



COMPUTER GRAPHICS & ANIMATION

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COMPUTER-GENERATED IMAGERY (CGI)

Computer-generated imagery (CGI) is the application of **Computer Graphics** to create or contribute to images in art, printed media, video games, films, television programs, shorts, commercials, videos, and simulators. The visual scenes may be **dynamic** or **static** and may be **two – dimensional(2D)**, though the term “CGI” is most commonly used to refer **3D Computer Graphics** used for creating scenes or special effects in films and televisions.

The term ‘**CGI animation**’ refers to dynamic CGI *rendered* as a **movie**. The term **virtual world** refers to agent-based, interactive environments. Computer Graphics software is used to make computer-generated imagery for films, etc. Availability of CGI software and increased computer speeds have allowed individual artists and small companies to produce **professional-grade** films, games, and fine art from their home computers. This has brought an internet subculture with its own set of global celebrities, and technical vocabulary.

COMPUTER ANIMATION

Computer animation only applies to **dynamic images** that resemble a movie. However, in general, the term computer animation refers to dynamic images that **do not allow user interaction**, and the term virtual world is used for the interactive animated environments. Computer generated animations are **more controllable** than other more physically based processes such as constructing miniatures for affects shots or hiring extras

for crowd scenes, and because it allows the creation of images that would not be feasible using any other technology.

To create the **illusion of movement**, an image is displayed on the computer screen and repeatedly replaced by a new image which is similar to the previous image, but advanced slightly in the time domain(usually at a rate of **24 or 30 frames per second**). This technique is identical to how the illusion of movement is achieved with **television** and **motion pictures**.