7 Multi-Player Online Role-Playing Games

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This chapter describes multiplayer online role-playing games (MORPGs) where players participate through networked connections to collectively build a narrative or experience with a game that persists independent of who is logged in. We discuss two main traditions of these games (see **Chapter 8** for an emerging tradition):

- 1. Multi-User Dungeons (MUDs), and
- 2. Massively Multiplayer Online Role-Playing Games (MMORPGs).

MUDs and MMORPGs generally allow for a "massive" amount of players—sometimes hundreds, thousands, or tens of thousands of players who simultaneously engage in the same game. Most MUDs and MMORPGs feature worlds where players log in at any time to visit, providing players with a persistent world independent of who is logged in.

A variety of agents are at play shaping the multiplayer online RPG form. Creators have introduced novel game systems or narratives while dealing with the affordances of what everyone agrees is an RPG, but creators are also constrained by the technologies of their time rather than inherent limitations in RPGs. There also exists a parallel history in non-digital RPGs and computer role-playing games (CRPGs) that influence the online games. Thus the evolution of MORPGs is not channeled through just one tradition.

Thankfully, first-hand accounts of the history of the multiplayer online RPG industry (Bartle, 2010) and first-hand accounts of design and management decisions for specific games (e.g. Morningstar & Farmer, 1991; Curtis, 1996; Mulligan & Patrovsky, 2003) exist. One thing these accounts lack is scrutiny from scholars across multiple disciplines, studying specific player phenomena in online gaming, so this chapter complements the historical timeline with notable scholarly research on player behavior and community engagement. These include ethnographic studies of gamers (Taylor, 2006a; Pearce, 2009; Nardi, 2010) and game companies (Malaby, 2009), collected volumes about specific games (Carter, Bergstrom, & Woodford, 2016; Corneliussen & Rettberg, 2008), economic issues in virtual worlds (Castronova, 2005; Dibbell, 2006), learning in online games (Steinkuehler, 2007; Chen, 2012), issues of inclusion and marginalization (Kolko, 2000; Nakamura, 2009), discussions about player types (Bartle, 1996; Yee, 2006), persistent identity (Banks, 2014; Yee, 2014), player communities' lives (Seay et al., 2004; Williams et al., 2006), and emergent social norms and policing (Dibbell, 1993).

Roughly speaking, the history of multiplayer online RPGs can be divided into text-based ones (MUDs) and graphical ones (MMORPGs). This division isn't neat, however, perhaps placing too much emphasis on how content is communicated to players rather than on any number of other ways of thinking about games, such as categorizing them based on emotional experiences, allowable player activities and decisions, turn-based vs. real-time action, designed purposes, country of origin, etc.

[Box Insert 7.1]

Multi-User Dungeons (MUDs), the first multiplayer online RPGs, were text-based games that are similar in style to single-player, text-based games known as Interactive Fiction (IF; Montfort, 2003) (see Figure 7.1). In IF, a player reads passages of text describing a location, as if they are at that location, along with any objects located there and any activity occurring therein. A player then types in commands to let the game know what actions they want their character to take (e.g., "look," "pick up," or "go east"). These are usually interleaved interactions: i.e., player does something, game responds, player does something, game responds. The multiplayer versions of these games allow players to talk and interact with others in addition to interacting with the game environment. Shared in-game locations can resemble early Internet chat rooms, and players can perform actions or chat with each other without having to interact with the game itself. The original MUD1 created by Trubshaw and Bartle allowed players who "beat" the game, which focused on combat with computer-controlled enemies, to become wizards who then had the power to modify the locations and objects in the game, including other characters. This allowed those who finished the game's content to become authors of additional content or to become game masters for other players.

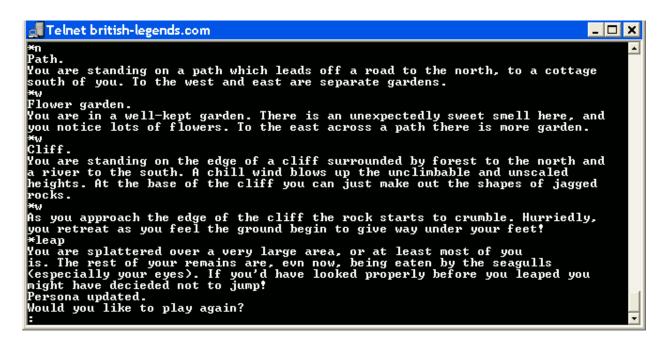


Figure 7.1: A screenshot from MUD1 featuring text-based style of play. [Source: Wikipedia]

Many different flavors of multi-user text-based games exist now, serving different audiences and featuring different affordances. Some focus on battling monsters (MUDs), some on social interaction with other players (MOOs), and some on collective storytelling and role play (MUSHs). They were all derived from the original MUDs, and we will use that name to refer to all of them throughout this chapter. Just as wizards had the power to create and change the game in *MUD1*, these early multiplayer games allowed multiple users to create new locations or inlocation objects to add to the game and even add limited scripting to objects. Quite often, though, a MUD had a core group of designers and managers such that the whole environment was a collaborative development between players and the MUD staff, the wizards. The extent of collaboration depended on the MUD and ranged from players offering limited description of locations and objects to completely co-created, shared environments in which there were few, if any, limitations on player creation other than those imposed by the MUD's code. The more role-

playing or socially oriented the MUD, the more power was generally given to players to cocreate their environments.

Though there were earlier incarnations (e.g. *Avatar* and *Habitat*), the 1990s saw a rapid expansion in popularity of multiplayer games with *graphics*. They include top-down, click-to-move games, such as *Ultima Online* and *Lineage* (see Figure 7.2), and, at the very end of the decade, a precursor of today's MMORPGs featuring an interface and controls closer to first-person shooters, *EverQuest* (see Figure 7.3). Most of these games moved away from user-created content and focused on designer-specified lore, often set in a fantasy world where players create an archetypal character to play and level up.



Figure 7.2: Origin System's Ultima Online and NCSoft's Lineage feature top-down isometric viewpoints where players clicked on the ground to move and on other objects to interact with them. [Source: Zachary Booth Simpson and ModDB.com]



Figure 7.3: Sony Online Entertainment's EverQuest popularized the move to 3D graphics.

[Source: MMORPG.com]

The rest of the chapter details the advent of MUDs, covering more nuanced definitions of different types of MUDs and includes notable issues and research around them. This is then followed by the same treatment for MMORPGs.

MUDs

Before today's standard of lush, visually overloaded screens, multiplayer online RPGs were mostly plain text passages on flat fields of color with a parser for user input. Many of these games were played on university campuses with connections to a nascent internet far before home consumers had access. It can be argued, in fact, that multiplayer online RPGs originated from the labor of students, as they explored and pushed the mainframes and networks to their technological limits. The influences for these students and early game and virtual world creators were varied but much of it came from trends in the tabletop world.

History

Pre-MUDs

Dungeons & Dragons (D&D) popularized games structured around an adventuring party, where a referee (or "dungeon master") would manage a game world full of adversaries on behalf of a group of players participating in a campaign (see Chapter 4); it was inherently a multiplayer game. The original rules recommend that a single referee handle "from four to fifty players" in any single campaign, numbers which are in line with Arneson's Blackmoor campaign (see Chapter 3). Practically speaking, this assumed that not all players would be present at all game sessions, but it was not uncommon for early tournament dungeons, like the famous 1975 *Tomb of Horrors* at the first Origins convention (Schick, 1991, p. 113), to assume a party of fifteen players served by a single referee.

Outside the tournament environment, it can be difficult to bring a large and consistent group of players to the same table. This problem has faced multiplayer games since the early 1960s, when geographically-distributed *Diplomacy* fans first began to play by mail rather than in person. Each of the seven players in a *Diplomacy* game sent their moves by post at an agreed interval for turns to a gamesmaster, who then revealed the results of the moves all at once to the players.

Diplomacy variants sometimes increased the number of players substantially. This postal format became the norm for many of the more complicated multiplayer simulation games of the decade, such as Tullio Prony's seminal 1967 *War of the Empires* (Peterson, 2012, p. 36), which supported over thirty simultaneous players in its first year.

Ownership of computer systems at the time remained almost exclusively limited to academics, military personnel, and large institutions that could invest in mainframes or minicomputers. By 1970, certain computer systems became more affordable, and the possibility of a commercial computer game became realistic. The Flying Buffalo Computer Wargame Company was founded in 1970 with the unusual premise of running a computer to adjudicate multiplayer wargames, beginning with the title *Nuclear Destruction* (Peterson, 2016, p. 25). A group of between eight to fifteen players mailed in a specially-formatted card that indicated their moves. These were then fed into the computer, and, once all moves were received, a print-out was sent to all players explaining the results. In this sense, the early play-by-mail games were prototypical MMORPGs even though the role-playing elements were lacking.

Computer role-playing games (**see Chapter 6**) began to appear within a year of the release of D&D. One of the earliest systems to support the interactive graphical systems necessary to visualize dungeon adventures also happened to be a networked, distributed system: PLATO, based at the University of Illinois at Urbana-Champaign and created by the Computer-based Education Research Lab (CERL). In fact, multiplayer networked games of various kinds already existed on the PLATO system prior to the publication of D&D. For example, the 1973 teambased, space strategy game Empire (Peterson, 2016, p. 25) supported up to fifty players, each controlling their own ship. With the advent of computer versions of D&D, however, multiplayer modes emulating D&D parties soon followed.

Early multiuser RPGs, *Oubliette* (1978), *Moria* (1978), and *Avatar* (1979), were created on the PLATO system, allowing groups of players to take advantage of its multi-user platform to form a party to adventure together. The game play was limited to exploring a dungeon, killing monsters, and finding treasure, but the social aspect of the games aided their longevity. Of these early games, *Avatar* was by far the most popular and influential, existing through several incarnations and actively played through the mid-90s. Despite its relatively long existence, the limited access to PLATO and its successor, NovaNET, kept the total player base quite small. The impact of the early PLATO games is limited, and few of the earliest designers continued to help form the computer games industry. Though the PLATO system allowed for limited graphics, the method of implementing them further limited its early use to specific hardware created for the PLATO system. Thus, the greatest impact on the spread of multiplayer online RPGs was not through

PLATO but through the more widespread teletype and CRT terminals connected to mainframes networks and, eventually, personal computers and the internet.

With the widespread availability of mainframe, single-player, text adventure games like *Adventure* and *Zork* by the end of 1977, several experiments attempted to recreate a multiplayer model in text. One of the authors of *Zork*, Dave Lebling (1980), recalled that "there was briefly a multiplayer version of the PDP-10 *Zork* several years ago," but by that point he noted that "today there is a 'Multiple User Dungeon' at Essex University in England." The original MUD system was created in 1979 but remained accessible only to users of the university computer system. Initially, early MUDs simply let multiple players experience the mechanics of a text adventure at the same time with only minimal opportunities for cooperation other than sharing advice. Bartle (1983), noted, for example, that "you may have to ask for help in order to lift up a heavy portcullis."

MUDs operated from a variety of code bases and operational models. Outside of university environments, dial-up access was typically required, either to access a MUD directly or to connect to an information service supporting the MUD. For example, the 1985 Compunet MUD, available to Commodore 64 players, supported up to 36 simultaneous players. Only when Internet access grew more widespread in the 1990s did internet MUDs begin to flourish outside of academia.

That the history of MUDs is deeply tied to hardware platforms seems to be a major emphasis in early accounts of MUD development. Bartle (2003), for example, spends much of his history chapter on the types of computers and networking infrastructure available to creators as they programmed new MUDs, dividing eras of MUD history into four ages defined in large part through these affordances/constraints. In 1983, Bartle wrote, "What I would like to see - and it's a long, long way off - is some local or national network with good graphics, sound effects and a well designed set of worlds of varying degrees of difficulty." While this possibility seemed remote in 1983, it was realized within a decade. Notably, Bartle immediately followed this line with, "In this true meritocracy, you will forever be encountering new situations, new difficulties, new solutions, and above all new people. Everyone starts off on an equal footing in this artificial world." As we will see later, this promise of a new meritocracy wasn't without struggle and controversy.

Types of MUDs

The term "MUDs" is used here generically, but, for some players, the term specifically refers to combat-heavy games. Rheingold (1993) states that Bartle emphasized death as a necessary component of MUDs to be considered games, and this led to the fork in MUD evolution between social MUDs and combat-oriented MUDs. Indeed, today, many MUDs encourage heavy role-playing where players stay in character and act out scenes. In contrast, combat-heavy games (also called "hack-n-slash" games) usually focus on encountering game-controlled monsters to defeat and loot.

One way to differentiate MUDs is to look at the underlying framework that was used in creating them. Different flavors of packages were available for developers to take and modify to create new games. For example, many combat-oriented games were built on LPMud and DikuMUD, while TinyMUD's derivatives (MUSHs and MUCKs) were often used to create games that emphasized social interaction. Busey (1995, p. 3-5) lists types of MUDs, mostly using a platform categorization scheme. These categories are confusing, however, as they conflate platform with style of play and do not represent an exhaustive list of platform types. Bruckman (1992), alternatively, divides MUDs into Adventure-Game-Style MUDs and Tiny-Style MUDs. Adventure-Game-Style MUDs featured leveling-up with a character, exploring, and defeating monsters. Tresca (2011) adds that, eventually, players formed tight fellowships with others in taking on game challenges, foreshadowing the kinds of grouping needed in later MMORPGs. Tiny-Style MUDs were much more about interacting with other players and creating the world for all to inhabit. Bruckman writes, "In these MUDs, status within the community is achieved by building" (1992, p. 8).

Further confusing this delineation, both Adventure-Game-Style MUDs and Tiny-Style MUDs were sometimes tied to heavy narratives and genres, again, foreshadowing later MMORPGs that are tied to different media properties (Star Wars, Star Trek, etc.). There were in fact a wide variety of MUDs (just as there are now many different affinity groups on the web and different flavors of MMORPGs).

Themes and Issues

Governance, Utopian Visions, and Spill-over, Part 1

A common feature of these virtual spaces was that users who were given certain permissions could create content (e.g., new rooms or new objects), thereby making game creation a sort of collective or crowd-sourced endeavor. Many of these worlds were created and maintained by volunteer players, and visions of collective self-governance attracted academics and technical hippies, anarchists, and libertarians. Writing in 1995, Busey (p. 7) posited that

The allure of creating one's own world, or even just living in a world with different rules, can be immense. Politics, adventure, and the brave new world are great attractions. People like the fact that they can spin a new reality or shed the boundaries of an everyday world.

An odd paradox existed, however: most MUDs forced through code a hierarchical structure among their denizens with creators being deemed "gods" *in the code*, dispelling illusions of participatory control.

Sometimes admins would make decisions that were meant to flatten participation and do away with real-world discrimination, some of which backfired, aggravating issues instead of alleviating them. For example, in "erasing @race," Kolko (2000) detailed *LambdaMOO*'s move

to take away the "race" attribute of created characters. Like color-blind policies, this ended up marginalizing already marginalized groups of people and normalized "default white," rather than resulting in inclusivity. Rheingold (1993) also notes that "Identity is the first thing you create in a MUD... By creating your identity, you help create a world." This initial action for first-time players clearly emphasizes one's identity as the starting point to base all other communication. System-wide control over what is available as options to define one's identity shouldn't be taken lightly, especially when it's so easy to obliterate traditionally marginalized sources of identity. Other issues arose around control, user permissions, and social norms. Dibbell (1993), in his landmark article, "A Rape in Cyberspace," detailed controversy that can happen when players have ways of forcing other players to take certain actions, in this case sexual. Sending ripples throughout the community (LambdaMOO again), the admins and players had to then figure out how to handle the incident and possible future ones. The debate not only included policies for normal behavior but also necessitated a discussion on what counted as violation. Was sexual harassment and rape less meaningful when performed on a virtual character? How much did players identify with their onscreen selves? One side of the argument maintains that violations did not happen because there was no bodily harm. The other side asserts that players experienced emotional harm, and so these actions were *real* violations. These questions about virtual vs. "real" harassment persist today. Many later examples of violations that test the boundaries of real and virtual include instances of theft and killing without game-enforced repercussions, such as with the games *Habitat* (Morningstar & Farmer, 1991), *Ultima Online* (Lastowka & Hunter, 2004), and *Runescape* (Messner, 2016).

Clearly, for some players, the distinctions between online and offline identities are extremely blurred and multifaceted as researchers would later confirm (Grooten & Kowart, 2015; Banks 2015). As is also seen in TRPGs and larps, MUSHs, MOOs, and other MUDs that were set up for character role-playing required a level of consent from its players. They had to constantly negotiate and socially agree on the limits of their role-play. Social MUDs, however, seemed to bring the issue of consent to focus especially since players were often anonymous to each other.

Player Types and Identity

Consenting to participate is dependent on how a player sees themselves as they play. In an effort to classify players, Bartle (1996) published early scholarship on player behavior. He derived four player archetypes out of a conversation between 30 wizards about their observations of players in games they were administrating from late 1989 to early 1990. These categories—Killers, Achievers, Explorers, and Socializers—were then placed on two axes, creating the diagram in Figure 7.4. Achievers focus on game-related goals, such as acquiring treasure or defeating monsters. Explorers initially map out the extent of a MUD's world, moving onto experimenting with the rules of the world once the map is complete. Bartle labels these as the breadth and depth of the MUD world. Socializers spend time using the game's communicative facilities to role-play with other players. Killers are players who imposed upon other players. This usually takes on the form of harming or causing other players distress, but it sometimes also includes helping others using in-game tools or mechanics. Thus, perhaps in hindsight the label "Killer" is a misnomer when it should be "Imposer" or some other name that indicates affecting other players with no indication of whether it is hurtful or helpful.

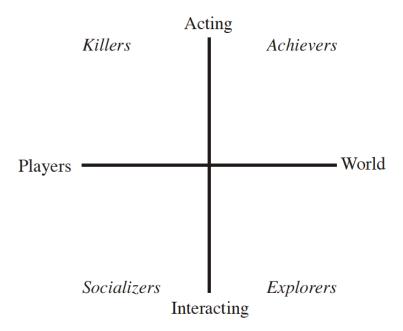


Figure 7.4: Bartle's player types.

Many researchers and, indeed, game designers still use these categories as a rough scheme today (see Chapter 18). Of course the model is a simplification since players in these settings can testify to expressing all of these categories of behavior to some degree. The Bartle Quotient (now run by GamerDNA), a survey that determines a player's type, does allow for four independent plots along the four axes, and an alternative model introduced by Yee (2006) and then by Yee, Ducheneaut, and Nelson (2012) years later supports degrees of affinity toward certain types of behavior as independent from other types of behavior. One major difference between Bartle's and the later models is that the later ones emerged out of data on thousands of players. That data consists mostly of self-report survey responses, and the affinities are perhaps more useful than the player types that arose out of shared observances from 30 administrators, of which Bartle

states only 15 were actively engaged in the conversations. Unfortunately, a common move researchers using these models make is to then place players into these particular categories—labeling the players themselves—rather than just labeling their behavior at specific moments in time. This act can essentialize and generalize human experience rather than recognize that players can act relatively differently from moment to moment. They may have preferred or biased ways of responding to in-game events, but labeling them a specific way has the danger of marginalizing nuanced behavior.

Another notable line of research explored online identity and predicted that people spending increasing amounts of time in MUDs would have a very different social experience than previous generations of people who did not spend as much time in these virtual spaces (Turkle, 1995; Bruckman, 1992; Rheingold, 1993). Then and now, this line of reasoning is sometimes accompanied by the claim that time spent online is inferior to time spent offline because we become less social and therefore less human (often seen in sensationalist videos shared on Facebook and YouTube¹). This, of course, fails to acknowledge that much of the interaction in virtual spaces can be highly social and allow for more time in social situations and greater numbers of social contacts than in someone's offline life. Rheingold (1993), for example, recounts a quote from Pavel Curtis that counters the argument that time spent in these virtual spaces is not social (while also adding nuance to the claim that MUDs are addicting):

^{1 &}quot;Look Up." https://www.youtube.com/watch?v=Z7dLU6fk9QY

These people aren't addicted to playing video games... They're communication addicted. They're addicted to being able to go out and find people twenty-four hours a day and have interesting conversations with them. We're talking about people who spend up to seventy hours a week connected and active on a MUD...

...if someone is spending a large portion of their time being social with people who live thousands of miles away, you can't say that they've turned inward. They aren't shunning society. They're actively seeking it. They're probably doing it more actively than anyone around them.

(Curtis as quoted in Rheingold 1993)

Bruckman (1992) and Turkle (1995) note that MUDs provide a space to explore identity construction, and Rheingold (1993) uses identity as the main theme to examine our history with media when he says,

MUDs are part of the latest phase in a long sequence of mental changes brought about by the invention and widespread use of symbolic tools."

Previous communications media dissolved ancient barriers of time and space that had separated people, and in the process changed the way people thought... Literate people think differently from people in nonliterate or postliterate cultures, and they think of themselves differently...

...the latest computer-mediated communications media seem to dissolve boundaries of identity as well. One of the things [we are doing]... is *pretending to be somebody else*, or even pretending to be several different people at the same time. (Rheingold 1993)

For Rheingold, Bruckman, and Turkle, part of the draw of MUDs is precisely the fact that identity in them is malleable. After her earlier optimistic work (1995), however, Turkle more recently (2011) cautions us and questions whether we want our new selves to be so steeped in these new forms of mediation (though she is mostly talking about our use of social media and mobile devices rather than online games). Yet Rheingold seems to be suggesting that the act of switching mediums is no easy task when our defined existence is so tied to the mediums in which we participate.

Another area of interest about identity and consent is with sex, sometimes known as "TinySex," "TSing," or "cybering" in MUDs. Part of the reason why the virtual rape reported by Dibbell (1993) was so controversial has to do with the blurred line between virtual and real identities and the social etiquette of MUD users that upheld consent and permission (cf. the Netiquette rules laid out by Busey, 1995, pp. 79-81). In truth, TinySex was a known phenomenon and generally accepted within parts of the MUD community such as in *FurryMUCK* (Busey, 1995). Romance in MUDs, MMORPGs, and virtual worlds can be intense, sometimes more so than in offscreen romances partly due to its "always on" nature. They can result in both online marriages and "real-life" marriages when players move their romance to their real selves. Sex in MUDs and

such can be romantic, too, but, just as often, they can be casual hookups. Furthermore, gender bending or portraying a character that is unlike an offline identity is a frequent phenomenon in MUDs, just as it is in MMORPGs, which theoretically shouldn't be a problem unless the lines between onscreen and offscreen life get blurred such as when meeting a romantic partner from an online space in non-game contexts.

Issues of control, governance, and identity continue to be concerns for researchers of MMORPGs. MMORPGs are more complicated and attract orders of magnitudes more players than MUDs before them. Research into player communities and culture around MMORPGs also ballooned in comparison to research on MUDs, and, in addition to the above topics, many more areas of study emerged including descriptions of player modding, team-oriented play and coordination, and engaging in scientific practice analyzing a game's underlying systems to find the most efficient ways of playing (also known as *theorycrafting*). It's not that these practices did not exist for MUDs (and other gaming communities), but the rise in their prevalence along with the rise in scholarship around MMORPGs allowed the academy to see these practices in much more detail.

MMORPGs

As with text-based multiplayer RPGs, visual ones tend to have different foci (whether battling fantasy monsters, socializing with other players, or role-playing specific characters and situations), though more often than not, a single game can serve all of these purposes to varying degrees. This section highlights specific trends as these games gained in popularity and as they

evolved with the videogaming industry in its pursuit of more sophisticated graphics and with designers' and players' visions for online life.

A defining feature of MMORPGs is that they allow a massive amount of players to simultaneously log in and interact with the game world and each other. It is a mistake to assume that playing an MMORPG is like playing a single-player RPG but with other people around. In fact, the social aspects of participating in one of these game worlds can eclipse any pre-designed single-player experiences. These games can become "third places" (Steinkuehler & Williams, 2006; Moore, Hankinson Gathman, & Ducheneaut, 2009), where players hang out and live, make friends and enemies, form close bonds, communicate in intricate ways, figure out how to selforganize, and govern.

A major change, moving from MUDs to MMORPGs, is that games transitioned into being paid services as they became commercial ventures rather than hobbyist activities run my students and academics. These ranged from early dial-up games with hourly fees (e.g. *Neverwinter Nights* on AOL), to a monthly subscription fee for internet-based MMORPGs (e.g. *World of Warcraft*), to free-to-play games (*Neverwinter*). The latter sometimes begin as subscription-based games that change if/when their subscription numbers falter (*Wildstar*). Another model is to require an upfront purchase and then allow people to play the game indefinitely (*Guild Wars*).

More History

Dial-Up Games: Habitat and Neverwinter Nights

In the 1980s and early 1990s, home online access was still costly, but dial-up modems were getting faster, and dial-up services that offered hourly or monthly subscription rates started to gain prominence. These networks often provided online services that were distinct from, and not a part of the internet as it is known and used today.

Habitat (1986), by Randy Farmer and Chip Morningstar at Lucasfilm, was essentially a graphical representation of a MUD's rooms (see Figure 7.5). It was an early example of a virtual world but not typically considered an RPG. Even though players controlled characters that moved from scene to scene and interacted with objects and other characters in those scenes, they did not normally engage in combat with monsters or level up while questing. Locations and characters were drawn from the side, as if from a wide-angle shot, making *Habitat*'s art format a precursor to Lucasfilm's later point-n-click adventure games, Maniac Mansion and Zak McKraken.



Figure 7.5: Lucasfilm's Habitat.

Habitat was set up to allow a self-governing citizenry, taking a cue from many MUDs before it. Players of Habitat had to socially construct rules to follow as a society since the game allowed stealing and killing with no game-enforced repercussions. Morningstar and Farmer (1991) highlighted cases of controversy and showed how the community reacted and reasserted order. These issues continue to appear in both MUDs and MMORPGs today. Perhaps something about virtual space attracts idealists, libertarians, and identity-experimenters all interested in experimenting with how far they can push the limits of social interaction or freedom in the system. The idea that players can, together, figure out how to run a place seems compelling for many who want to get away from real-life hierarchies and differences.

A few years after *Habitat*, AOL offered *Neverwinter Nights* (*NWN*; 1991) as part of its dial-up service. Created by Stormfront Studios and SSI in partnership with TSR (the publisher of *Dungeons & Dragons*), it was an extension of their work on the "Gold Box" games set in the *D&D* Forgotten Realms campaign world (**see Chapter 6**). The Gold Box games emphasized turn-based tactical combat on an isometric grid, which continues to be a mainstay in role-playing and strategy games. *NWN* is a contender for the first graphical online RPG (see Figure 7.6), and it was certainly the first one to hit consumer markets (though, as covered above, there were other graphical virtual worlds before *NWN*).



Figure 7.6: Stormfront / SSI's Neverwinter Nights featured the same isometric grid combat as their other "Gold Box" games but was a multiplayer online game through the dial-up service AOL. [Source: games.mail.ru]

NWN's community of players was actively engaged, creating guilds and hosting events for members, precursors to the guild-run events in today's MMORPGs. In fact, a decade later,

Bioware sought the *NWN* brand for its non-massive computer RPG of the same name, which featured a construction kit that allowed players to create their own adventures and, if desired, to act as a live game master for a group of players. As intended, this created a new formation of the old player community on internet forums and web pages dedicated to the game.

Early Online Games: Ultima Online and Lineage

Two of the early games that also featured an isometric view where players clicked on the represented ground to move their characters were *Ultima Online* (*UO*; 1997), developed by Origin Systems in the US, and *Lineage* (1998), developed by NCSoft in South Korea. Both were set in fantasy worlds, but *UO* tended to focus on cooperative action against in-game monsters while *Lineage* was lauded for its robust guild-based, team vs. team play. Both games still featured text chat between players, overlaying a text box on top of the main screen's action. *UO* took place in the fantasy world of Britannia, the same setting as the popular single-player CRPG series *Ultima*. An important aspect of *UO* was its virtual economy and crafting system. Players collected resources or equipment and could trade them with others. Some players even constructed homes and gardens (see Figure 7.7). This created a market for rare goods and crafted items, which were traded in a barter system or for in-game currency. As demand rose, players began trading real-world currency for items and in-game money. Dibbell explored these early days of real-market trading (RMT) and describes his experiences attempting to make a living off this virtual economy in *Play Money* (2006).



Figure 7.7: Player housing and crafting in Ultima Online. [Source: DJAd, stratics.com] For more see http://stratics.com/threads/post-your-custom-house-designs-here.35349/

Development of MMORPGs was not limited to Western markets. *Nexus: The Kingdom of the Winds* (1996) was an early game from South Korea. A couple of years later, *Lineage* (1998) hit the market and became available in Western regions. Like *UO*, *Lineage* featured a top-down view of the action where players controlled their avatars' movement primarily with a mouse like in Blizzard's single-player RPG *Diablo*. *Lineage* also featured player-created guilds or alliances that then battled each other for control of territory. Independent players soon found that survival

and richer play experiences depended on joining one of these guilds. It was less dangerous to team up with others than attempting to traverse the world alone.

In the early 2000s, academic scholarship around MMORPGs began in earnest. In the education world, Constance Steinkuehler wrote about her experiences with and literacy practices within *Lineage* and *Lineage II*. For example, she discussed and analyzed chat communication in *Lineage* (2007) (e.g. "afk g2g too ef ot regen no poms,"), showing how participating in *Lineage* play required a cultural understanding—i.e. a sophisticated literacy of its discourse. MMORPGs (and MUDs before them), as with any subculture, spawn new ways of speaking and interacting within a shared social space, and Steinkuehler's work sheds light on their nuanced and sophisticated nature.

EverQuest

When Sony Online Entertainment (SOE) released *EverQuest* (*EQ*; 1999) it saw its chance to refine mechanics from earlier games while also taking advantage of improvements in technology by moving its game to a more immersive 3D platform. To be sure, the creators of *EQ* cite major influence from earlier text-based MUDs, but it's easy to argue that some amount of influence must have also come from games like *Ultima Underworld: The Stygian Abyss* (1992) and *The Elder Scrolls II: Daggerfall* (1996).

EQ continued to be influenced by other games and otherwise refined over the years, especially with its graphical presentation. It first started out looking like older CRPGs, like the Wizardry series, with information presented in blocked off panels, but it later did away with side panels and instead presented that information as overlays on top of the 3D space (see Figure 7.8).



Figure 7.8: Side-by-side comparison of EverQuest's different presentations, removing text panels from beta and early versions in favor of overlays. [Source: kheprigames.com and Wikipedia]

EQ was a landmark MMORPG, not only in terms of defining a genre but also in attracting scholarship around player behavior and cultural practices. T. L. Taylor (2006a) forged the way in describing players as they interact with each other and game developers, both online and at face-to-face conventions, as they define social norms, figure out what's fair, argue about the future of their game, etc. She paints an intricate portrait of MMORPG gamers that dispels stereotypes of gamers as teenage boys in basements. Most importantly, participating in MMORPG play means participating in a larger cultural context that is social, collaborative, competitive, contentious, and deeply meaningful in many different ways to its participants.

World of Warcraft

In the 1990s, online multiplayer games became more of an industry focus with serious revenue possibilities. Early successes in *UO*, *Lineage*, *EQ*, along with others such as *Asheron's Call* (1999), *Dark Age of Camelot* (2001), and *Star Wars Galaxies* (2003) proved that developing and then supporting these games was a viable business model. Then came *World of Warcraft* (*WoW*; 2004) by Blizzard Entertainment, who had a sizable fan base already from their *Warcraft*, *Starcraft*, and *Diablo* series of games.

Prior to *WoW*, SOE was proud to amaze people with the fact that *EQ* had over 450,000 subscribers (MMOData, 2013). *EQ*'s success was enough to greenlight a sequel, *EverQuest 2* (*EQ2*; 2004). Unfortunately, *EQ2* was released right around the same time as *WoW*, and players were drawn to Blizzard's reputation for creating satisfying experiences with refined presentations and tightly balanced mechanics. *WoW* subscriptions quickly dwarfed *EQ*'s record. In two years, they were up to 6 million subscribers, and at its peak around 2010, *WoW* had over 12 million subscribers worldwide, in part due to player tools that let them customize the user interface through "add-ons" (see Figure 7.9).



Figure 7.9: Screenshots of World of Warcraft, showing the default interface (left) and with user-created add-ons (right). [Source: Mark Chen]

This popularity attracted a wave of new games research, much of it ethnographic in nature (e.g. Bainbridge, 2010; Chen, 2012; Nardi, 2011), as graduate students and faculty wrote about their own gaming practices or saw that *WoW*'s prominence couldn't be ignored as a site for study. The fledgling journal *Games and Culture* featured a special issue on WoW in 2006 (Krzywinska & Lowood, 2006), which included articles that looked at guild formation (Williams et al., 2006), gave a prescient note about surveillance culture (Taylor, 2006b), and compared text-based MUDs to *WoW* as social activities (Corneliussen & Rettberg, 2008; Mortensen, 2006). Topics like these existed before *WoW*, but the game gained a large enough player base to permeate into popular culture and academia alike.

Post-WoW

A series of "WoW killers" were released during the late 2000s and early 2010s, but none of them attracted the same magnitude of players nor significantly took away players from WoW. Some hoped established intellectual property (IP) would sell their games: Dungeons & Dragons Online (2006), The Lord of the Rings Online (2007), Age of Conan (2008), Warhammer Online (2008), and Star Wars: The Old Republic (2011). Others, such as Rift (2011) and Wildstar (2014), featured novel gameplay that their creators thought would attract players.

When subscription numbers did not meet expectations, many companies decided to try out a new funding model: offer the games for free but charge for vanity items like character customization options, a higher chance of rare equipment drops, and access to the in-game bank. This "free-to-play" (f2p) model was already being used by other multiplayer online games, such as *Runescape* (2001) and *MapleStory* (2003), and by games in other genres, such as *Team Fortress 2* (2007) and *League of Legends* (2009). It was notable, however, that mainstream commercial MMORPGs were going this route. For some, like *Dungeons & Dragons Online* and *Star Wars: The Old Republic*, it proved beneficial, increasing active accounts and revenue from item sales, giving the games a new life.

ArenaNet, owned by NCSoft, publishers of *Lineage* and *City of Heroes*, introduced a different funding model than the others by letting players pay once for the games *Guild Wars* (2005) and *Guild Wars* 2 (2012). Players can then play for as long as they wanted without a monthly

subscription. Certain in-game items and benefits could then be bought, but they were optional and not critical to success in the game. Later expansions to the game followed the same purchasing model (buy once, play indefinitely).

Asian MMORPGs

There is no doubt that games like *EQ* and *WoW* expanded the popularity of MMORPGs. In Asian countries, however, the MMORPGs with the most success were locally developed. An early example is *Fantasy Westward Journey*, developed by NetEase in China in 2001 (see Figure 7.10). Loosely based on the famous Chinese tale, *Journey to the West, Fantasy Westward Journey* gained a huge following in China. In 2007, it was reported to have hit 1.5 million concurrent players, and in 2015 it touted 350 million registered users (NetEase, 2015). These figures seem to dwarf even the most popular Western games, but it is hard to compare because different companies report different metrics. *WoW* had 12 million active users in 2012, but *WoW* also charges a monthly fee, while most Asian games do not. *WoW*'s total number of registered users is probably much higher if we include inactive accounts. Furthermore, many Asian games have longer lifespans, often over ten years, whereas Western ones that were not immediately successful shut down within a few years.



Figure 7.10: Fantasy Westward Journey, an early and lasting success in China [source: MMOs.com]

Most games that do well in Asia owe their numbers to the sheer market size of China. These games tend to be from East Asian companies and gravitate towards three themes: Western-style fantasy (i.e., themes found in Tolkien or D&D), wuxia games, and "cute" games. Regardless, Asian MMORPGs are associated with routine, repetitive tasks (which players tend to love or hate) and manga-inspired character designs.

Fantasy games like many from NCSoft, South Korean creators of *Lineage*, sometimes reach Western shores. This includes *Black Desert*, developed by Pearl Abyss and released in North America in 2016. *Black Desert* represents the most sophisticated graphics in an MMORPG to date (see Figure 7.11), allowing players to customize the look of their characters more so than in any previous MMORPG. (A quick online search returns characters modeled after celebrities such as Michael Jackson with surprisingly uncanny fidelity.)



Figure 7.11: Black Desert Online, featuring the latest generation of graphics, making it resemble many AAA console games.

Wuxia games, in contrast to traditional fantasy-themed games, seem only to be popular with Chinese players whether living in China or Taiwan or abroad in Malaysia, Singapore, Hong Kong, Thailand, and Indonesia (Chi, 2009). Wuxia games, such as *Age of Wulin* (2013), often

feature martial arts or individual fighting in chivalrous matches, and they owe their origin to traditional Chinese wuxia stories, some of which date back thousands of years and today includes comics, films, and videogames.

Cute games—sometimes considered girl games because they attract a higher ratio of female players—feature cartoon characters or anthropomorphic animals and focus on sharing and social interaction. Cute games tend to appeal to players "living in urban cities, including Seoul, Tokyo, Taipei, Hong Kong and Shanghai" (Chi, 2009, p. 39).

China has the biggest internet population and its gaming market is growing rapidly. Its rising youth culture is increasingly digitally connected, and they are likely to build up persistent online personas and more readily align with other youth in virtual worlds (Fung & Liao, 2015). The Chinese market is also interesting in that the Chinese government requires international companies to work with local publishers to release Chinese-specific versions of their games, carefully monitoring them for anything subversive or offensive to Chinese audiences (or the state). In fact, the state deliberately slows down dissemination of Western games and encourages home-grown games. These factors may contribute to the fact that online games serve as a political platform where youth express nationalism and patriotic pride (Kshetri, 2009).

No matter the game, China also limits game playing to a few hours to address concerns over addiction and lack of productivity. China has a long history of gambling as a pastime and using cunning to increase wealth, however, and games there often feature gambling-style mechanics that encourage players to spend money to progress to higher levels (cf. Martinsen, 2007) or actively encourage real money trading (RMT) where players acquire in-game items to sell for real-world money.

Meanwhile in Iceland: EVE Online

In 2003, almost unnoticed amongst the hype of *EQ2* and *WoW*, Icelandic company CCP released a space combat and trading MMORPG called *EVE Online*. Rather than fade away when *WoW* took over, *EVE* has seen a steady slow growth since release and currently has over 500,000 subscribers. While some have likened playing *EVE* to "spreadsheets in space" (see Figure 7.12), what makes *EVE* different than other MMORPGs is its strong emphasis on player-driven governance, organizations, and economy. *EVE* also features high-stakes consequences to player death: ships can cost thousands of real US dollars and are not respawned in the same way that characters can just pop back to life in games like *WoW*. This has created a sort of "Wild West" feel to the game, where players can engage in piracy and banditry with little intervention from official game-controlled law enforcement. *EVE* also benefitted from players communicating outside of the game to coordinate, form alliances, make and break treaties, and so on. In fact, detailed accounts of large corporate alliances going to war with each other, made only possible through careful outside-of-game coordination, have appeared in popular media outlets such as

Wired (Moore, 2014). A definitive guide to *EVE* scholarship can be found in Carter, Bergstrom, and Woodford's, *Internet Spaceships Are Serious Business* (2016).



Figure 7.12: EVE Online, which has had lasting appeal due to player-driven economies, factions, governance, and events despite also being known as "spreadsheets in space." [Source: Marvin Boyd YouTube]

Themes and Issues Continued

Guilds and Accrual of Social and Cultural Capital

Guild life is a huge part of the MMORPG experience (Williams et al., 2006). Belonging to a guild comes with certain privileges, such as access to a private chat channel, a shared storage space to drop and take items into and out of, and group management controls. Guilds became the go-to place to study communication patterns (Jakobsson & Taylor, 2003), social network bonds

(Williams et al., 2006; Hajibagheri et al., 2015; Schatten & Duric, 2016; Tan, Yeh, & Chen, 2015), and basically what shared tasks and existence in a MMORPG looks like (Seay et al., 2004; Ducheneaut et al., 2007).

Many guilds have specific purposes for their members. Some are social or family guilds that provide a safe space for players to just hang out and explore the game together. Participating in any guild and the general player community meant that players accrued social and cultural capital where access to in-game activity was often tied to a player's existing capital and network (Chen, 2009). Some specifically provide this safe space for real-world (often marginalized) groups such as LGBT gamers or gamers who are veterans (McKenna, Gardner, & Myers, 2011; Collister, 2014). Others are more focused on end-game raiding and boss battles (Cockshut, 2012). Role-playing in *WoW* was initially relatively difficult due to game design constraints (MacCallum-Stewart & Parsler, 2008), and eventually it became overshadowed by a focus on efficient raiding (Chen, 2012), and this was also reflected in guild life as more and more guilds became "raiding" guilds. Joining a raiding guild required certain qualifications of a player including having the right tools (or socio-material resources) available to do well in a raid.

Gold Farming and Representation

WoW, like many other MMORPGs, has a thriving in-game economy and auction house—due to how important it is to progress—that allows players to sell and trade resources with each other in-game. An industry emerged where (sometimes Western) entrepreneurs hired laborers from

developing countries where wages were low to "farm" resources and gold, continually killing monsters in rich in-game zones to then sell for real money (Dibbell, 2007). Players, on the demand-side of this equation often participate in these trades as a way to obtain rare items or to shortcut their way through the game (e.g. purchase a character that has already reached the level cap). Most commonly, however, some players purchase in-game gold from others that give them an in-game economic boost, which they can use to purchase faster mounts or crafting resources to make powerful gear.

Gold farming and purchasing gold are controversial practices in the West. Some players view the practice as an innocuous way to catch up with their friends who may have been playing for longer periods of time. Others argue that gold farmers break the "magic circle" of the game, allowing players who are wealthy outside of the game to continue to have advantages in the game. Some of these players even go as far as to organize raiding parties to kill gold farmers in specific locales (Chen, 2012). Issues of race emerged as gold farmers, many of whom were/are Chinese, quickly became stereotyped, leading to discriminatory behavior against any players who seemed to talk or act differently. Lisa Nakamura (2009), who had previously looked at race issues in MUDs (Kolko, Nakamura, & Rodman, 2000), incisively covered this complex global phenomenon that mixed market factors with racial identity and prejudice.

The Chinese player community, meanwhile, does not stigmatize gold farmers in the same way as Western player communities, and it is, for many, a legitimate occupation. There does exist,

however, a stigma against gaming in general, and players who work as gold farmers have to carefully construct their identities within this larger milieu (Lee & Lin, 2011). In 2009, the Chinese government banned the sale of virtual currency, but these laws only apply to generic virtual currency that can be used to buy all sorts of goods from many different games (Claburn, 2009). At the time, virtual currency trading was an important source of revenue for players and gaming companies (Kshetri, 2009), so Chinese citizens who engage in RMT are continually wary of potential future restrictions. Also prevalent are cybercrimes where "a large proportion of the malware found in China is password-stealing Trojans, which are designed to steal users' identities (passwords and login information for games such as *World of Warcraft*)" (Kshetri, 2009).

Governance, Utopian Visions, and Spill-over Part 2

As with MUDs, and in contrast to tight external state control in China, many multiplayer online spaces attract players who have visions of a utopian future where they can realize a true democracy. This is most evident in communities around virtual worlds that aren't necessarily RPGs, such as with *Second Life* (Malaby, 2009) and even online communities like *The Well* (Rheingold, 1993). Still, some RPGs also attracted subsets of idealistic player communities. The *Ultima* games that established the world of Britannia featured in *UO*, were founded on the principles of the Avatar who was the embodiment of a set of virtues deemed by Richard Garriott, the creator, as ideal characteristics. Much of this was steeped in a fantasy ideal of virtuous knights and chivalry.

These ideals seem to come with any new MMORPG space. Forum posts for guilds, clans, and corporations, as they are variously called in different MMORPGs, often feature debate on how to govern with particular attention given to providing an inclusive egalitarian environment for all member voices whether in MMORPGs or virtual worlds (McKnight, 2012). As with MUDs, this player-community move is often in contention with built-in game systems of control, such as the game only allowing one guild leader or providing default member hierarchies that come with different in-game permissions (as is the case with *WoW*).

Raph Koster, who had a major hand in *Star Wars Galaxies*, *UO*, and other MMORPGs, wrote "Declaring the Rights of Players" (2000) which set forth a bill of rights for avatars in virtual worlds and online games. In it, Koster extends inalienable human rights to avatars of online worlds, thereby codifying norms of proper conduct and due process. To him, it is a given that players are in control of their own selves. Note that these rights were written after the early days of controversy in MUDs but well before mainstream MMORPGs took root. The rise of commercial games would have many companies claim in-game items and characters as their property, not the players', and they would strictly forbid the selling or trading of these "goods." Koster's declaration, however, pertains more to social norms of behavior and control over others in an online society, but these issues continue to be in tension, such as with the recent shutdown of a third-party server that ran original *WoW* code for players who longed for the early days of *WoW* (Frank, 2016).

Player Types, Identity, and Effects (Positive and Negative)

As mentioned in the discussion on MUDs, research on player types and identity continued with MMORPGs. In 1999, Nick Yee started the Daedalus Project

(http://www.nickyee.com/daedalus/), a long-running project to survey MMORPG players. Out of the data he collected and through later collaborations, Yee added much needed nuance to the discussion on player types (2006), along with adding detail to player demographics, and the link between the two (Yee et al., 2009). Furthermore, in a landmark move, SOE released massive amounts of *EQ2* data to academics, spearheaded by Dmitri Williams (Timmer, 2009). This led to more research on player demographics (Williams, Yee, & Caplan, 2008) and whether it can be mapped on to real-world identities (Williams, 2010). Thus, the late 2000s and early 2010s saw MMORPG research following the trend of big data research in other fields, and these spawned game data analytics companies founded by said researchers. Meanwhile, a healthy tradition of ethnography and mixed-methods research that also considered player identity was still ongoing (Nardi, 2010; Taylor, 2006; Banks, 2015; Jenson et al., 2015), situating the big data findings, though, understandably, at a much slower pace.

What's clear from this plethora of research is that there is a massive population of players who fall on a wide spectrum of motivations and reasons to play. There also exist many different types of MMORPGs and different activities within single MMORPGs that cater to all of these preferences. Many MMORPGs, for example, include zones or arenas for player vs. player (PvP) combat, and some MMORPGs are completely open to PvP battles throughout the game world. Many games feature crafting items, decorating player housing, tending gardens, and taking care

of pets in addition to questing and killing monsters for experience. Players can pick and choose which of these activities to engage in and which to ignore.

MMORPGs have so much to offer that it is no wonder there are concerns over addiction and other negative effects. In China, worries over negative impacts on health, productivity, and children's education spurred the government to limit the duration of game play to only a few hours a day (Kshetri, 2009). This is enforced through "fatigue" controls and monitoring software that also prompted those under 18 to "do suitable exercise" after three hours (Kshetri, 2009). In both the West and in China, treatment centers were established to treat internet and gaming addiction.

Much of these causes for concern may be misattributed to games, however, and not to the players who are affected. Clearly, MMORPGs can be spaces for the development of deep, meaningful relationships. To call attachment to living in these spaces "addiction" may be akin to calling living and *being social* addiction. Furthermore, guilds that focus on camaraderie and being social may actually *enhance* players' lives (Snodgrass et al., 2016).

Summary

This chapter began by defining different online RPGs, followed by a more detailed account of their histories, broken down into two major sections for text-based games (MUDs) and graphics-based games (MMORPGs). In each of the major sections, notable games were presented that

either pushed the medium or were exemplars of a type of game. Also mentioned were notable research and issues arising out of these histories, often focusing on player governance and social norms as they butt against questions about player identity and what counts as "real." The MMORPG section recounted the early days before the internet, the rise and lasting life of *WoW*, and a brief look at other MMORPGs, including Asian ones and *EVE Online*. The MMORPG section also included a look at co-creation of gaming, positive and negative effects, real money trading, and guilds.

[Box Insert 7.2]

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Box Inserts

Box Insert 7.1: Common MORPG Terms and Concepts

Add-on: User-created modification to a game, e.g. World of Warcraft's user interface.

Cultural capital: Value of a persons' knowledge and experience.

Instance: A copy of a game environment for a group of players such that different groups of players can explore the same environment in separate groups without affecting each other.

Level cap: The maximum experience level for characters, after reaching the cap, characters rely on more powerful equipment to "progress".

Loot: Items and equipment obtained as reward for in-game activities.

Parser: Software the "reads" what the user types and tries to interpret it as instructions for the game. Used in text-based games and interactive fiction.

Party (**MORPG**): A small group of players. In MORPGs, "party" is also a formal/technical status (being *in* a party) that allows members to access game content and functionality together (e.g. enter an instanced dungeon).

PvP: Player vs. player

Raid: Also, *raid group*, a large group of players, composed of up multiple parties.

Raiding: A high-stakes, joint-task activity that requires careful coordination.

Social capital: The value in relationships or affiliations with friends, family, etc. because they are obligated to honor these connections (e.g. who will do you a favor and how big a favor would it be?) Often includes value in the reputation one has within a particular community or culture.

Theorycraft: Modeling and testing theories about the underlying mechanics of a game.

Third place: A site outside of home and work (or school) that acts as a hangout space to "be yourself" and participate with others who share affinities.

Wizard: A player with higher-level permissions in a MUD who can change the game world and affect other players.

Box Insert 7.2: Chronology of Notable MUDs and MMORPGs

Year	Title	Creators / Platform	Country of	Players* and Other
			Origin	Notes
1977	Oubliette	Jim Schwaiger /	United States	Players had to party
		PLATO		together to defeat
				monsters
1978	MUD1	Roy Trubshaw and	United	
		Richard Bartle	Kingdom	
1979	Avatar	Bruce Maggs,	United States	
		Andrew Shapira,		
		and David Sides /		
		PLATO		
1986	Habitat	Chip Morningstar	United States	
		and Randy Farmer		
		/ Lucasfilm		
1989	LPMud	Lars Pensjö and	Sweden	
		many others		
1989	TinyMUD	James Aspnes	United States	
1990	LambdaMOO	Pavel Curtis	United States	10,000
1991	DikuMUD	Sebastian	Denmark	
		Hammer, Michael		
		Seifert, Hans		
		Henrik Staerfeldt,		

		Tom Madsen,		
		Katja Nyboe		
1991	Neverwinter	Stormfront	United States	115,000
	Nights	Studios, SSI		
1995	Meridian 59	Archetype	United States	First 3D MMORPG**
		Interactive / 3DO		
1996	Furcadia	Dragon's Eye	United States	60,000 in 2008;
		Productions		graphical MUD, still
				exists!**
1996	Nexus: The	Nexon	South Korea	
	Kingdom of the			
	Winds			
1997	Ultima Online	Origin Systems	United States	250,000
1998	Lineage	NCSoft	South Korea	43 million registered
				users*** (3.2 million
				active accounts)
1999	Asheron's Call	Turbine	United States	120,000
1999	EverQuest	Sony Online	United States	550,000
		Entertainment		
2000	Phantasy Star	Sonic Team/Sega,	Japan	First cross-platform
	Online	PC and consoles		MMORPG**

2001	Anarchy Online	Funcom	Norway	60,000; first MMORPG
				to feature dungeon
				instances**
2001	Dark Age of	Mythic	United States	250,000
	Camelot	Entertainment		
2001	Fantasy Westward	NetEase	China	310 million registered
	Journey			users (2.7 million
				concurrent)***
2001	Runescape	Jagex	United	200 million registered
	(browser)		Kingdom	users***
2002	Asheron's Call 2	Turbine	United States	50,000; first sequel**
2002	Final Fantasy XI	Square Enix	Japan	550,000
2002	Ragnarok Online	Gravity	South Korea	80 million registered
		Corporation		worldwide*** (800,000
				concurrent)
2003	EVE Online	ССР	Iceland	500,000
2003	Lineage II	NCSoft	South Korea	2 million
2003	MapleStory	Wizet	South Korea	100 million registered
				users***
2003	Project Entropia	MindArk	Sweden	First MMORPG to
	(now Entropia			officially allow RMT**
	Universe)			

2003	Star Wars Galaxies	Sony Online	United States	300,000
		Entertainment		
2003	Tibia Micro	CipSoft GmbH	Germany	First mobile phone
	Edition			MMORPG**
2003	Toontown Online	Disney	United States	110,000
2004	City of Heroes /	Cryptic Studios,	United States	200,000
	Villians	Paragon Studios /		
		NCSoft		
2004	Dofus	Ankama Studio	France	62 million registered
				users***
2004	EverQuest 2	Sony Online	United States	335,000
		Entertainment		
2004	Legend of Mir 3	WeMade	South Korea	120 million registered
		Entertainment		users*** (750,000
				concurrent)
2004	Ryzom	Nevrax / Winch	France	
		Gate Property		
2004	World of Warcraft	Blizzard	United States	100 million registered
		Entertainment		users (peak 12 million
				active accounts)***
2005	Guild Wars	ArenaNet	United States	
2005	Perfect World	Beijing Perfect	China	50 million registered
		World		users***

2005	The Matrix Online	Monolith	United States	48,000
		Duo divettore / SOE		
		Productions / SOE		
2006	Dungeons &	Turbine	United States	110,000
	Dragons Online			
2006	Face of Mankind	Duplex Systems,	Germany	First MMORPG to
		Nexeon		feature player and
		Technologies		faction-created quests**
2007	Lord of the Rings	Turbine	United States	570,000
	Online			
2007	Myst Online: Uru	Cyan Worlds	United States	
	Live			
2007	Zhengtu Online	Zhengtu Network	China	100 million registered
	(ZT Online)			users*** (2.8 million
				active; pay-to-win
				model****)
2008	Aion	NCSoft	South Korea	4 million
2009	Free Realms	Sony Online	United States	10 million
		Entertainment		
2011	Drakensang Online	Bigpoint Berlin	Germany	35 million
	(browser)			
2011	Rift	Trion Worlds	United States	600,000
2011	Star Wars: The Old	Bioware	United States	10 million registered
	Republic			users***

2011	TERA	Bluehole Studio	South Korea	20 million registered
				users***
2012	Blade & Soul	NCSoft	South Korea	1.5 million concurrent
				users***
2012	Dragon Quest X	Square Enix	Japan	400,000
	(Wii and Wii U)			
2012	Guild Wars 2	ArenaNet / NCSoft	United States	5 million
2012	The Secret World	Funcom	Norway	~300,000
2013	Age of Wulin (Age	Suzhou Snail	China	
	of Wushu)	Electronic Co.		
2013	Final Fantasy XIV	Square Enix	Japan	5 million
2013	Neverwinter	Cryptic Studios	United States	
2014	The Elder Scrolls	ZeniMax Online	United States	800,000
	Online	Studios / Bethesda		
		Softworks		
2014	Elite: Dangerous	Frontier	United States	500,000
		Developments		
2014	Wildstar	Carbine Studios /	United States	
		NCSoft		
2015	Black Desert		South Korea	
TBA	EverQuest Next	Daybreak Game	United States	
	(cancelled)	Company		

*Not all game developers measure this the same way. Some measure total subscriptions over time, some concurrent players, some peak number of subscriptions, etc. Most of these numbers come from MMOGData and only include peak subscription numbers, which don't necessarily indicate sustained popularity. Furthermore, many of the Asian MMORPGs have huge numbers for two reasons: 1) China's truly massive population of gamers and 2) many of them still have active servers, whereas many of the Western MMORPGs shut down after a few years.

- ** http://news.mmosite.com/content/2009-06-12/20090612022259789,1.shtml
- *** https://mmos.com/editorials/most-popular-mmorpgs-world
- **** http://www.danwei.org/electronic_games/gambling_your_life_away_in_zt.php

List of keywords defined in callouts at the end of the document

Add-on, Cultural capital, Instance, Level cap, Loot, Parser, Party (MORPG), PvP, Raid, Raiding, Social capital, Theorycraft, Third place, Wizard