

Virtual Worlds

A virtual world is a computer-simulated representation of a world with specific spatial and physical characteristics, and users of virtual worlds interact with each other via representations of themselves called “avatars.”

Modern virtual worlds differ from traditional video games in their objective. Traditional video games generally have some ultimate game objective, for example defeating all the level bosses, saving the kingdom, or just winning the game. Playing in a virtual world, by contrast, is an end in itself. The objective of virtual worlds is to continue participating in the world, interact with other users, and gain more status or experience within the virtual world.

Virtual Worlds and Pop Culture

Even computer users who don't have a World of Warcraft account probably are acquainted with virtual worlds through pop culture. Pop culture picked up the virtual world trends in the past 10 years, and catalyzed virtual worlds' emergence in mainstream culture.

Mainstream pop culture engaged the concept of virtual worlds in 1999 when special-effects extravaganza sci-fi film The Matrix reaped \$460 million in the box office. The Matrix depicts a future in which the human world has been trapped inside a virtual world by sentient machines.

Comedy Central's South Park parodied the rising phenomenon World of Warcraft in its episode “Make Love not Warcraft” of Season 10. In the episode, the kids of South Park embark on a mission to save the world (of Warcraft) from a rogue gamer, who defies game rules and slaughters other users at will.

Finally, YouTube made the name “Leeroy Jenkins” famous amongst gamers and college students. Leeroy Jenkins, a World of Warcraft player, became known for pulling an unplanned stunt in the game which results in his entire clan getting killed. A YouTube video of the event has almost 5 million hits.



The kids of South Park save the World of Warcraft.

Kinds of Virtual Worlds

The definition above of virtual worlds encompasses several kinds of modern games. Most computer users today who have had an experience with virtual worlds have played MMOGs. The first MMOGs were text-based MUDs, some of which still have users today, including virtual interactive home LambdaMOO. However, with the evolution of graphics and higher-bandwidth internet connections, MMOGs with 3D graphics worlds account for most of the market.

Graphical MMOGs can be subdivided into different genres. The fantasy genre accounts for nearly all of MMOGs played, including games such as World of Warcraft, Everquest, and Ultima Online. Life simulation games account for another genre of MMOGs, which includes games like The Sims Online and Second Life. Finally, a very small category of games is historical games, which includes the now-discontinued WWII Online.

While virtual worlds are most common in the form of MMOGs, virtual worlds don't have to be multiplayer or online. Single-player RPGs such as The Sims meet the definition of a virtual world. In The Sims, all gameplay consists of the user directing avatars to live lives that mimic real human lives.

Finally, virtual worlds have opened the door to many other kinds of projects and games that don't quite fit the definition of virtual worlds, but have many characteristics of virtual worlds. Some video games have complex world-like environments but still retain the traditional video game structure in which the objective is to win the games. Examples would include the computer game Myst and the online RPG Diablo. At the opposite extreme, online games such as Counterstrike take place in a virtual world-type environment, but gameplay does not include complex interaction with the world or other avatars.

A final example of a questionable virtual world is modern virtual classrooms. The idea of conducting a class entirely in a virtual world has been entertained by teachers and tech insiders. One teacher of literature at the University of Texas, Austin has put virtual classrooms into practice with her implementation a class taught entirely in Second Life. While they would be using a virtual world environment to conduct the class, the objective of the interaction would be education and not interaction in the world. Thus, it is unclear as to whether a virtual environment that was specifically used for a virtual class would fit the definition of a virtual world.

Milestones in Virtual Worlds

Virtual worlds originated in online text adventure games, which developed into online text worlds like LambdaMOO. In the mid-80s, graphics met text worlds for the first time to form the first MMORPGs. Although the acronym MMORPG wasn't coined until the 90s, industry insiders retrospectively refer to an online world called Habitat as the first graphical MMORPG, as it was the first one to be able to sustain more than 16 players (Kent, 2003).



Habitat is the first graphical MMORPG (Elkin, 2003).

In the decade following Habitat, much of the groundwork was laid for modern MMORPGS. Online worlds eventually were able to be persistent, or available 24 hours a day, and the worlds were developed to be able to sustain all of the users in a single world. Graphics developed to the point where 3D graphics became standard for online games. The first game to bring all of these elements together was a game called Meridian 59, developed by a now-defunct company called 3DO Company (Kent, 2003). It was released in 1996, but never became very popular and was unable to capitalize on its achievement.

The following year, a game called Ultima was released. Ultima was also a persistent 3D world that sustained the users in a single world, and, contrary to the precedent shown by Meridian 59, went on to a milestone game in popularity. Ultima became the first MMORPG to gain users in the 100,000s, and is still the 10th most popular MMORPG ever to have existed. While Ultima didn't make any significant technical achievements since Meridian 59, Ultima game designer Ralph Koster has stated that Meridian 59 had failed where Ultima succeeded due to the marketing pull behind Ultima's developer and publisher, Electronic Arts (Kent, 2003).



Ultima is the first MMORPG to gain users in the 100,000s.

Since Ultima, usage of virtual worlds in the form of MMORPGs has expanded even more. A game called Lineage became the first MMORPG to have users in the millions, although it was always most popular in South Korea.

Finally, following its release in 2004, Blizzard's World of Warcraft broke all previous records and expectations for MMORPGs when it gained more users than any other MMORPG before it, totaling today to around 10 million users. As total users of MMORPGs today amount to approximately 16 million, WoW's user base makes up more than half of total active subscriptions to MMORPGs.

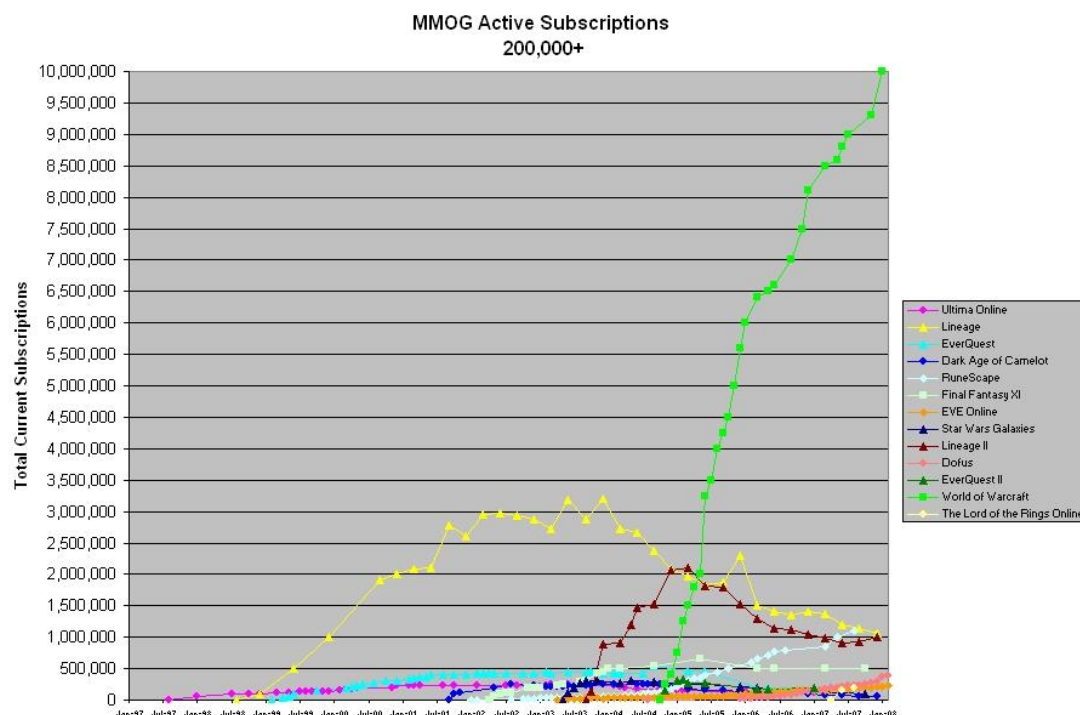


Chart 1: MMORPG popularity since 1997, including all games with 200,000+ active subscriptions (Woodcock, 2008). Click to enlarge.

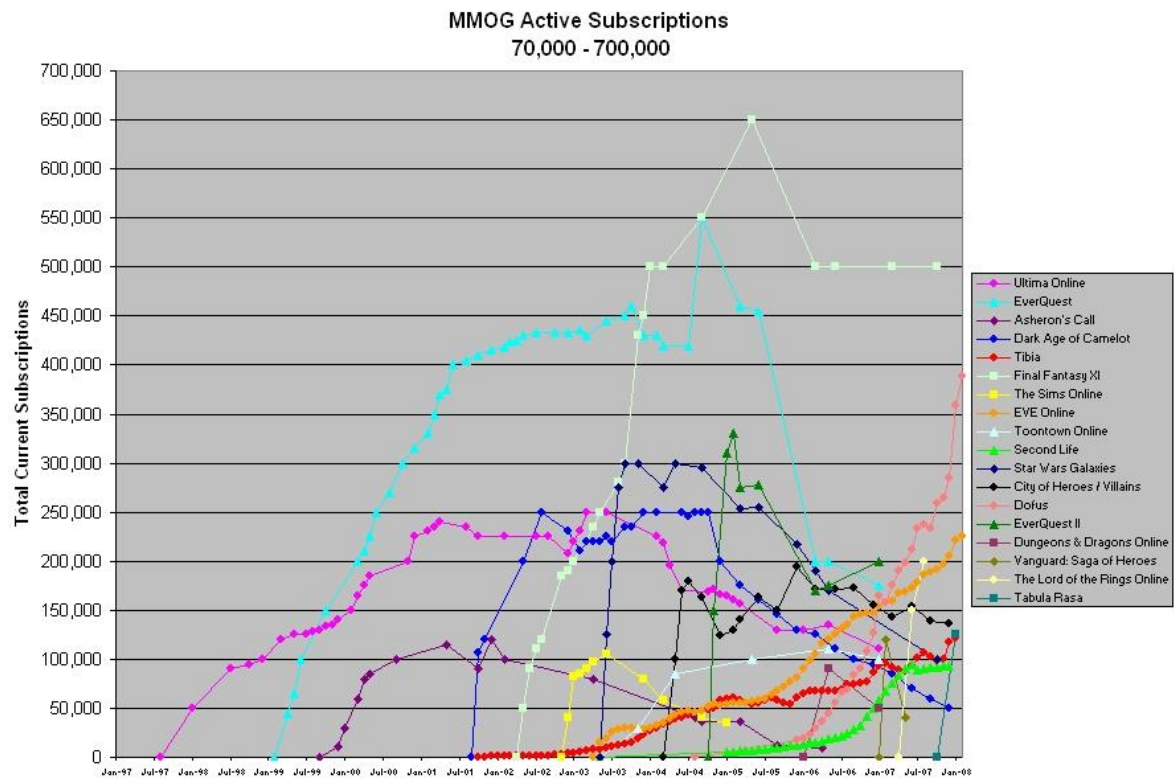


Chart 2: MMOG popularity since 1997, including all games with 70,000-700,000 active subscriptions (Woodcock, 2008). Click to enlarge.

Finally, it is notable that one MMORPG genre dominates all others, and that is fantasy. The top 18 MMORPGs are all fantasy games. The most popular life simulation games, The Sims and Second Life, both hover at around 100,000 users. The only historical game to gain popularity, WWII online, only had around 15,000 users at its peak.