

Massively Multiplayer Online Role Playing Games (MMORPGs)

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History and Legacy

The origins of massively multiplayer online role playing games (MMORPGs) can be traced to the role playing game (RPG) genre – that is, live action games in which participants enact the roles of fictitious characters. The genre includes board games such as Dungeons and Dragons and its many imitators. Digital-era RPGs utilize computing power to automate story scenarios and rule execution so that players can focus on character creation and development, as well as in-game interactions among avatars. While game masters used to play pivotal roles in traditional RPGs, in the digital age they are considered hidden elements of game systems.

The term MMORPG describes console and PC RPGs that are enhanced in terms of computer mediated communication and social interaction. Thousands of players collocate in shared virtual gaming spaces to interact with each other and with game systems. Text based multiple user dungeons (MUDs) are considered the prototype of MMORPGs. MUD worlds consist of thousands of areas arranged like checkersboards, with textual descriptions of scenes, objects, and characters in each area. Players who are represented by their identifications (IDs) rely on text commands to move, act, and interact with the system or with other players. Current MMORPGs can be viewed as MUDs enhanced with 2D or 3D computer graphics. While progress in gaming technology has enriched the physical and psychological senses of immersion felt by players, it is still possible

to trace the social and cultural characteristics of MMORPGs to their early MUD predecessors (Turkle, 1995).

MMORPGs have much greater potential for longevity than other types of games. *Ultima Online*, begun in 1997 and considered a pioneer in graphic MMORPGs, is still operating. The list of other MMORPGs that have endured for more than a decade includes *Lineage* (1998) and *EverQuest* (1999). During development, MMORPG designers have consistently borrowed elements from other game genres in terms of action, strategy, simulation, and construction, thus enlarging their scope beyond console RPGs to establish a new hybrid game genre. Modern MMORPG players are known for playing the same game for long durations. The most famous example is *World of Warcraft (WoW)* (2004), which at its peak had more than 10 million subscribers – the largest base of any MMORPG.

A typical MMORPG provides large-scale scenery that supports storylines based on science fiction, fantasy, martial arts, or warring kingdom themes. Many narratives are rooted in novels, films (including animated productions), and comics. Players navigate and interact within multilayered game maps consisting of continents, countries, districts, cities, streets, and buildings. The large majority of games contain “magic portals” to dungeons in which limited numbers of players can enjoy more focused gaming experiences. Essentially all games make use of nonplayer characters (NPCs). This is especially true during quests, when NPCs provide training in special skills, the trading of goods and currencies, and combat. In some cases NPCs only serve as background characters to create impressions of vivid and complex worlds. Player senses of immersion are partly due to narratives involving NPCs – that is, maintaining the story telling legacies of past RPGs. New game versions usually contain upgraded or completely new forms of game scenarios, NPCs, and objects; as a general rule, the longer the history of a game world, the more varied and versatile its landscape and spectacles.

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Framework and Operation

To start, a MMORPG player selects a game server and establishes an account that can be used to create multiple characters, although in most cases only one character can be activated at a time. These characters are expressed as avatars and controlled by computer code. Player computers execute scenarios and object movement, while other player data (e.g., appearance and behavior) are transmitted from a system computer and projected onto player monitors. This arrangement supports a sense of player cognition among a large number of avatars located in the same game world; the spatial cognition provides the context for MMORPG social interaction.

Of course, servers have limitations in terms of power and bandwidth: A maximum of several thousand accounts can log on and play simultaneously. Accordingly, a successful MMORPG must distribute players across many servers, with each sharing the same game content; it is rare for a player to have the technical and physical capability to play on two or more servers at the same time. Most international MMORPG companies provide regional servers for their subscribers. *WoW* regions include the United States, Europe, Russia, Taiwan-Hong Kong-Macau, China, and South Korea. Some companies try to provide servers for specific time zones to give certain player groups a synchronous sense of “game world time.” In other cases they emphasize language groups – for example, *WoW* has English, French, German, and Spanish speaking regions. Each server has an official language for game interface displays, but players can use other languages for communication.

MMORPG design, development, operation, and research activities are usually managed or performed by different companies. Regional firms can compete for game operation licenses. They handle daily operation chores involving hardware and software maintenance, content upgrades, player account management, and customer service. This business model is very different from that used by console game companies. There is some risk involved: If a company that owns the game suddenly decides to cancel its operations, players can lose all of their computer code for characters, equipment, and pets, which are all considered the property of the company.

In other words, players can lose all of their time investment, game related social status, and virtual fortunes. One such instance is documented by Celia Pearce (2009) in her ethnographic study of players from *Uru: Ages Beyond Myst* after the game was shut down. About 10,000 players termed themselves “refugees” and migrated collectively to other game worlds. For general reference, Wikipedia provides a list of MMORPGs and the server close dates of those no longer operating.

MMORPG gaming activities entail character development, dungeon adventures, and object manufacturing and trade for both individual and group players. Game designers use diverse activities to attract players from different backgrounds and with different interests. As a result, MMORPGs do not fit the standard definition of games, but are more like online theme-park playgrounds in which players choose from a long menu of activities with different tempos and intensity levels. Menus are periodically upgraded, with successful MMORPG companies releasing a completely new version once every year or two and providing patches to enhance interim versions – all available through downloads. Many new players join and many leave over time, resulting in a dynamic in-game social network.

Most of the first MMORPGs operated according to a subscription or pay-to-play business model. Players downloaded the game software (usually for free), and then purchased gaming time from online or offline outlets (e.g., convenience stores) in order to log on to game servers to play. Gaming time units could be minutes, months, or a complete season. In the early 2000s, a small group of game companies adopted a free-to-play model; one example is *MapleStory* (2003). Players are allowed to enter online game worlds free of charge, but have to pay for functional and decorative virtual goods considered central to the gaming experience. Players wanting to make fast progress or who lack sufficient gaming time due to their real-world schedules are often willing to buy virtual equipment and props with actual currency. Some players feel that this model compromises the integrity of online gaming, and argue that success should be achieved by incremental skill building rather than financial purchases. The free-to-play model continues to challenge past assumptions regarding the

“magic circle” concept associated with restricted game worlds, resulting in active disagreements within both the game industry and the academic discipline of game studies (Lin & Sun, 2011). Primary disagreements include whether players’ sense of immersion is compromised when they purchase virtual goods with real money, whether their sense of fairness is challenged when rules allow richer players to buy privileges in games, and whether the free-to-play model makes the game world more vulnerable to other political and economic influences.

Gaming Activities

MMORPG gaming activities can be categorized as player versus environment (PvE) or player versus player (PvP). PvE players face challenges generated by the game system – terrains, puzzles, quests – and NPCs such as quest monsters and dungeon bosses. In contrast, PvP players engage in frequent face-to-face combat and other challenges involving other players. The two categories are easy to identify as dominant in a game, but they are not mutually exclusive. In a clearly PvP oriented game such as *Lineage*, players feel a constant sense of excitement associated with ongoing survival pressure, while a PvE-style game such as *EverQuest* supports a more relaxed gaming experience. *WoW* is an example of a game that allows players to choose from servers that support both PvE and PvP versions. Players who choose a PvE server can still engage in PvP activities such as paired duels, but both participants must agree to do so beforehand, and such interactions emphasize fun rather than intense competition. Players who choose a PvP server can still level up by completing PvE quests, but such activities must be accompanied by constant vigilance against attacks from other players.

Representative PvE activities include using hack-and-slash monsters to loot equipment and gather game currency dropped by targets; participating in quests to collect functional and decorative items, earn experience points, and level up; exploring game world environments for the purposes of enjoying landscapes and background stories; and joining dungeon teams to defeat bosses and to collect high ranking equipment and unusual pets. Typical game system

supported PvP activities include one-on-one duels, arenas for two teams composed of two to five players to exhibit their personal skills and teamwork, battlefields for multiple teams with perhaps dozens of players each to demonstrate large-scale strategies and improvisational tactics for ambushes or encounters, and castle sieges involving hundreds of players who must participate in or express diplomatic alliances, logistical arrangements, loyalty, and persistence.

The ongoing-world characteristic of MMORPGs is expressed in the form of routine and daily economic and social activities. Avatars need food to survive or to heal, and need tools or materials to repair damaged equipment, thus requiring players to have steady in-game incomes. Real or virtual currency can be used to purchase decorative objects such as new hairstyles or clothes. To earn money, players can complete quests that are reset on a daily basis; they receive gold coins for doing so, which provides a basic salary guaranteed by the system. They can also visit certain areas to collect raw materials (e.g., minerals, herbs, or leather) to sell in markets, or they can make various products from raw materials (using system provided recipes or instructions) that they can exchange with the game system or other players in return for virtual or actual money. Some players focus on making a large series of increasingly lucrative trades to build fortunes, either via game supported auction mechanisms or through private channels that are not sanctioned by game companies.

MMORPG designers are known for adding structural social elements to further embed economic activity in daily life settings. For instance, players may be required to establish a good reputation in a certain NPC camp before they can purchase equipment or learn recipes and instructions from that camp; those reputations are established by participating in daily quests. This game feature encourages players to engage in routine and potentially boring activities. Players are willing to do so because of their long-term game world plans and goals – in this respect, MMORPGs mirror the physical world, in which work-like activities are conducted in the interest of delayed rewards. Another design feature used to inject a sense of the real world is holidays and festivals. In some games they correspond to actual holidays such as Christmas or New Year’s,

while in others they are created exclusively for the specific game world. Some festivals occur on a monthly basis – for example, a traveling circus that distributes special gifts, thereby increasing player expectations for return visits. Some game features may not be associated with a holiday or special occasion, but have other time related characteristics. One example is offering a different version of a highly prized dungeon each week so that players can repeatedly test their skills in the same environment. Combined with quests that are reset on a daily basis, these activities provide incentives for players to return again and again, resulting in ongoing game worlds marked by individual tempos and displays that support evolving but stable lives among players.

Social Lives and Organization

Some MMORPG characteristics make them supportive environments for rich social interactions. First, they offer foreseeably stable and ongoing worlds that allow individual players and game communities to develop identities with evolving histories. Second, the pseudonymity of one or more avatars encourages rich identity play, especially since MMORPGs provide participants with both platforms and materials for interaction. For those players who interact with gaming friends over distances, the uniform but diverse structure of MMORPGs allows them to generate shared (and often joyful) experiences that help to generate a sense of community.

MMORPG players do not need to meet in person to feel a sense of belonging. They create and develop avatars so as to participate in social organizations that rely on an assortment of communication channels for purposes of interaction, cooperation, and competition. When designing their avatars, players can choose their class, profession, gender, style, and other characteristics that give them a sense of uniqueness compared to other players. The “function” category in MMORPGs includes tanks that attract enemy fire, thus absorbing the majority of damage so that teammates can focus on attacking enemies through hand-to-hand combat or the use of long-range weapons. A player may also accept a role as a healer responsible for taking care of the health of teammates. Players must constantly

adjust their characters’ skills and functions in step with current game system generated challenges, or to complement the skills of other players.

Multiple player characters – referred to as *player alts* – can also participate in groups, raids, and guilds of various sizes for different time durations, and join multiple chat channels for different gaming or social purposes. In addition to textual and verbal communication, characters that are “physically” close can perform certain bodily actions and express different emotions to other characters, thus enhancing personal relationships. Combined, these features support the formation of layered social and communication networks.

Long-term player organizations such as guilds or clans serve important social functions. Difficult but highly rewarding challenges require detailed organizational skills involving live (online) negotiations with other players, most of them complete strangers. Player guilds can vary in size from less than five to several hundred members – the larger the guild, the greater the effort required to manage guild affairs. Some guilds emphasize casual play, others put a lot of effort into social networking, while still others are solely focused on hitting targets as quickly and thoroughly as possible. The last category tends to consist of large teams composed of members interested in long-term and more “professional” commitments. Groups at all levels, however, share some similar characteristics: Members collect and redistribute resources to make better or more efficient use of them, and share information to achieve common goals. Player organizations serve broader social functions than simply improving the gaming experiences of individual players. They help shape and maintain social norms and game world rules, discipline members for socially unacceptable behaviors, and put a great deal of effort into resolving conflicts. When members of different organizations quarrel, usually their guilds are openly identified and encouraged to take action.

Combined, these kinds of activities are part of a current MMORPG research focus: determining the extent to which mainstream cultural values and social habits such as race and gender stereotypes are reflected in game worlds via avatar identity practices and social interactions. A related question is the effect of game design on social behavior in game worlds. As technology

based social systems, MMORPG architectures and game rules are thought to affect the alignment of player behaviors (Bartle, 2004). One example is player ranking for purposes of looting treasure after a boss is killed. Whether it is determined by the game system or negotiated by players, the rule dictates interactive behaviors among participants. Another example is the differentiation between PvE and PvP games: A single change in setting or behavior (e.g., one player attacking others without their agreement) has significant ramifications in terms of social behavior and game culture.

There is evidence indicating that many players do not follow intended or encouraged ways of playing as described in game rules or reflected in game design features. These players take advantage of design bugs or use plug-in programs to increase gameplay efficiency, to gain an edge over others, or to develop innovative ways of game play. An example of a practice that does not adhere to game design intentions is the use of game currency to bid on looted equipment instead of rolling the system dice to determine possession. Other practices are explicitly prohibited by game companies – for example, using client programs (bots) to play, or exchanging virtual game currency for real-world cash. These examples underscore the player autonomy and collective gaming behaviors currently observed in game worlds. There is also evidence of game culture diversity across game worlds, with different settings, rules, and organizational and behavioral cultures emerging on different servers or within different player communities, even though the game system is the same. Accordingly, researchers are finding that MMORPG behaviors have important implications in terms of technology user agency by highlighting the effects of system function alignment on player behavior, as well as player resistance to it.

Gaming Culture

Gaming culture is an example of what Jenkins (2006) has called an emerging “participatory culture.” Player identification with MMORPGs of all kinds has produced a significant international fan community whose members take pleasure in giving names to their avatars and local organizations, designing character appearances,

crafting objects, and creating innovative gaming strategies and activities. They share game tips with fellow players, manage game forums and boards, develop plug-ins, modify game software to produce unofficial versions (a practice known as *modding*), create *machinima* by taking game visuals and manipulating character movement, take still or moving pictures of their gaming records to share with individuals and groups, and even write fiction based on game characters or experiences. Thus Taylor (2006) suggests that MMORPG culture has implications in terms of cultural innovation and economic value. Game culture not only enriches gaming experiences, but also injects new ideas and methods into game worlds.

There are many examples of player innovations being adopted by game designers and appearing in new versions. In other words, MMORPGs reflect an abundance of player inspiration and effort, and therefore should be viewed as both cultural and commercial products; similarly, player communities should not be dismissed as consisting of passive consumers. *Prosumers* (a term recently coined to describe Web 2.0 users) are similar to players in terms of game design and production. The large majority of players engage in design and game testing activity without any demand or expectation of payment, leading Yee (2006) to describe this new phenomenon as a “labor of fun.” Its estimated economic value has received considerable research attention. Players now actively assist MMORPG companies with debugging during public testing stages, post instructions for other players to enter and stay in games, and respond to other players’ questions. Thus player fan communities not only provide game companies with free technical assistance, but also support their marketing and customer service efforts. Such support networks have high economic value.

Players Between Two Worlds

Many MMORPG players maintain alternative lives in game worlds because they provide a sense of presence in a digital environment and an atmosphere of a social “third place” for interaction. They carefully choose servers based on specific interests, sometimes selecting servers far

away from their geographic locations, or ones that use foreign languages. One result is the dynamic phenomenon of boundary crossing in virtual worlds. Now that MMORPG servers offer a large number of parallel worlds to choose from, factors considered by players may be economic, with low-income players preferring free-to-play games; technical, with popular servers attracting so many players that long gameplay delays are experienced, thus encouraging players to migrate to new servers; political, with some governments putting severe restraints on game content so that players move to servers in foreign countries; social, with players selecting servers where online or offline friend networks already exist; or cultural, with players traveling among multiple servers to explore their various game cultures before selecting one for long-term play. In extreme cases where a company terminates operations, players who identify with the affected game may migrate collectively to another game and “live” there; Pearce (2009) describes one such case in detail. Social and other real-world conditions may frame player choice, but with added concerns for sufficient flexibility and promises of layered and heterogeneous social contact.

A huge number of MMORPG players invest large amounts of time and effort in their game world activities. Their devotion has resulted in real-world markets for virtual equipment and currency, making MMORPGs one of the few examples of economic resources flowing between two worlds and economies. The most prominent MMORPGs currently serve as bases for unofficial currency trading, with floating exchange rates based on player demand. Game equipment and props are traded daily using player created channels. The free-to-play business model apparently emerged from these market forces, with companies wanting to directly control exchanges of equipment and currency, thereby legitimizing and expanding a previously illegal activity. Yet questionable practices still exist, with “gold (virtual currency) farming” businesses booming in industrializing countries such as China, Mexico, and India. Players are hired to work 12-hour shifts earning MMORPG equipment, objects, and currency for sale to players willing to pay real money. Such practices blur traditional boundaries between leisure and work (Dibbell, 2006). The recent emergence of game currency inflation

is partly a result of this phenomenon. Economic links between these two worlds have additional, more complex practical implications, such as who owns the rights to virtual goods, how to control money laundering, and whether real world transaction taxes must be paid (Castronova, 2005).

To a certain extent, game worlds allow for interaction among players regardless of race, age, gender, class, profession, or location. Such opportunities are much more limited in the real world, especially in terms of meeting and playing with gaming friends in the same physical location. In contrast, in game worlds they can selectively hide or reveal their identities and focus on player interaction. Further, individuals who immigrate or who work and/or study in foreign countries may choose to play on their home country servers to maintain connections with their roots. In an age of frequent movement between countries for travel, study, or work, MMORPGs are no longer merely portals for exploring other worlds, they also serve as avenues for keeping in touch with friends and family members, or as alternatives to returning home. The impacts of this phenomenon are worthy of further research attention.

SEE ALSO: Alternate Reality Games; Multi-User Dungeons (MUDs); Online Games; Online Games Characters, Avatars, and Identity; Online Games, Cooperation and Competition in; Online Games and Role Playing

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