

Massively multiplayer online role-playing game

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(Redirected from Massively multi-player online role-playing game)

Massively multiplayer online role-playing game (MMORPG) is a genre of computer role-playing games in which a very large number of players interact with one another within a virtual game world.

As in all RPGs, players assume the role of a character (often in a fantasy world) and take control over many of that character's actions.^[1] MMORPGs are distinguished from single-player or small multi-player RPGs by the number of players, and by the game's persistent world, usually hosted by the game's publisher, which continues to exist and evolve while the player is away from the game. This is often referred to as being offline.

MMORPGs are played throughout the world.^[2] Worldwide revenues for MMORPGs exceeded half a billion dollars in 2005,^[3] and Western revenues exceeded US\$1 billion in 2006.^[4] In 2008, Western consumer spending on subscription MMOGs grew to \$1.4 billion.^[5] *World of Warcraft*, a popular MMORPG, had over 11.5 million subscribers as of December, 2008.^[6]

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Common features

Although modern MMORPGs sometimes differ dramatically from their antecedents, many of them share some basic characteristics. These include several common themes: some form of progression, social interaction within the game, in-game culture, system architecture, and character customization. Characters can often be customized quite extensively, both in the technical and visual aspects, with new choices often added over time by the developers. Many games also offer some form of modding in order to allow for even greater flexibility of choice.

Character abilities are often very specific due to this. Depending on the particular game, the specialties might be as basic as simply having a greater affinity in one statistic, gaining certain bonuses of in-game resources related in-game race, job, etc.

Themes



Part of a series on:
RPG video games
Sub-genres

- Action RPG
- Competitive online RPG
- Massively multiplayer online RPG**
- MUD
- Roguelike
- Tactical RPG
- Adventure RPG
- Shooter RPG

Topics

- History of RPG video games
 - History of MMORPGs
- Social interaction in MMORPGs
- Character creation
- Cultural differences
- GNS Theory
- Player character
- Non-player character
- Role-playing game terms
- Statistics
- The Big Model
- Threefold Model

Lists

- Chronology of computer RPGs
- Chronology of console RPGs
- Chronology of roguelikes
- Chronology of tactical RPGs
- Comparison of MMORPGs
- List of free MMOGs
- List of MMORPGs
- List of text-based MMORPGs

The majority of popular MMORPGs are based on traditional fantasy themes, often occurring in an in-game universe comparable to that of *Dungeons & Dragons*. Some employ hybrid themes that either merge or substitute fantasy elements with those of science fiction, sword and sorcery, or crime fiction. Still others draw thematic material from American comic books, the occult, and other genres. Often these elements are developed using similar tasks and scenarios involving quests, monsters, and loot. Another popular theme in MMORPGs is the past/future. Often times, in the past, you are a character who fights mythical monsters such as dragons, demons, and sorcerers. While in the future, you fight mechanical beasts such as robots or cyborgs.

Progression

In nearly all MMORPGs, the development of the player's character is a primary goal. Many MMORPGs feature a character progression system in which players earn experience points for their actions and use those points to reach character "levels", which makes them better at whatever they do.^[7] Traditionally, combat with monsters and completing quests for NPCs, either alone or in groups, are the primary ways to earn experience points. The accumulation of wealth (including combat-useful items) is also a way to progress in many MMORPGs, and again, this is traditionally best accomplished via combat. The cycle produced by these conditions, combat leading to new items allowing for more combat with no change in gameplay, is sometimes pejoratively referred to as the level treadmill, or 'grinding'. The role-playing game *Progress Quest* was created as a parody of this trend.

Also, traditional in the genre is the eventual demand on players to team up with others in order to progress at the optimal rate. This sometimes forces players to change their real-world schedules in order to "keep up" within the game-world.^[citation needed]

Social Interaction

Main article: Social Interaction via MMORPGs

MMORPGs almost always have tools to facilitate communication between players. Many MMORPGs offer support for in-game guilds or clans (though these will usually form whether the game supports them or not).

In addition, most MMOs require some degree of teamwork for parts of the game. These tasks usually require players to take on roles in the group, such as those protecting other players from damage (called tanking), "healing" damage done to other players or damaging enemies.

MMORPG's generally have Game Moderators or Game Masters (frequently abbreviated to GM), which may be paid employees or unpaid volunteers who attempt to supervise the world. Some GMs may have additional access to features and information related to the game that are not available to other players and roles.

Roleplaying

Most MMORPGs provide different types of classes that players can choose. Among those classes, players are encouraged to roleplay their characters, providing rules, functionality and content to this end. Some MMORPGs offers "roleplay-only" servers that prohibit interactions to other players among characters for those who want to immerse themselves in the game in this way.^[8] Community resources such as forums and guides exist in support of this play style.

For example, if a player wants to play a priest role in his MMORPG world, he might buy a cope from a shop and learn priestly skills, proceeding to speak, act, and interact with others as their character would. This may or may not include pursuing other goals such as wealth or experience. Guilds or similar groups with a focus on roleplaying may develop extended in-depth narratives using the setting and resources of the game world.

Culture

Since MMORPGs have so many elements in common, and those elements are experienced by so many people, a common culture of MMORPGs has developed which exists in addition to the culture present within any given game. For example, since MMORPGs often feature many different character "classes", the games must be balanced in order to be fair to all players, and this has led players of many games to expect "buffing" or "nerfing", which describe the strengthening or weakening, respectively, of particular game elements. ("Buffing" also refers to in-game effects that temporarily enhance performance; both usages come from a core meaning of increasing power levels.)

As another example, in many older MMORPGs the fastest way to progress was simply by killing the same monsters over and over again, and as this is still common in the genre, all MMORPG players know the process as "grinding", or "camping" (sitting at a monster's spawn point in order to attack it as soon as it respawns). The importance of grinding in MMORPGs, and how much "fun" it contributes to the experience, is constantly debated. Many MMORPGs have taken steps to eliminate or reduce grinding, but few such attempts have met with success, and it is generally accepted by players and developers alike that some amount of 'grind' is required to maintain a stable playing experience.

MMORPG addiction, which has been a source of concern for parents, also affects the culture.^[citation needed] Some players might look down on those who invest huge amounts of time and or money into a game, while others might scorn those who can't put in the time to "play properly". The validity of such viewpoints is heavily debated, with both sides of the issue being discussed frequently on most games' forums.

System architecture

Most MMORPGs are deployed using a client–server system architecture. The server software generates a persistent instance of the virtual world that runs continuously, and players connect to it via client software. The client software may provide access to the entire playing world, or further 'expansions' may be required to be purchased to allow access to certain areas of the game. *EverQuest* and *World of Warcraft* are two examples of games that use such a format. Players generally must purchase the client software for a one-time fee, although an increasing trend is for MMORPGs to work using pre-existing "thin" clients, such as a web browser.

Some MMORPGs require payment of a monthly subscription to play. By nature, "massively multiplayer" games are always online, and most require some sort of continuous revenue (such as monthly subscriptions and advertisements) for maintenance and development. Some games, such as *Guild Wars*, have disposed of the 'monthly fee' model entirely, and recover costs directly through sales of the software and associated expansion packs. Still others adopt a micropayment model where the core content is free, but players are given the option to purchase additional content, such as equipment, aesthetic items, or pets. Games that make use of this model often have originated in Korea, such as *Flyff* and *MapleStory*. This business model is alternately called "pay for perks" or "freemium", and games using it often describe themselves with the term "free-to-play".

Depending on the number of players and the system architecture, an MMORPG might actually be run on multiple separate servers, each representing an independent world, where players from one server cannot interact with those from another; *World of Warcraft* is a prominent example, with each separate server housing several thousand players. In many MMORPGs the number of players in one world is often limited to around a few thousand, but a notable example of the opposite is *EVE Online* which accommodates several hundred thousand players on the same server, with over 50,000 playing simultaneously (February 2009^[9]) at certain times. Some games allow characters to appear on any world, but not simultaneously (such as *Seal Online: Evolution*), others limit each character to the world in which it was created. *World of Warcraft* has, however, experimented with "cross-realm" (i.e. cross-server) interaction in PvP *battlegrounds*, using server clusters or "battlegroups" to co-ordinate players looking to participate in structured PvP content such as the Warsong Gulch or Wintergrasp battlegrounds.^[10] Additionally, in the recent patch 3.3, released on December 8 2009, introduced a cross-realm "looking for group" system to help players form groups for instanced content (though not for open-world questing) from a larger pool of characters than their home server can necessarily provide.^[11]

History

Main article: History of massively multiplayer online role-playing games

The term MMORPG was coined by Richard Garriott, the creator of *Ultima Online*, in 1997.^[12] Previous to this and related coinages, these games were generally called graphical MUDs; the history of MMORPGs traces back directly through the MUD genre.^{[13][14]} Through this connection, MMORPGs can be seen to have roots in the earliest multi-user games such as Mazewar (1974) and MUD1 (1978). 1985 saw the release of a roguelike (pseudo-graphical) MUD called *Island of Kesmai* on CompuServe^[15] and Lucasfilm's graphical MUD Habitat. The first fully graphical multi-user RPG was *Neverwinter Nights*, which was delivered through America Online in 1991 and was personally championed by AOL President Steve Case.^[16] Other early proprietary graphical online RPGs include three on The Sierra Network: *The Shadow of Yserbius* in 1992, *The Fates of Twinion* in 1993, and *The Ruins of Cawdor* in 1995. Another milestone came in 1995 as NSFNET restrictions were lifted, opening the Internet up for game developers, which allowed for the first truly "massively"-scoped titles. Finally, MMORPGs as defined today began with *Meridian 59* in 1996, innovative both in its scope and in offering first-person 3D graphics,^[1] with *The Realm Online* appearing nearly simultaneously.^[16] *Ultima Online*, released in 1997, is often credited with first popularizing the genre,^[16] though more mainstream attention was garnered by 1999's *EverQuest* in the West^[16] and 1996's *Nexus: The Kingdom of the Winds* in Asia.

These early titles' financial success has ensured competition in the genre since that time. MMORPG titles now exist on consoles and in new settings, and their players enjoy higher-quality gameplay. The current market for MMORPGs has Blizzard Entertainment's *World of Warcraft* dominating as the largest pay-to-play MMORPG,^[17] alongside earlier such titles like *Final Fantasy XI* and *Phantasy Star Online*, though an additional market exists for free-to-play MMORPGs, which are supported by advertising and purchases of in-game items. This free-to-play model is particularly common in Korean MMORPGs such as *MapleStory* and *Rohan: Blood Feud*. Also, there are some free-to-play games, such as *RuneScape* & *Tibia*, where only about half the game is free and one would have to pay monthly to play the full version. *Guild Wars* is an exception. It avoids competition with other MMORPGs by only requiring the initial purchase of the game to play.

Psychology

Since the interactions between MMORPG players are real, even if the environments are virtual, psychologists and sociologists are able to use MMORPGs as tools for academic research. Sherry Turkle, a clinical psychologist, has conducted interviews with computer users including



game-players. Turkle found that many people have expanded their emotional range by exploring the many different roles (including gender identities) that MMORPGs allow a person to explore.^[18]

Nick Yee has surveyed more than 35,000 MMORPG players over the past several years, focusing on psychological and sociological aspects of these games. Recent findings included that 15% of players become a guild-leader at one time or another, but most generally find the job tough and thankless;^[19] and that players spend a considerable amount of time (often a third of their total time investment) doing things that are external to gameplay but part of the metagame.^[20]

Many players report that the emotions they feel while playing an MMORPG are very strong, to the extent that 8.7% of male and 23.2% of female players in a statistical study have had an online wedding.^[21] Other researchers have found that the enjoyment of a game is directly related to the social organization of a game, ranging from brief encounters between players to highly organized play in structured groups.^[22]

In a study by Zaheer Hussain and Mark D. Griffiths, it was found that just over one in five gamers (21%) said they preferred socializing online to offline. Significantly more male gamers than female gamers said that they found it easier to converse online than offline. It was also found that 57% of gamers had created a character of the opposite gender, and it is suggested that the online female persona has a number of positive social attributes.^[23]

Richard Bartle classified multiplayer RPG-players into four primary psychological groups. His classifications were then expanded upon by Erwin Andreasen, who developed the concept into the thirty-question Bartle Test that helps players determine which category they are associated with. With over 200,000 test responses as of 2006, this is perhaps the largest ongoing survey of multiplayer game players.^[24]

In *World of Warcraft*, a temporary design glitch attracted the attention of psychologists and epidemiologists across North America, when the "Corrupted Blood" disease of a monster began to spread unintentionally—and uncontrollably—into the wider game world. The Center for Disease Control used the incident as a research model to chart both the progression of a disease, and the potential human response to large-scale epidemic infection.^[25]

Economics

See also: Virtual economy

Many MMORPGs feature living economies. Virtual items and currency have to be gained through play and have definite value for players.^[26] Such a virtual economy can be analyzed (using data logged by the game)^[26] and has value in economic research; more significantly, these "virtual" economies can have an impact on the economies of the real world.

One of the early researchers of MMORPGs was Edward Castronova, who demonstrated that a supply-and-demand market exists for virtual items and that it crosses over with the real world.^[27] This crossover has some requirements of the game:

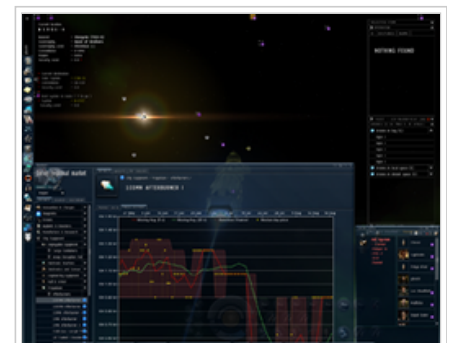
- The ability for players to sell an item to each other for in-game (virtual) currency.
- Bartering for items between players for items of similar value.
- The purchase of in-game items for real-world currency.
- Exchanges of real-world currencies for virtual currencies.
- The invention of user-created meta-currencies such as Dragon kill points to distribute in-game rewards.^[28]

The idea of attaching real-world value to "virtual" items has had a profound effect on players and the game industry, and even the courts. Castronova's first study in 2002 found that a highly liquid (if illegal) currency market existed, with the value of *Everquest*'s in-game currency exceeding that of the Japanese yen.^[29] Some people even make a living by working these virtual economies; these people are often referred to as gold farmers, and may be employed in game sweatshops.^[30]

Game publishers usually prohibit the exchange of real-world money for virtual goods, but others actively promote the idea of linking (and directly profiting from) an exchange. In *Second Life* and *Entropia Universe*, the virtual economy and the real-world economy are directly linked. This means that real money can be deposited for game money and vice versa. Real-world items have also been sold for game money in *Entropia*, and some players of *Second Life* have generated revenues in excess of \$100,000.^[31]

Some of the issues confronting online economies include:

- The use of "bots" or automated programs, that assist some players in accumulating in-game wealth to the disadvantage of other players.^[32]
- The use of unsanctioned auction sites, which has led publishers to seek legal remedies to prevent their use based on intellectual-property claims.^[33]



A user browsing the market for items in EVE Online

- The emergence of virtual crime, which can take the form of both fraud against the player or publisher of an online game, and even real-life acts of violence stemming from in-game transactions.^[34]

Linking real-world and virtual economies is rare in MMORPGs, as it is generally believed to be detrimental to gameplay. If real-world wealth can be used to obtain greater, more immediate rewards than skillful gameplay, the incentive for strategic roleplay and real game involvement is diminished. It could also easily lead to a skewed hierarchy where richer players gain better items, allowing them to take on stronger opponents and level up more quickly than less wealthy but more committed players.^[35]

Development

The cost of developing a competitive commercial MMORPG title often exceeds \$10 million.^[36] These projects require multiple disciplines within game design and development such as 3D modeling, 2D art, animation, user interfaces, client/server engineering, database architecture, and network infrastructure.^[37]

The front-end (or client) component of a commercial, modern MMORPG features 3D graphics. As with other modern 3D games, the front-end requires expertise with implementing 3D engines, real-time shader techniques and physics simulation. The actual visual content (areas, creatures, characters, weapons, spaceships and so forth) is developed by artists who typically begin with two-dimensional concept art, and later convert these concepts into animated 3D scenes, models and texture maps.^[38]

Developing an MMOG server requires expertise with client/server architecture, network protocols, security, and relational database design. MMORPGs include reliable systems for a number of vital tasks. The server must be able to handle and verify a large number of connections, prevent cheating, and apply changes (bug fixes or added content) to the game. A system for recording the game's data at regular intervals, without stopping the game, is also important.^[39]

Maintenance requires sufficient servers and bandwidth, and a dedicated support staff. Insufficient resources for maintenance lead to lag and frustration for the players, and can severely damage the reputation of a game, especially at launch. Care must also be taken to ensure that player population remains at an acceptable level by adding or removing servers. Peer-to-peer MMORPGs could theoretically work cheaply and efficiently in regulating server load, but practical issues such as asymmetrical network bandwidth, CPU-hungry rendering engines, unreliability of individual nodes, and inherent lack of security (opening fertile new grounds for cheating) make them a difficult proposition. The hosted infrastructure for a commercial-grade MMORPG requires the deployment of hundreds (or even thousands) of servers. Developing an affordable infrastructure for an online game requires developers to scale to large numbers of players with less hardware and network investment.^[40]

In addition, the development team will need to have expertise with the fundamentals of game design: world-building, lore and game mechanics,^[41] as well as what makes games fun.^[42]

Non-corporate development

Though the vast majority of MMORPGs are produced by companies, many small teams of programmers and artists have contributed to the genre. As shown above, the average MMORPG development project requires enormous investments of time and money, and running the game can be a long-term commitment. As a result, non-corporate (or independent, or "indie") development of MMORPGs is less common compared with other genres. Still, many independent MMORPGs do exist, representing a wide spectrum of genres, gameplay types, and revenue systems.

Some independent MMORPG projects are completely open source, while others feature proprietary content made with an open-source game engine. The developers of *Endless Online* have also released development information with details about their coding.^[43]

The WorldForge project has been active since 1998 and formed a community of independent developers who are working on creating framework for a number of open-source MMORPGs.^[44] The Multiverse Network is also creating a network and platform specifically for independent MMOG developers.^[45]

Trends

As there are a number of wildly different titles within the genre, and since the genre develops so rapidly, it is difficult to definitively state that the genre is heading in one direction or another. Still, there are a few obvious developments. One of these developments is the raid group quest, or "raid",^[46] which is an adventure designed for large groups of players (often twenty or more).



Players interacting in *Ultima Online*, a classic MMORPG.

Instance dungeons

Instance dungeons, sometimes shortened to "instances", are game areas that are "copied" for individual players or groups, which keeps those in the instance separated from the rest of the game world. This reduces competition, while also reducing the amount of data that needs to be sent to and from the server, reducing lag. *The Realm Online* was the first MMORPG to begin to use a rudimentary form of this technique and *Anarchy Online* would later take it to another level by creating a robust instance-based game experience. Since then, instancing has become increasingly more common. The "raids", as mentioned above, often involve instance dungeons.

Player-created content

Increased amounts of "Player-created content" may be another trend.^[47]

Use of licenses

The use of intellectual property licensing, common in other video game genres, has also appeared in MMORPGs. 2007 saw the release of *The Lord of the Rings Online*, based on J. R. R. Tolkien's Middle-earth. Other licensed MMORPGs include *The Matrix Online*, based on the *Matrix* trilogy of films, *Warhammer Online*, based on Games Workshop's table top game, *Star Trek Online*, *Star Wars Galaxies*, *Champions Online* and *Age of Conan*. Additionally, several licenses from television have been optioned for MMORPGs, for example *Stargate Worlds*, which is currently in development.

Console-based MMORPGs

The first console-based MMORPG was *Final Fantasy XI* for the Sony PlayStation 2. *EverQuest Online Adventures*, also on the PlayStation 2, was the first console MMORPG in North America. Although console-based MMORPGs are considered more difficult to produce,^[48] the platform is gaining more attention. Funcom's *Age of Conan* is to be released on the Xbox 360 in 2010.^{[49][50]} Turbine, Inc. announced they are working on a console-based MMO.^[51] *Final Fantasy XI* was originally released for PlayStation 2 and PC, but was later extended to Xbox 360, and later emulated as a PlayStation 2 game on the PlayStation 3. Also, Cryptic Studios will release *Star Trek Online* and *Champions Online* to both PC and console.^[52]

Final Fantasy XIV, Square Enix's second MMORPG in the Final Fantasy series has been announced for release in 2010 for Microsoft Windows and Sony's PlayStation 3.^[53]

See also

- Comparison of MMORPGs
- History of MMORPGs
- List of free MMOGs
- List of MMORPGs
- List of text-based MMORPGs
- MMOG
- MMOFPS
- MMORTS
- MOG
- Online game
- Private server

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7. ^ Mulligan, Jessica; Patrovsky, Bridgette (2003). *Developing Online Games: An Insider's Guide*. New Riders. pp. 474, 477. ISBN 1592730000. "[pp. 474] **experience points** A point value that is accumulated by gameplay activity such as **leveling** and is used as a measure of a character's power. Popularized by the classic dice version of TSR's *Advanced Dungeons & Dragons* back in the 1970s and carried over to online gaming by designers. [pp. 477] **level** A rank or rating of a character's power. [...] **leveling** Activity in-game devoted to increasing a character's experience, level, and/or skills. Leveling usually consists of killing **mobs**."
 8. ^ See e.g. World of Warcraft Roleplaying Policy (https://web.archive.org/web/20100716092631/http://us.blizzard.com/support/articles.m?locale=en_US&articleId=20458&rhtml=true)
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External links

- The Daedalus Project (<https://web.archive.org/web/20100716092631/http://www.nickyee.com/daedalus>) – Nick Yee's ongoing survey study of MMORPG players. Demographics, narratives and essays.
- Massively multiplayer online role-playing game (https://web.archive.org/web/20100716092631/http://www.dmoz.org/Games/Video_Games/Roleplaying/Massive_Multiplayer_Online/) at the Open Directory Project

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