

Multi-User Adventures as Interactive Fiction

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Spring 1996

Introduction

At one point anyone who has ever watched a horror movie has wished to become part of the plot, if only for a moment, just long enough to warn the main character not to go into that dark room where the monster waits. Traditional literary fiction (literature printed on paper as compared to literature held on a computer disk) also gives the reader no chance to influence the final outcome. The reader cannot change the protagonist's actions, even if the protagonist acts unbelievably idiotically. Events carry the reader along as a helpless observer, as the reader turns page after page of the story. Soon the reader, like many other unenthusiastic readers, may give up in frustration and go find another activity to join, putting down the book until another day. Interactive fiction, a developing genre of literature, counters this lack of involvement that lessens the enjoyment for so many readers. To read one of these electronic novels, the reader goes to the personal computer and brings up the text of the novel, much as starting an application such as Microsoft Word. In the story that unfolds on the screen, the reader becomes the central character. All actions are directed by the reader by typing in commands (Randall 183); the computer rapidly re-evaluates the scene as the commands are received. The reader has literally become a character in the novel; everything done within the story affects the plotline of the novel the reader and the computer program create together. Through interactive fiction, the reader creates the storyline for a novel by playing a computer game; therefore, the terms "story," "novel," and "game" are interchangeable when dealing directly with interactive fiction, although traditional novels or computer games that do not qualify as interactive fiction may also be mentioned. Likewise, the terms "reader," "player," and "user" are also interchangeable when speaking of the person connected to the interactive fiction game.

The Third Barnhart Dictionary of New English defines interactive fiction as being "a computer game or video games in which an adventure, mystery, or other story is developed through the player's interaction with the story's characters." In many literary studies, interactive fiction has been treated within the context of one-player games on personal computers. Multi-user games have added a new level of complexity to the experience of interactive fiction. These multi-user adventures (MUAs) usually have many players within the game at any one time. Unlike two-or-more-player video games, however, these MUAs connect players located all over the world by means of interlinked computer networks. These interactional users interact with the computer, as they would in the more simple personal computer one-player games, but they also come in contact with the human players from a variety of backgrounds and experience (Curtis and Nichols 1). MUAs draw from all connected players, developing an interactive fiction more detailed and complex than could be expected from a reader alone on a personal computer. MUAs take the concept of interactive fiction and expand to an on-line drama.

Interactive Fiction: What is it?

Interactive fiction combines storytelling elements with computer technology to create a fictional world for the reader. When the reader brings up an electronic novel the story actually encompasses the reader into whatever place it describes. This world becomes a virtual reality in the sense that a world, separate from the reader's mundane reality of school or work, forms itself around the persona whom the reader becomes in the story. Unlike traditional paper-bound literary settings, this fictional world needs the reader; without the reader's decisions, the computer will never be able to "decide" what happens in the next scene. Without further decisions, the plot will never advance. The computer creates a world for exploration around the reader's persona, full of stumbling blocks, objects to take or leave, and secondary characters who help or hinder the reader's persona. The reader moves the character through the world by typing in commands, always with the option of returning to a previous scene or restarting to make different choices.

Directing the Protagonist

In older applications, the range of choices the "reader-hero" could make was very limited. The computer would give the reader a yes/no question or a numeric list of choices (Niesz and Holland 114). The next advance allowed single-letter input, such as shown in Figure 1.

open	open a door
pay	pay your bill (in a shop)
puton	put on a ring or amulet
quaff	drink a potion
read	read a scroll or spell book
remove	remove a ring or amulet
search	search for secret doors, hidden traps, and monsters
throw	throw or shoot a weapon
takeoff	take off some armor
wield	wield a weapon (w- wield nothing)
wear	put on some armor
spells	list the spells you know
zap	zap a wand
Zap	cast a spell
up	go up the stairs
down	go down the stairs
trap_id	identify a previously found trap
),[,", (	ask for current items of specified symbol in use
gold	count your gold

Figure 1: Portion of option screen from the game Nethack

Modern computers can handle far more complex instructions (Lancy and Hayes 45). Instead of numerical or single-letter input, the reader can now enter such commands as "pick up everything on the table except the plate." This expanded input widely broadens the actions the reader can choose. Even with the extended choices, however, the reader must stay within the limits of her character for the computer to have a good chance to be able to understand the instruction. If, for example, the reader's persona was an eighteenth-century pirate, telling the computer to "talk to

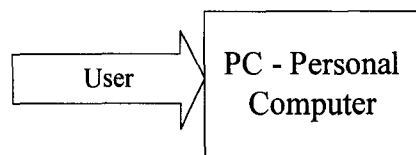
first mate about nuclear physics" would almost certainly give an error message. This role-playing makes the experience seem more real to the player; the world must be fully immersive for the protagonist to react correctly to situations that occur. The reader must make a conscious effort to mentally "become" the main character.

When is it just a game?

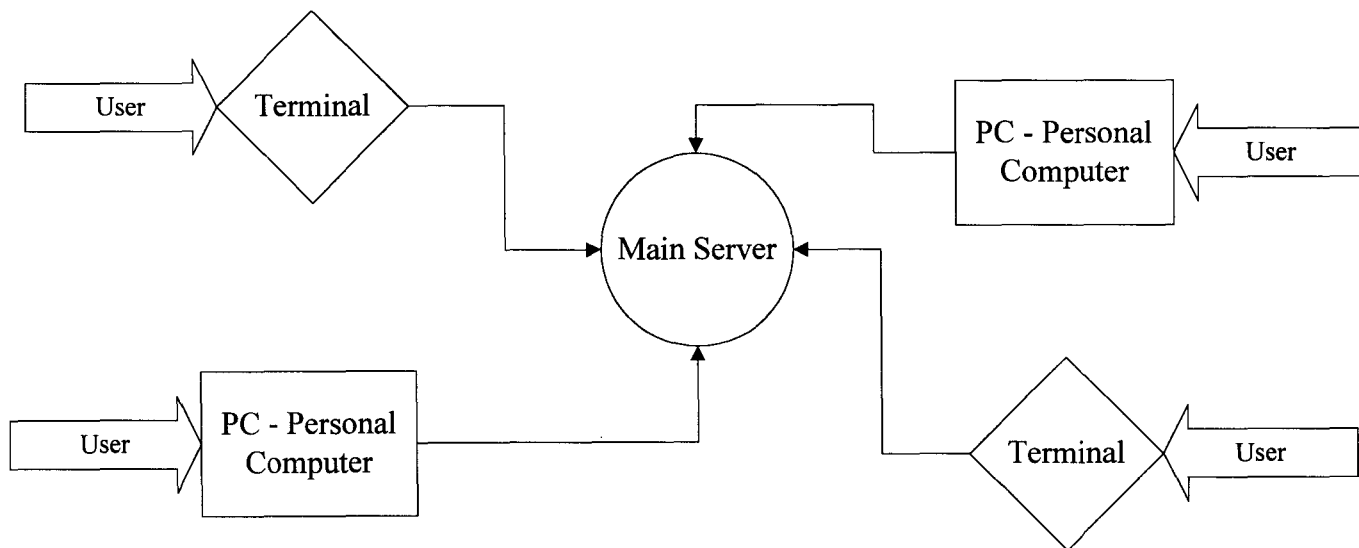
Games and interactive fiction overlap; games often use text to communicate with the players, and interactive fiction often uses a quest-like format for the reader that resembles many adventure games (Niesz and Holland 115). The line between games and interactive fiction has not yet been clearly defined within the new genre of interactive fiction. All examples treated within the studies of this genre deal with games that utilize more text than graphics. Almost all arcade-type games, especially those that use joysticks or control pads instead of a keyboard, fall outside this restriction. For example, the Nintendo game called Dragon Warrior uses text but does not allow keyboard input and utilizes more graphics than text. This paper will treat only the games that have a high text content as interactive fiction.

Is it truly interactive?

According to Stuart Moulthrop and Nancy Kaplan, Brand writes in The media lab: Inventing the future at MIT that even the electronic novel does not really call for true interaction between the human and the computer (17). The reader will have only a finite list of choices for paths to follow since the computer can only respond in the ways that the author structured the novel (Moulthrop and Kaplan 17). Multi-user adventure adventures, or MUAs, go a further step, since the reader not only interacts with the computer but also with the other players connected to the game system through the main computer server. This is illustrated in Figure 2.



One Player Game



Multi-User Game

Figure 2: One Player and Multi-User Interactive Fiction

What are they?

Dr. Richard Bartle defines interactive multi-player computer games as "those computer-run games where the individual players can issue commands which affect the way the game treats other players" (1.1). Although this definition sounds specific, it still includes such games as pinball and two-player Sonic on the Sega Genesis. In limiting the scope of the definition, all games where the two-or-more-player nature is merely a gimmicky addition to a one-player game are not considered. Playing two-player Pacman, for example, does not differ greatly from playing one-player Pacman. This limitation reduces "multi-player computer games" to those accessed over some type of public network (Bartle sec 1.1).

Brief History of MUAs

Students at the University of Essex, England, wrote the first multi-user adventure program in 1979. The attempts to turn single-player adventure games, such as Zork, into MUAs died out or failed outright (Bartle sec 1.5). The games were simply not suited to adaptation, and so did not catch on. MUAs have become much more commonly known in the last six years or so. Currently, they are used almost entirely for recreational purposes. In a recent list, over 300 MUAs were advertised that were accessible through the Internet. Busy MUAs often have over 100 character connected at any given time (Bartle sec 1.5).

Brief Description of a MUA

These MUAs are "programs that accept network connections from multiple simultaneous users and provide access to a shared database of 'rooms,' 'exits' and other objects" (Curtis and Nichols sec 1); in other words, a multi-user interactive computer game allows many users to connect to a single game at any one time, and those users can influence the game by typing in commands, rather than merely playing. For example, one player's character can take an action, such as throwing a snowball, at another player's. This causes the second player to react, which would not have happened if both players were merely on a pre-set track and could have no real

influence on the game and each other. The computer supplies the background for the game but, in most cases, the players must act rather than be acted upon. For example, in the Sega game Sonic, if the player doesn't send input through the joystick the game will either time-out, killing Sonic, or a monster will come up and force Sonic to either react or be killed. In a MUA, not doing anything is called "idling," and though no playing is done, inaction is not fatal to the character.

Access to a MUA

Instead of using a personal computer with one-player interactive fiction games, the reader can access the multi-user games by using a computer modem and/or a computer network, such as the Internet. For example, a player could come to the University of Tennessee campus and go to the Ayres Hall computer science computer lab. By using an account given by the department, she then "logs in" to the main computer science network. From this account, a program called "telnet" is used to connect to one of the MUAs through the Internet. Often, a client program, such as TinyFugue, is used to make multiple connections possible, as well as other features. The users connected to the game at the same time as this player can talk to the character in real time by typing messages (Curtis and Nichols sec 1).

Communicating on the MUA

All the keyboard input that the reader types is sent to the server (the computer that actually physically holds the game's database) and the server's output shows up on the reader's terminal (Curtis and Nichols sec 2). Figure 3 shows an example of mush communication.

[The prefix ">" will show what the reader types. All other text is the server's output that shows up on the reader's screen. The character the reader is playing in this scenario is Wesley. Albino is another character played by a separate player.]

>look here

Pit of Despair(#0RSHJ)

This is the Pit of Despair. Don't even think about trying to escape.

Contents:

Albino

Obvious exits:

Hidden Door

>:wiggles in his bonds, testing. The sound leather straps squeak a bit, but do not give.

Wesley wiggles in his bonds, testing. The sound leather straps squeak a bit, but do not give.

Albino shakes his head and croaks, "It's useless to try to escape."

>"So you say.

You say "So you say."

Albino shrugs and goes back to treating your wounded shoulder.

Figure 3 Sample of MUA communication in real-time

The prefix of the typed command lets the server know what type of communication is being expressed. For example, the quotation mark denotes a spoken statement, whereas the colon makes an "emote," or "pose." Posing makes the interactions between players much easier. Rather than relying wholly on spoken words, the characters also have expression in their actions. Commands--communication and otherwise--are usually executed in the order that the main server receives them (Bartle sec 2.1). This can occasionally cause some problems when one part of the computer network responds more quickly than another part, or one typist is quicker than

another. A point of courtesy is to wait until others have had a chance to issue their commands before issuing another, as not to unbalance the interaction toward one particular character.

Is this virtual reality?

The Oxford English Dictionary defines the word virtual (as it relates to computers) as "not physically existing as such but made by software to appear to so from the point of view of ... the user." Virtual reality is just that: a simulated reality that does not physically exist as the everyday world does. The reader does not have to put on the goggles and electronic sensors of the commonly held concept of virtual reality to play on a MUA. The MUA depends instead on images drawn from the text shown on the screen to create the picture of a virtual world in the reader's imagination (Bartle sec 7.2), instead of relying on fancy graphics or equipment that can sense movement. MUAs are a type of "electronically-represented 'place' that users can visit," creating a social virtual reality (Curtis and Nichols sec 1). The plan, unformatted text influences the way that the reader imagines the character's surroundings. Yet does this truly constitute virtual reality? Virtual reality must combine at least two elements: interactivity, and an "immersive" experience (Arthur 25). Charles Arthur quotes Ian Andrew, managing director of Dimension International, as stating that the only qualifier for virtual reality is that the user becomes completely absorbed in the experience (25). "The crucial point is that the virtual reality does exist; not in the same way as real life, but as a conceptualization which can have an effect on people in real life" (Bartle sec 7.2).

What's the difference between MUSHes and other MUAs?

Randall describes serious interactive fiction as forcing the reader to take moral actions, as compared with the "kill-and-steal mentality" of earlier works (188). MUSHes often display this more moral mentality. (For purposes of documentation, all references to on-line help files on various games are parenthetically cited by listing the names of the game and the on-line command used to find the reference.) A MUSH is a role-playing-intensive virtual society (Dawn

Sisters "news purpose"), rather than the puzzle-solving or battle-focused forum on which MUDs (Multi-User Dungeons) often focus. For example, imagine that the reader enters a game based on Tolkein's Middle-Earth, a fantasy-based world with dragons and magic. The character walks along and wanders into a dragon one day. In a MUD, the character would likely either battle the dragon, run, or solve a riddle that the dragon gives. In a MUSH, a game further oriented on the role-playing experience, the character might still do any of those options, but the character also has access of the hundreds of things that a real person would do in that situation. The player must be very careful, however, not to let things that the player knows influence what the character does (Dawn Sisters "news theme"). The player may know that this dragon has the power to hypnotize her, but the character may not. Even though the player has the knowledge, the character should not act upon it until the information is learned in character (in this case, probably the hard way). In this type of world view, theme becomes very important, so the player can make the judgment of what the character knows.

What world is this?

Some MUAs have not adhered to presenting a coherent world system; instead, parts of different fictitious worlds are scattered throughout the game. The imagination of the players and the programming code of the game set the only limits on the types of objects that the database can represent (Bartle 2.4). Unless the directors of the game (usually called wizards) agree on a particular set of standards, this often results in a confusing variety of settings and backgrounds. For example, a reader connects a character to a game called TestMush. Exploration shows that the character can walk from Tolkein's Middle Earth to a Mississippi river boat to the Enterprise from Star Trek. This discontinuity seems jarring to the reader, so the experience of playing the character never becomes fully immersive. These games run the danger of degenerating from a type of interactive fiction into a place where the players gather to talk about real life, as opposed to interacting as characters. This chatline would be much like a party phone line, with text instead of voice. For example, the reader decides to stay connected to TestMush. The reader

then walks into a group of people who are in an out of character (OOC) discussion. Instead of talking about spaceships or other in character (IC) things, they are discussing the latest presidential press conference or the latest episode of "Friends." OOC discussions happen in all MUAs from time to time; several MUAs have set up particular "lounges" for that very purpose. The wizards, like Marlana on SouCon (short for the Southern Continent of Pern), react to these situations as in the example letter found in Figure 4.

From: Marlana
 To: Cantor
 CC: wizards (global alias)
 BCC: Mera
 Subject: ICness
 Flags: REGISTERED

Cantor, Your existence has been brought to my attention. I **strongly** advise you to read 'news characters.' SouCon is an environment for roleplaying in a society which is a simulation of Pern, a world created by the author [sic] Anne McCaffery. Characters from other genres are simply not welcome here. You, the player, are welcome to develop a Pernese character here. If you really insist on a elf and the "Sword of Shannara," however, **I** must insist that you find another MUSH, possible [sic] a multiple-genre one, to play on. If you have any other questions about Pern and what it's all about, I, or any other wizard, will be happy to assist you.

The bottom line: No elves, no magic swords, etc (see 'news characters'.)

Thank you for your compliance.

Marlena, rider of Maylith

Senior Weyrwoman, Eastern Weyr

Figure 4 Letter about keeping within a set fictitious world

In this example, Marlana (the character of a wizard on a mush called SouCon) was informed of a character named Cantor playing a type of persona not found within the guidelines of that game. Usually an agreement (mostly informal) exists between the people running the game and the author of the traditional novels on which the game are based. Part of this agreement is that the game will stay within the theme of the original fictitious world. A wizard therefore has a twofold purpose in keeping people in character: first, this informal agreement with the original author and second, that a world without the necessary touch of immersive reality will soon lose its players to the real life they discuss. The wizards try very hard to keep the places and people within the game in character, so as not to jar players and make them lose the feel of the virtual society. A world set up a particular concept, especially one based on a novel or series of novels, tends to seem more believable to the players than one of the multi-genre settings. If the fictitious world within the MUA has this touch of reality, then the player will be able to understand the character's motivations much better, provoking a strong emotional response to the events that occur to the character. The reality of the game fuses, however, briefly, with the player's reality, transporting the player out of the computer lab into the fiction world of the game (Bartle sec 7.2).

MUAs: the Next Step in Interactive Fiction

In theory, single-player interactive fiction should be infinite (Niesz and Holland 368). In practice, only a limited number of choices can be allowed for by the original author of the game in question. Niesz and Holland compare oral literature to interactive fiction on the basis of the branching and interaction that happens within oral literature as each tale-teller embellishes the tale each time the story is retold. Oral literature, however, is disqualified as truly being classified as interactive fiction because the original author has no control over the various interpretations that develop. Also, oral literature lacks the technological elements by its nature as a mouth-to-mouth literary form. Television and other electronic forms of communications were considered by Niesz and Holland to have many things in common with interactive fiction, including

graphics, color, and simulation. These mediums, however, had the distinction of being dominated by visual or audible aspects, as opposed to textual, and so were disqualified. MUAs, however, can overcome the disqualifications of both oral literature and television by the use of planned stories and tinyplots.

What are tinyplots?

A tinyplot is "a roleplaying situation planned in advance that provides an opportunity for roleplay for character development, and spectator amusement/interest" (TwoMoons "news tinyplots"). Rather like an improvisation in drama, a tinyplot works within the given fictitious world of the MUA to create a storyline actively, rather than the passive creation that often occurs. For example, a character meets another inside the game. In a tinyplot, the two players may decide that one of the characters is actually having a heart attack and the other has the ability (or not) to react appropriately. Since there was discussion between the players to guide the roleplay, the situation could qualify loosely as a tinyplot, rather than a purely spontaneous action-and-reaction between the characters without any deliberate guidance. As with most social interactions, however, protocols exist for this type of interaction. If one of the players had decided to have the character have heart attack first and asked the other player afterwards, not only would the scenario have no deliberate guidance (and therefore not been a tinyplot by this definition), but the player that decided such a drastic event without consulting the other player would have been very rude. One of the guidelines to tinyplots found on TwoMoons (a MUSH based on the Pini's Elfquest series) "news tinyplots2" is to never involve other characters without their respective players' permission. By not asking the other player if the heart attack scenario was welcome, the first player violates this convention. Several good reasons exist for this rule of courtesy. For example, the other player may have had a class or other appointment to go to shortly. In involving the characters into a scene that should be intensive and demanding, the player has asked for a commitment from the other player that may not be possible at that time. Additionally, the other player may not wish to be involved in the type of scene being created

because of personal preference, even though their character might have no objection to the situation. The best example of this type of situation occurs so frequently that a name has been coined for it: *tinysex*. As can be inferred from the name, *tinysex* is a *tinyplot* involving a sexual encounter between two or more characters. Understandably, not all players wish to roleplay a sexual encounter in the medium of the game, even though the characters involved might have no good reason for refusing. Therefore, pursuing such a scene without discussion with the other players involved is considered much like a milder version of pursuing a sexual encounter in real reality without the consent of the others involved. A good rule of thumb exists: when in doubt, page (contact the other players privately) and ask.

Another point of etiquette that often calls for consultation with other players involved involves "crashing" someone else's *tinyplot* (TwoMoons "news *tinyplots2*"). Because of the interlinked room areas on most MUAs, characters often walk into scenes already in progress. Although most scenes can accommodate for such expansions in cast, others can not. Some scenes can take much longer to roleplay than they would have taken in the relative time of the characters. For example, this effect can often be clearest seen in fight scenes. Although an average fight usually completes in less than five minutes, the process of typing the conflict blow-by-blow can take up to two hours or more. If a third character comes into the room where this fight occurs, the character's very presence might not be "realistic," and therefore the other two players may wish for the newcomer to wait in a state of suspended time (often called a "timewarp" or "timestop") until the scene has caught up to the newcomer's arrival. Drama itself is said to differ "from interactive fiction because performance and written text are not available simultaneously as they are with interactive fiction" (Zeigfeld 368). MUAs, however, perform through the text itself and, by utilizing *tinyplots*, do so in an ordered and controlled manner. Formalized storylines, with a single directing player, are a logical extension of the *tinyplot*, as can be seen in story-intensive MUSHes like GarouMush.

How do formal stories work?

On MUAs where formalized stories occur, a combination of the three types of interaction exist. First, spontaneous and undirected roleplay between the characters occurs. Next, players consult out of character to direct the roleplay for their characters to some degree, creating small tinyplots. Finally, overreaching stories are put into place, which creates the framework for a larger tinyplot. To help differentiate between the two types of tinyplot, a tinyplot arranged a few players without an overreaching story goal will be referred to as a "microplot" and a tinyplot arranged by a storyteller (a player that takes responsibility for directing the events connected to the story) that affects a greater number of people will be referred to as a "macroplot." Unlike microplots, which generally only affect the characters immediately involved, macroplots often have an impact on the overall story being told by the game. For example, a player may send his character to the docks. Another character may already be on the docks, and the two might have some interaction--a fight, a conversation, even simply ignoring each other--but that interaction will rarely have an impact on the game as a whole. If, however, a storyteller has decided that one of the non-player characters in the particular storyline that storyteller is running has booby-trapped those docks, then the subsequent explosion has an effect on the entire game. The next time a character wishes to go to the docks, that character will find splintered remains where those docks had been, and the subsequent investigation and reaction will impact a greater number of characters. Such actions may not immediately make sense to the characters in the game, or their players, but the storyteller usually knows the motivations of the non-player characters in the macroplot and, like a good book, is merely keeping the motives dark until the climax of the storyline.

How do characters become involved in stories?

On GarouMush, the storyteller presenting a story places a note on a bulletin board used for the purpose of announcing stories and their status. An example of this storyboard can be seen in Figure 5.

This sturdy looking board covers the back wall of the room. Though made well, it is purely functional, not decorative. Pinned, stapled and tacked to the board are notices pertaining to Current Feature Stories. There currently are 5 notices on the board.

Type 'board help' for commands.

#	Story	GM	Date
1	Shattered Truths, Like Grains of Sand	Slick	2/12/96
2	Trust No One	Lysander	3/18/96
3	Take it on Faith	Becca	4/10/96
4	Circle Game	Sepdet	4/4/96
5	Silver Key and Black Stone	Drastic	5/3/96

Figure 5: Storyboard of current stories on GarouMush

When a player finds a story title that seems intriguing, more information can be retrieved, as seen in Figure 6.

Message number 3:

Author: Becca

Story: Take it on Faith

Status: Redefining 'soon'

Date: Wed Apr 10 06:01:51 1996

Contact Wiz: Slick

Message:

"And you hath he quickened, who were dead in trespasses and sins; Wherein in time past ye walked according to the course of this world, according to the prince of the power of the air, the spirit that now worketh in the children of disobedience: Among whom also we all had our conversation in times past in the lusts of our flesh, fulfilling the desires of the flesh and of the mind; and were by nature the children of wrath, even as others."

Ephesians 2:1-3

Campus evangelists: Coming late April to a campus near you.

Major Characters: Brother Jim and Sister Dolores

Minor Characters: none

Characters Needed: College folks, human or otherwise

Figure 6: Example of a storyboard post on GarouMush

If the player is still interested, a message can be sent to the storyteller. The storyteller makes the judgment on whether the character can be included and then lets the player know. On occasion a particular character cannot be included, either because the character type is inappropriate or because of too much player participation already. Not every story is right for every character, and not every character is right for every story.

Conclusion

Multi-user adventures take the general concepts of interactive fiction--interactivity, computer textual games, and branching storylines--and expand these concepts into an application that many users can access at a time. Players direct characters in an on-line drama. Each player plays the role of protagonist within the perspective of the character; others play merely secondary roles. MUAs are limited only by the interest and imagination of the players. MUAs, therefore, are infinite in scope in a way that one-player interactive fiction (limited by the number of branches that the author can foresee) is not. These MUAs combine computer games with real-time communication facilities to create a virtual society whose reality rivals the reality of real life. Dr. Richard Bartle quotes Ray Cromwell, a MUA player, as saying the following:

Ready for the shocker? Reality is a game. It has rules (physics), players (life forms), and many goals. ... I won't deny that MUDs [a type of MUA] are games, but if that is so than reality can also be considered a game. (sec 7.2)

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