Parisian magician Geroges Melies mixed stop-motion and single-frame photography with _____ for magical effect. /2
- 5) What three factors was the Disney company able to incorporate into their animations to allow them to dominate the market for many years? /3
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- 6) _____ was the first cartoon to synchronize sound and movement. /1
- 7) _____ was the first American feature-length animated film. /1
- 8) _____ was the first animated film nominated for Best Picture. /1
- 9) Animated and live-action films have in common such basic film devices as _____, _____, _____ and _____. /4
- 10) What ultimately separates animated and live-action techniques are _____.
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Part 2

Go to <http://video.mit.edu/watch/history-of-animation-3391/> and watch the clip called History of Animation to complete the following questions.

- 1) Who is named as doing the first simple drawing/acting animations? He is credited with the birth of the art form. /1

- 2) Winsor McKay is considered to be one of the fathers of animation. He used his character _____ and passed it off as a show. /1

- 3) Animation was quite popular, but it was looked at as a _____. /1

- 4) What did Walt Disney bring to animation that wasn't present before? /2

- 5) Walt Disney created a new character that people started to have a connection with. Name this character. /1
