

Online Role-Playing Games:
There is nothing new under the sun.

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Every game borrows from its predecessors. Just as today's first person shooters such as *Quake* or *Counterstrike* fall into a category originally defined by games such as *Doom* or *Wolfenstein 3-D*, today's online role-playing games are the result of a long history of crucial developments. The critical boost for online role-playing was the development of the first Multi-User Dungeon (MUD), by Richard Bartle and Roy Trubshaw; their original MUD provided a model for an entire genre of highly addictive, flexible, and influential games whose mark on gaming culture and format is still visible today, even as they continue to be important games in their own right.

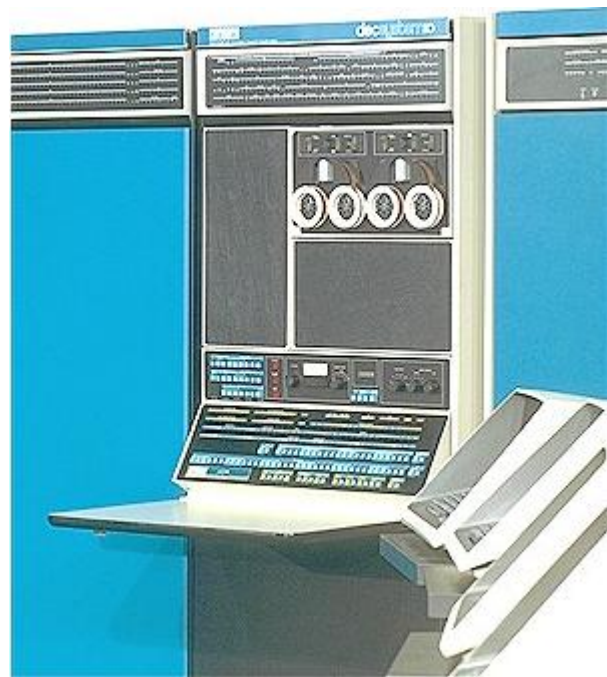
While the first MUD was a groundbreaking application of barely emerging technology, even it must be compared to previous forms of games such as Dungeons and Dragons (D&D). In D&D, players used their imagination to navigate through dungeons, embark on quests, and build characters with the aid of an extensive set of rulebooks. Players occasionally dressed in costume, but the game truly existed in their minds without a game board, visuals, or any of the 3-d imitation reality that is ubiquitous in current games. D&D's model of rules, algorithms, and imagination lent itself perfectly to being implemented on a computer, and indeed it was.

The first games to incorporate the exploration and questing of D&D, with a heavy reliance on imagination, were Will Crowther's *Adventure* and the games it inspired. Will Crowther created *Adventure* in 1972, as a text based single player game focused on exploring a digital version of a cave system he originally surveyed with his wife (History). *Adventure* or variations on the original soon spread to several servers on the ARPANET, which was just beginning to link major universities. By 1977 the first

multiplayer games such as Jim Guyton's *Mazewar*, which allowed multiple users to explore a maze while trying to "shoot" each other, appeared on the scene (Reid).

These games, while surely fun for their users, left out crucial elements of a complete gaming experience. People logged in to enjoy themselves, but they could not save their progress; there was no way for them to become deeply engrossed in a storyline, culture, or character. Enter Richard Bartle and Roy Trubshaw. With some friends, they discovered a command to set read/write priorities for files stored on their server. The

gravity of their finding is best described by Trubshaw himself, who said, "the feeling of achievement, when the line of text typed on one teletype appeared as typed on the second teletype, was just awesome" (Cuciz). Their new ability languished unused for another year before they began developing the first MUD, which provided a glimpse of the role-playing, character development, multiplayer interaction and community that gamers had been waiting for.



A DECSYSTEM 10s similar to the one that hosted the first MUD

Bartle and Trubshaw's creation proved to have an amazing impact on the world of computer gaming. Their discovery did for online gaming what the memory pack did for console gaming: people could save their progress, so they invested more time and grew more caught up in the games. The first people logged on to Bartle and Trubshaw's MUD

in the spring of 1980, and soon swamped the server at Essex University. Because of the demand, Bartle then sent copies of the code to Norway, Sweden, Australia and the US (Bartle). Before much longer, CompuServe asked Bartle to modify the MUD to run on its servers, where it was available under the name *British Legends* until its demise due to the Y2K bug (Reid).

In addition to being a popular game in its own right, Bartle and Trubshaw's MUD served as a model for many other online games. People used their source code, either intact or with slight modifications, to set up MUD servers all over the rapidly growing Internet (Bartle). The brilliant and enduring feature that set their MUD apart from the other multiplayer games of the period was its flexibility. Their MUD was a small world stored in a database, with a built in language for expansion; given the appropriate permissions, players could modify and update whatever functions of the game they wanted to without changing the game's foundation. The MUD became, as Janet Murray described it in *Hamlet on the Holodeck*, "a collective creation—at once a game, a society, and a work of fiction." To date, thousands of individual MUDs have been built, all of which are very closely related to Bartle and Trubshaw's original MUD. A search of "The MUD Connector" on March 20, 2002 yielded roughly 1700 MUDs that were online (Mud); this staggering number does not include MOOs or other variations on the format.

Given a little time, the set of highly popular MUDs spawned by Bartle and Trubshaw's original began to show their true potential. The advancement and leveling system adapted from D&D, combined with the nerdy allure of communicating with people all over the world through a terminal kept people playing. Part of the early success of MUDs was due to early computer culture. People who played MUDs were so

excited by new ways of applying technology that they would have played almost anything; they liked computers for computers, and were not afraid to learn a complex set of commands so they could survive online. Because the game was not beatable in a traditional sense, players stayed to build social and virtual communities instead of growing bored and leaving.

One particularly community-oriented branch of MUDDom is the MUD, Object Oriented (MOO). MOOs differ from MUDs in a few ways, though they share similar underlying technology. In MUDs, players can change their descriptions and have full control over their actions, but few MUDs allow everyday players to build areas. In MOOs, everybody is allowed to build areas, and most people do. Some log on just to chat, but most take the time to at least build an online home, if not an entire area. There are also subtle differences in the types of communities that develop; MUD communities consist of either the entire MUD, or various subgroups formed around role-playing goals. MOO communities grow and change much more like real life communities do, with influences from geographic, political, and ideological differences.

As time went on, these social and virtual communities developed problems just as real life communities do. On LambdaMOO, perhaps the largest and most developed MOO, some of the less community-oriented players did things like vandalize other people's virtual homes (sometimes even completely erasing months worth of work). Eventually, the situation came to a head after a virtual rape, in which a player exploited a bug to force unwilling characters to act out the crime. The event sparked a debate, in which people argued for and against a set of formal LambdaMOO laws and rules. Some argued that the laws would compromise the creativity and flexibility of the MOO; they

saw “the Net as a tool for stripping away repetitive and reinforcing societal strictures, a tool for liberating exploration of sense and self” (Valovic). While others may have viewed the Net the same way, they argued that laws were necessary to the MOO society’s survival.

The infamous MOORape debate illustrates the seriousness of online lives to many MUDders. Due to the MOO’s flexible setup, players could build homes, identities, and friendships from the virtual ground up. The simple result of each player’s very personal investment of time and creativity was that they had a significant stake in the MOO, which became much more important to them than games of other genres could be. Therefore, the MOORape had a profound effect on the users of LambdaMOO, who naturally longed for the protections they generally enjoyed in real life (Mnookin). In short, the parallel virtual lives people built for themselves changed from a fun, safe escape from the real world where they could do anything and be anything, to virtual existences that were so emotionally charged that actual psychological trauma could happen at the hands of other virtual characters.

In a recent reflection of the early LambdaMOO debates, the admin of *Ultima Online* (UO) faced a flurry of user dissatisfaction over online ethics. Bugs in the UO code allowed nefarious players to break into the online homes of other players, and the victims had no way of knowing who to blame. Instead of alienating players by telling them that the houses were not meant to be secure, the UO admins should have learned from the debates in LambdaMOO over virtual vandals. They should have addressed the issue sooner than they did or made houses more secure to begin with.

One of the key issues people dealt with on LambdaMOO, which is one of the medium's strengths, is the anonymity of living behind the mask of a character. This new life as a fictional character allowed players to explore ideas, personalities, and actions just as many did with D&D, but without worrying about social retribution. Players could expect more sincere responses to their actions, but also dealt with the wildly unrestrained accusations of people hiding behind their own anonymity. So long as they bear in mind that their actions take place in a virtual world where things like the MOORape do not happen in a real sense to real people, players maintain a reasonably comfortable level of safety or control while they explore their personal limits, goals, and desires through their online lives. Indeed, their characters allow them to escape their real identities to embrace "a world in which mastery and the admiration of peers is available to anyone with imagination and intellectual curiosity" (Rheingold).

Player imagination is crucial to emotes, or written descriptions of what a character is doing. As Ms. Reid said in her dissertation, "the cues normally associated with sight and sound and touch are provided through description." Good emoting allows more specific and obvious body language than is possible to convey with rendered characters, and with a healthy imagination, can be more rewarding than watching an animated character walk lifelessly across a screen. In a graphics-based game, players can only use body language preprogrammed by the game developers; one can walk quickly or slowly, but the options are limited. In a MUD, players can swagger, scamper, hurry, or stagger drunkenly from the room: they can emote anything they can imagine. As Howard Rheingold put it, emotes "give you some added control over the atmosphere in which a

conversation takes place—a taste of the all-important context that is often missing from words alone.”

The flexibility and ability to convey specific details give MUDs other benefits over graphics-based games. Builders, or people who create new rooms, objects, and non-player characters (NPCs), can have a material positive effect on a given MUD with a minimum of training. If they had to do all their work in a 3-d environment or with graphics, the amount of time required to put together an area of fifty rooms would be staggering. Instead, they can build a reasonably well-described, coherent area for players to explore while still maintaining a life in the real world. This simple yet effective method of building allowed MUDs to stay current and grow, despite their grassroots development style.

Another interesting result of the simple technology used in MUDs is their availability, on any platform. MUDs use a simple communications protocol that players using any operating system can access, which means more people can play the same game without a re-release for a new platform. This benefit is especially notable overseas and in developing areas, where access to newer computers and expensive operating systems is not guaranteed. The simple protocol also allows users without high bandwidth Internet connections to play on an even playing field, which is not the case with other more complex multiplayer games. A few MUD features such as colored text require special programs on the client side, though none of them demand expensive software or hardware.

Gameplay also benefits from the simple flexibility built into MUDs. On the management level, developers and builders can keep the game running smoothly with

less effort, while maintaining player interest. For instance, if players started dying too often while fighting with NPCs because of a change to the combat algorithms, simple tweaks could bring the virtual deaths back in line. To maintain interest, builders can do much more than add new areas to the MUD world with ease. If advancement is so difficult that players grow frustrated, a few code tweaks can give players more immediate rewards. If players cap out at the highest level, MUD administrators can rewrite class and leveling code to allow players to start a second or conceivably third specialty class for their character, instead of losing the player to a new game with new challenges.

These issues of maintaining player interest and balanced gameplay are well known to today's developers of graphical multiplayer RPGs. Whether they know it or not, people such as Ken Karl of Microsoft's *Asheron's Call* revisit issues MUD administrators have dealt with for decades on a daily basis. As he mentioned in a lecture at Stanford on March 14, 2002, they continually tweak parts of the game to keep its economy or difficulty balanced. Developers for games like *Asheron's Call* also made their worlds easily expandable, like MUD worlds. While the initial investment in a given object such as a house may be large, pre-built objects can be scattered across a landscape or put together into a village with relative ease.

The interest-maintaining effect of a dynamic world, one of the hallmarks of MUDs, is well used in *Asheron's Call*. For example, Ken Karl showed how a simple trick of putting the houses in the game up for market over a long period of time generates suspense and maintains interest in that aspect of the game. Similarly, a visit to the game's web site reveals a strong emphasis on newly revealed areas filled with new towns and creatures. Just as MUD builders copy existing creatures and make minor cosmetic or

statistical changes, the web page says of the new monsters: “Some of the existing creatures in Dereth have mutated dramatically,” which effectively admits that they borrowed the MUD trick of recycling NPCs.

The role of identity creation is also a crucial part of gameplay in MUDs. Depending on the MUD, MUDDers can choose just about everything that makes up their characters: gender, race, description (including size, level of attractiveness, demeanor, and clothing style), method of appearing in a room, and occupation. The flexibility of describing exactly what your character looks like, combined with complete control over how your character interacts with others allows role-playing to be more effective, and helps make MUDding more personal and addicting. As Robert White, an ardent MUDder and connoisseur of online gaming said in a recent interview, “...in my case the making of the characters was much more fun than some of the other parts of the games.”

Identity creation is an essential component of a good RPG; with too much anonymity or not enough customization, a promising game can fall short of satisfying players who have grown used to role-playing in MUDs. Mr. White lost interest in *Ultima Online* because “it had problems in how it allowed players to interact. Most people used their anonymity to be complete and utter jerks.” In MUDs, players have anonymity in that they can hide their real identity behind a fake name, but with a game like *Ultima Online*, even a fake name is not always available. With appearance limited by the options the developers gave players, and the tendency of clans to adopt identical appearances, a world was born in which telling one jerk from another once they left your immediate field of view was quite difficult. Without the natural restraint of responsibility



A clan attacks a home or fort in Ultima Online

for one's actions that society relies on, it is easy to see how an online community could degenerate into merely a group of self-serving individuals.

The alternative, long employed in MUDs, is to display a character's name so that other characters can readily identify those around them. From Mr. White's perspective, *Dark Age of Camelot* is a much more appealing game. He said the "community is surprisingly closer...with only 700 people you start to know a lot of the people." Without a reliable method of identifying other characters, which *Dark Age of Camelot* provides with names that float above character's heads, getting to know a game's other players on a large scale is nearly impossible. This keeps players from making friends readily and opens the door to abusive behavior, a la *Ultima Online*, which does not improve gameplay.



Dark Age of Camelot's answer to unaccountable playerkillers and robbers

An interesting contrast between MUDs and their graphics-based counterparts lies in the way they attract new players. Because of their uncommercialized, volunteer supported existence, most MUDs fail to attract a large player base. Without the advertising budgets of professionally backed games, MUDs rely on word of mouth and the powerful testimony of addiction to get new users. Mr. White's younger brother tried to start playing because he saw his older brother play for up to forty hours a week, year after year. However, he never got into it because "it had no pictures so it wasn't worth his time."

Graphics are another important aspect of gameplay for many players. In another recent Stanford lecture, *Pong's* creator Al Alcorn argued that successful arcade games

must snag people within the first few seconds of play and then maintain their interest, or they would move on. Many games rely on a flashy, well-rendered movie to snag players, but MUDs have no graphics. MUDs instead have an exceptionally steep learning curve with hundreds of commands, not all of which are intuitive. Without close friends to teach a new MUDder how to survive, people like Mr. White's younger brother lose interest rapidly.

If Bartle and Trubshaw had made the first MUD easier for new players to learn, or even if they had not created it to begin with, the world of MUDDing would not be much different than it is today. As mentioned, other games in the late seventies allowed multiple players to log on and chat, so it was just a matter of time until somebody combined the ideas behind D&D and *Adventure* into a powerfully addictive new game. The 1700 MUDs in operation today, along with countless MOOs and other variations of the text-based virtual world illustrate the importance of the medium to gamers and computer enthusiasts.

The sheer number of MUDs and MOOs also suggests that between the many developers who built each MUD or MOO, most of the ways to implement an online RPG have been explored. The saying that there is nothing new under the sun truly applies to online RPGs and the rich history of MUDs. Developers for new games should take advantage of the established history of MUDs to anticipate problems and help improve balance in their games more than they do today. Since new massively multiplayer RPGs (MMRPGs) are essentially MUDs with graphics, most of the problems that are not code-related have already appeared and been dealt with in MUDs or MOOs; developers simply need to look to history for their answers.

As technology improves, MMRPGs will eventually allow individual players the flexibility of expression they enjoy on MUDs. Even today, players use simple forms of emoting on games like *Asheron's Call* or *Ultima Online*. To do so, they enclose text emotes in characters such as asterisks to communicate their emotions or body language. This effectively returns complex interaction to a text-based medium, much like a standard MUD. While the MUD may still have the upper hand in nuanced interaction, it relies on the imprecise realm of imagination, which is subject to the misunderstandings of individual interpretation. The gaming industry is moving toward a day when graphical RPGs will bring the model they adopted from MUDs to a new level. Eventually, they will allow the precise expression that MUDDers are accustomed to without the potential for confusion; when that happens, gamers will once again be limited only by the power of their creativity.

Works Cited

- Bartle, Richard. "Early MUD History." Richard@tharr.UUCP, 15 November 1990. 15 March 2002. <<http://www.apocalypse.org/pub/u/lpb/muddex/bartle.txt>>.
- Cuciz, David. "The History of MUDs, Part III." *Gamespy Articles*. 15 March 2002. <<http://www.gamespy.com/articles/january01/muds1/index6.shtm>>.
- History of 'Adventure', A. The Colossal Cave Adventure Page. 15 March 2002. <http://www.rickadams.org/adventure/a_history.html>.
- Mnookin, Jennifer L. *Crypto Anarchy, Cyberstates, and Pirate Utopias*. Cambridge, MA: The MIT Press, 2001.
- Mud Connector, The*. 22 March 2002. <<http://www.mudconnect.com/>>.
- Murray, Janet H. *Hamlet on the Holodeck*. Cambridge, MA: The MIT Press, 2001.
- Reid, Elizabeth M. "Cultural Formations in Text-Based Virtual Realities." Diss. U. of Melbourne, 1994.
- Rheingold, Howard. *The Virtual Community: Homesteading on the Electronic Frontier*. Menlo Park, CA: Addison-Wesley Publishing Company, 1993.
- Turkle, Sherry. *The Second Self: Computers and the Human Spirit*. New York: Simon & Schuster, 1984.
- Valovic, Thomas S. *Digital Mythologies: The Hidden Complexities of the Internet*. New Brunswick, New Jersey: Rutgers University Press, 2000.
- White, Robert. Personal Interview. 15 March 2002.