

Animation

The background of the entire page is a still from the Pixar movie WALL-E. The robot WALL-E is positioned on the right side, facing left. He has two large, circular camera eyes and a mechanical arm raised in the air. His body is a rusty, orange-brown color with the name 'WALL-E' printed on the front. He is standing on a dark, rocky, and desolate landscape under a blue, hazy sky. The overall color palette is dominated by blues and greys, with the warm tones of WALL-E's body providing a contrast.

A publication of mklfln

TECHNOLOGY
AND SOCIETY

Latest technology trends:
TECHNOLOGY FOR YOU



Table

OF CONTENTS

01	Introduction
02	History of Animation
03	Types of Animation
04	Uses of Animation
05	Examples of Animation
06	Trivia Questions
07	About the Artist

Animation

Introduction

Animation is a method in which figures are manipulated to appear as moving images. In traditional animation, images are drawn or painted by hand on transparent celluloid sheets to be photographed and exhibited on film.

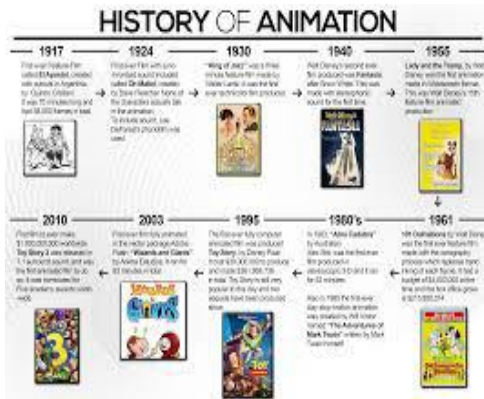
Today, most animations are made with computer-generated imagery (CGI). Computer animation can be very detailed 3D animation, while 2D computer animation can be used for stylistic reasons, low bandwidth or faster real-time renderings. Other common animation methods apply a stop motion technique to two and three-dimensional objects like paper cutouts, puppets or clay figures. Commonly the effect of animation is achieved by a rapid succession of sequential images that minimally differ from each other. The illusion—as in motion pictures in general—is thought to rely on the phi phenomenon and beta movement, but the exact causes are still uncertain. Analog mechanical animation media that rely on the rapid display of sequential images include the phénakistoscope, zoetrope -

praxinoscope and film. Television and video are popular electronic animation media that originally were analog and now operate digitally. For display on the computer, techniques like animated GIF and Flash animation were developed. Animation is more pervasive than many people realize. Apart from short films, feature films, television series, animated GIFs and other media dedicated to the display of moving images, animation is also prevalent in video games, motion graphics, user interfaces and visual effects. The physical movement of image parts through simple mechanics—in for instance moving images in magic lantern shows—can also be considered animation. The mechanical manipulation of three-dimensional puppets and objects to emulate living beings has a very long history in automata. Electronic automata were popularized by Disney as animatronics.





Animation History



Before cinematography

Hundreds of years before the introduction of true animation, people from all over the world enjoyed shows with moving figures that were created and manipulated manually in puppetry, automata, shadow play and the magic lantern. The multi-media phantasmagoria shows that were very popular in West-European theatres from the late 18th century through the first half of the 19th century, featured lifelike projections of moving ghosts and other frightful imagery in motion. In 1833, the stroboscopic disc (better known as the phénakisticope) introduced the principle of modern animation with sequential images that were shown one by one in quick succession to form an optical illusion of motion pictures. Series of sequential images had occasionally been made over thousands of years, but the stroboscopic disc provided the first method to represent such images in fluent motion and for the first time had artists creating series with a proper systematic breakdown of movements. The stroboscopic animation principle was also applied in the zoetrope (1866), the flip book (1868) and the praxinoscope (1877).

Silent era

When cinematography eventually broke through in 1895 after animated pictures had been known for decades, the wonder of the realistic details in the new medium was seen as its biggest accomplishment. Animation on film was not commercialized until a few years later by manufacturers of optical toys, with chromolithography film loops (often traced from live-action footage) for adapted toy magic lanterns intended for kids to use at home. It would take some more years before animation reached movie theatres.

Golden age of US animation In 1928, Steamboat Willie, featuring Mickey Mouse and Minnie Mouse, popularized film with synchronized sound and put Walt Disney's studio at the forefront of the animation industry. In 1932, Disney also introduced the innovation of full colour (in Flowers and Trees) as part of a three-year-long exclusive deal with Technicolor.

Animated features before CGI In 1937, Walt Disney Studios premiered their first animated feature, Snow White and the Seven Dwarfs, still one of the highest-grossing traditional animation features as of May 2020.[7][8] The Fleischer studios followed this example in 1939 with Gulliver's Travels with some success. Partly due to foreign markets being cut off by the Second World War, Disney's next features Pinocchio, Fantasia (both 1940) and Fleischer Studios' second animated feature Mr. Bug Goes to Town (1941/1942) failed at the box office. For decades afterwards Disney would be the only American studio to regularly produce animated features, until Ralph Bakshi became the first to also release more than a

Animation on television

Animation became very popular on television since the 1950s, when television sets started to become common in most developed countries. Cartoons were mainly programmed for children, on convenient time slots, and especially US youth spent many hours watching Saturday-morning cartoons. Many classic cartoons found a new life on the small screen and by the end of the 1950s, production of new animated cartoons started to shift from theatrical releases to TV series.

Hanna-Barbera Productions was especially prolific and had huge hit series, such as The Flintstones (1960–1966) (the first prime time animated series), Scooby-Doo (since 1969) and Belgian co-production The Smurfs (1981–1989). The constraints of American television programming and the demand for an enormous quantity resulted in cheaper and quicker limited animation methods and much more formulaic scripts.

Switch from cel animation to computer animation

Computer animation was gradually developed since the 1940s. 3D wireframe animation started popping up in the mainstream in the 1970s, with an early (short) appearance in the sci-fi thriller Futureworld (1976). The Rescuers Down Under was the first feature film to be completely created digitally.