National College of Art and Design

Department of Visual Communications

"Making Our Own Entertainment"

Computer games in the nineties

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The history of computer games is not a lengthy one. They first appeared in the early 1970s. They wre usually perceived as hi-tech toys, and it is only now that people are beginning to take them seriously as a medium. To ignore them would be a mistake, since they are now the world's biggest leisure industry. Beginning with the coin-operated arcade machines, they expanded onto the home computer market and it was at this point that different genres began to emerge.

Up until this point, nearly all video games were dependent on hand-eye coordination skills. The first arcade game, *Pong* which was made in 1972, was a simulated game of table-tennis involving two rectangular bats on either side of the screen which could be moved up and down, and a square, slow-moving "ball" which bounced off the bats and the sides of the screen. The object was to strike the ball into the area behind the opponent's bat. This evolved into other games with better graphics, better sound and faster action, but no real brain-taxing challenges or puzzles were involved.

When the home computers began releasing games, some very diverse formats began to emerge. One was the adventure game. Beginning as a text-based interface and evolving into a graphical one, this was essentially an interactive story. This particular genre is what concerns this thesis.

The type of computer games which will be dealt with are games which allow the player to be creative. For the purpose of comparison, I have chosen another game industry to show what kind of creativity the computer games are striving for. These are called role-playing games and they have existed in their present format for about the same length of time as computer games. (However, some of the terminology in this thesis is my own invention, to avoid confusion between certain areas.) The role-playing game is presented in a book format, and the players each assume a character in the story and interact with it and one another, making choices to solve problems, or throwing dice to decide the outcome of certain events.

This is not a passive form of entertainment by any means. It is for all intents and purposes, an improvisation exercise, such as a drama group might use.

Within the computer game industry there is a genre known as "role-playing games" and these attempt to copy the style of the role-playing games I have just mentioned. Unfortunately, they do not allow the same freedom for creativity or character interaction as the games in book format so they are of no interest to this thesis. To avoid confusion I refer to the role-playing games in book format as "traditional role-playing games". I should stress that anywhere I refer to one of these games, I am not referring to a computer game.

The three case studies I have chosen are computer games for the PC called *Alone in the Dark*, *Worms* and *Quake*. In my opinion these three are the best computer games to use as steps in the evolutionary process building up to the type of game I think is most important – the kind that allows the player to be creative. The problem with the majority of computer games is that they are so pre-defined there is no room for the player to be creative at all.

The reason *Alone in the Dark* was chosen was that it is the first game to show that a computer game can be taken as seriously as film or television, in the context of a medium. *Worms* is a game I chose which does not present itself as a role-playing game but becomes one, simply by allowing the players to name their characters. An expansion pack available for it allows players to create characters for themselves on screen by using samples of their own voices and drawing their own landscapes to play on. Finally, I chose *Quake* because it is, to date, the best example of a game which allows players to create a virtual environment and characters for themselves, while interacting with one another. This is the reason for the title of this thesis. The cliché of the serious-minded adult telling the child how they never had any of these modern electronic gadgets to play with when they were young and that computer games do not inspire creative behaviour, is now being dispelled by these new games which do allow people to be creative.

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The reason for choosing this aspect of the computer game industry is that it is an extremely important consideration in the design of any other computer application. "User-friendly" has been a computer catchphrase for almost as long as the home-computer itself, yet it is only now that designers are realising its relevance to computer games.

In all my research, I could not find any material on this specific subject of facilities (editors) which allow the user to interact with the actual structure of the game – so I found it difficult to write about in that respect. I could not find any computer magazines which review games that spoke of anything other than the technical aspects of the games such as their graphics, their speed, etc. Most of the material came in periodical form and nearly all relevant articles were older than the games I mentioned. I believe this is because they all seem to have been written around the late 1980s/ early 1990s and it was at this time that the game consoles such as the Nintendo and Sega machines were becoming popular for commercial release. However, the games released for those machines are not of any relevance to this particular subject, so much of what I learned about the later parts of this thesis comes from actually downloading the game editors in question from the Internet and reviewing them myself. These game editors, as will be explained in further detail later on, are applications which accompany some of the games which allow the user to intervene with the structure of the games and thus, make their own games. All of the games I mention, unless specifically stated otherwise are for the PC home computer.

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To use the term in its broadest sense, if you are playing a game of any kind you are to some degree playing a role. However, for the purpose of this thesis, the term role-playing will be defined in much more limited terms.

The type of game referred to is based quite simply on a story which a number of players may interact with, rather than just listen to or read. The players each assume characters in the story and their progress is dictated through a narrator or game master (GM) who lays down certain parameters within the story to ensure that he or she does not lose control of the plot and that it continues in a proper direction.

What is interesting about this type of game is that it usually is not competitive. The players generally have to work together towards some common goal. In some cases they have to reach some sort of personal objective and it is in cases like these that an individual player can actually win.

In the beginning...

The traditional role playing game as we now know it first appeared in 1971 in the guise of a book called *Chainmail* (Gygax, 1989, p 22). It was co-written by a man called Gary Gygax. It was essentially a universal handbook to playing games with military miniature figures. Of course, miniatures themselves had been around for many years beforehand. In fact, one could even argue that chess is a highly stylised version of war gaming. Also, prior to World War I, H.G. Wells published a book called *Little Wars*. This was the first miniatures game strategy handbook. It was books like *Chainmail* in the early '70s that attempted to revive this type of game. *Chainmail*, however was a revolution in miniatures gaming in that it included a "Fantasy Supplement" which introduced players to the war strategies of the Middle Ages. This exploded into a new industry as will be explained later. What was also revolutionary about *Chainmail* was that it steered away from the old method of the traditional miniatures which was to have

one figure represent anything from ten to one hundred soldiers. *Chainmail* utilised a more believable system of "man to man" combat: one figure represented one man. Automatically, the players would now tend to begin inventing characters for their figures- the first step in this evolutionary process. This new system proved to be immensely popular and so began the design of what we now define as "role-playing games".

Gary Gygax and Dave Arneson collaborated on a project to design the game, *Dungeons and Dragons*. The game featured miniatures again – representing the players, a GM, a sheet of parameters defining the characters' abilities and a system of dice-rolling which decided the outcome of certain events. Being the first game of its kind, this format defined the design of many role-playing games to follow, although miniatures are not a common feature nowadays. In fact many role playing games now use far less, yet more elaborate equipment. One such example is a game called *Castle Falkenstien*. Set in a world as visualised by Jules Verne or H.G. Wells, the players keep journals of their characters' progress and the dice-rolling system is more stylishly replaced with a deck of cards.

Interactivity

Essentially all one needs to create a role-playing game is a story. This is the simple backbone of each game. The Collins English Dictionary defines a story as: "a narration of a chain of events told or written in prose or verse" (Collins Concise English Dictionary. 1992. p 1329).

As I have already mentioned, however, the players do not sit passively and listen to the narrative. They must interact with it. So this dictionary definition of a story will not suffice. *The Storyteller's Handbook* defines the role-playing story thus: "a situation, event or series of events requiring action on the part of certain characters, presenting problems and challenges, and offering rewards for successful action" (Harch and Greenberg 1992. p7).

What sets the role-playing game apart from other forms of narrative-based entertainment

(such as television or film) is that the audience, i.e. the players get to interact with the story. If we take, for example, a horror film the audience may show their concern for the character on the screen prior to a significant event, but there is absolutely nothing they can do about it since the story is a recording. However, in a game based on the same subject, the players have the right to make all the characters' decisions and this heightens the story's elements such as fear and paranoia, and indeed satisfaction along with a character's success.

Of course it could also be argued that this amount of control would subtract from the horror of the game, since it is often this feeling of helplessness when watching a film which contributes to the feeling of horror in a film. From my personal experience of the traditional games, the paranoid sensations are often heightened by elements such as the fact that there may be a real person in the same room as yourself who is playing a character who could be your worst enemy. The traditional game will only be effective of course, if the players are willing to assume their roles. There is a certain amount of effort required that is not demanded in other media. The traditional game simply will not work if the players are not prepared to act. Perhaps this is what leads to the somewhat limited appeal of these games.

Creativity.

Perhaps the most endearing quality about the traditional role-playing game is the creativity it allows all participants concerned – i.e. the GM *and* the players. The GM will write a scenario based on a book of rules. (This is often the only part of the game you have to actually *buy*.) The books usually come with their own scenarios but certain games differ in the amount of freedom they allow. For instance, *Dungeons and Dragons*, while considered by many as one of the less mature role-playing games, offers a wealth of creative freedom to the GM in terms of creating completely customised scenarios. However the vast majority of games based on H.P. Lovecraft's novels are far more restrictive. The players in particular do not get

to dramatise their roles as much as in other games.

Steve Jackson developed a system of game design called *GURPS* (Generic Universal Role Playing System). This as its title suggests, is a system whereby the loosest guidelines are supplied and a game, its rules, characters and scenarios are all conjured up from scratch. Why then, one might ask, would someone bother with *GURPS* in the first place? Why not just make up a game out of your head? Well, *GURPS* is a book (or series of books) which provides good tactics and rules for making the ideal role-playing game. One example it gives is that for the purpose of making a player paranoid, a GM should throw events into the game which have nothing to do with the plot. *GURPS* is essentially the ideal game: it is a game which allows the players to invent a game.

Generally speaking, all skill required for a traditional role-playing game is purely cerebral. There are usually no quick reflexes required and there is no hand- eye co-ordination. These types of games are usually very easy to learn and their enjoyment factor depends heavily on their randomness- i.e. the use of dice or cards. This and the element of creativity is what makes them succeed.

In the case of computers, the role-playing game is a little more difficult to define. In essence, all computer games are role-playing. There are many genres: action arcade, simulations (such as a fighter plane simulator or a racing car simulator), strategy games, etc. However, the type of games I wish to deal with are the ones which try to capture the essence of the traditional role-playing game. Within the computer game industry this genre is more commonly known as an adventure game: taking control of a character or characters who are part of an interactive story which has a definite beginning, a definite ending and a non-linear plot, just like a traditional game.

The "RPG".

There exists also a genre known specifically as "role-playing games" in the computer industry. However, these are copies of games such as Dungeons and Dragons and more specifically, they copy the miniatures element of the traditional game. They use 3D graphics to represent the world of the game, rather than the top-down view of the miniatures laid out on the map in the traditional version. Basically, they attempt to give the player the viewpoint on screen of what would have been a miniature figure in a traditional game. The flaw with these is that there is little or no human interaction which was what defined the traditional game in the first place. Characters wander around a maze-like world, balancing their strengths and weaknesses against other characters and events in the game. As one-player games, these are rather monotonous because they are so pre-planned and scripted by the programmer. Of course, in recent times this has changed with new technology such as networked computers becoming the norm, and indeed the increasingly popular Internet, thus bringing in an element of human interaction. But they still lack the freedom of invention which is offered in the traditional games. There is very little action on screen with these games and the graphics are generally repetitive and static. This is an example of where, on a purely technical level, they

are actually weaker than the traditional versions of the same games, despite the technological advantages. On a cerebral level, the traditional games far outmatch anything these have to offer.

In the average action arcade game we are usually presented with something like a racing car game, spaceships blowing up aliens or two martial arts experts trying to beat each other to death. All of these are simply hand-eye co-ordination exercises presented as entertainment. Technologically, they have evolved the most, from the slow but hugely popular table tennis simulation *Pong* in 1972, to the near-realism of anything available now on a Sony Playstation. Another genre of computer games, the strategy game or as it is sometimes known, the "God Simulator", is merely a technologically advanced version of any traditional game of miniatures. The theme often varies – *Sim City* involves the player building a functioning city. *Civilization* is much the same and the classic war campaign strategies are a common favourite. In terms of presentation, these are usually a top-down or slightly isometric view of a landscape, to be manipulated by the player.

Adventure games.

The adventure game has undergone the most radical evolution of all the genres of computer games. All genres share the same dramatic change from 2D graphics to 3D which has proven popular in the last few years. This sudden evolutionary leap is extremely important. Obviously, it is another step towards realism but what many people do not understand is that 3D animation is actually easier than 2D. Only key frames have to be animated and the computer fills in the rest. 3D modelled games also give the player more versatility of control as well. This makes more time to concentrate on other areas of the game design. But if we consider that the adventure game began life as a purely textual interface, the change is more obvious.

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The first adventure games which would have appeared in the early 1980s on home computers such as the Commodore 64 did not feature any graphics. They were literally, written stories which were broken into segments and then they offered choices at the end of each segment, thus making the narrative non-linear.

The main points of interest with these adventure games is that for the purpose of comparison, they have the most in common with the traditional role-playing game in that their roots are in writing and quite often, the same subject matter. (They often tend to show a preference for scenarios based around Medieval folk tales, for instance.) They also began life at roughly the same time as the traditional game, and so both formats have developed alongside each other. However, the computer adventure still lacks the creative freedom of the traditional game in that the player is bound by whatever limits the programmer has laid down and the programmer in turn is limited by the capabilities of his or her computer. Traditional games, on the other hand, are only limited by the collective imaginations of the players and the GM.

I have to agree with Lindy Sout's article on "unplugged" (i.e. non-computer) games in Creative Review in which, after a comment from a computer game catalogue publisher who maintained that CD-ROM technology makes the creative options of a game relatively limitless, she replies that this is true only for the game designers. Somewhere along the line, greater choice and greater interactivity have been mistaken for greater creativity (Sout 1994. p48).

It is important at this point to understand the significance of CD-ROM on the games industry. Most computer applications- especially games- take up several megabytes of memory. Prior to the advent of CD-ROM, programs were stored on floppy disks with a capacity for approximately one and a half megabytes each. This meant that most games came on a selection of floppy disks which were installed onto the computer's hard disk because the floppy disk drive is too slow to run an application. This prevented the games from being too large

too, because the time it would take to install a large game this way would make things very awkward for the user.

Then came the CD-ROM (Compact Disk-Read Only Memory), with a capacity for 640 Mb and capable of running at almost the same speed as a hard disk. Games designers can now afford to play around with the finish on their games a little more. They can afford to include much more memory- intensive features in their games such as higher quality graphics and CD quality sound – a full live orchestral recording for example. Unfortunately the novelty of all this caused developers to dwell very much on these elements and the basic principle of gameplay was shoved to the back for a while. *Rebel Assault*, a Star Wars adaptation by Lucas Arts was considered by many to be the first game to realise the potential of CD-ROM technology, measuring around 400 Mb. The game itself involved a young pilot in a futuristic space scenario joining the Rebel Alliance to overthrow an evil empire. The game takes the player through the initial flight training stage, then through a series of adventures based on scenes from the Star Wars films and finally builds up to the climactic battle at the end. The gameplay was heavily interspersed with animations and cutscenes. While it was impressive to look at and listen to, there was very little actual gameplay involved.

In the same article just mentioned, a manager of a London game company defends the simple pack of cards saying, "The mere fact of shuffling and dealing cards creates a new set and one pack gives you the possibility to play hundreds of different games" (Sout 1994. p48). It is worth remembering the traditional game, *Castle Falkenstien*, mentioned in the previous chapter, which utilised the card deck as a vehicle for the role-playing game. What makes a board game like *Risk* so successful? It has all the essential elements to make an excellent game – human interaction (between two and six players), the random element of five dice and two decks of cards, military strategy using miniature figures and some semblance of a story in that it is set in Napoleonic times, using a map with countries that do not exist any

more. What is missing from most of the computer games is the human interaction and the random factor.

So what exactly is computer role-playing? We have to ask ourselves how many criteria we actually need to define it. Is it enough that a character has a name? The importance of this will be explained later with regard to games such as *Worms* from Team 17 and *Quake* from ID Software. In the sense of an adventure game it is a story which lets the player (usually there is only one player) take control of a character and guide that character through the plot, exploring the world of the game and avoiding pitfalls, etc. However, in contrast to the traditional type of game, the creativity factor is very much pushed to the rear. The computer role-playing game is essentially a problem-solving game, placing all the emphasis of the gameplay on the player finishing the story. In contrast to this, the traditional game's play is all about getting a number of people to create a story.

Non-linear narratives.

The graphical adventure game is usually presented from a second person perspective- i.e. the player gets to watch the character's progress on screen, like a film. If we look at most of the adventure games produced by Lucas Arts, we see that they stick to a fairly rigid game format - or engine, as programmers refer to it. Lucas Arts' favourite engine for their adventure games is called the SCUMM (Script Creation Utility for Manic Mansion) engine. The typical Lucas Arts adventure is presented in a 2D graphic format, with all the action taking place at the top half of the screen. Underneath this section s a list of commands such as "walk to", "pick up", etc., which allow the player, using a mouse, to interact with the objects and characters in the game. Speaking to other characters is controlled by means of a menu, providing lines from a pre-written script. Although this type of game is extremely popular and many other software producers utilise this format – and indeed it is entertaining in its own right – in terms of creativity for the player traditional games leave this type of thing far behind.

Chapter 3
Alone in the Dark
Cinema meets interactivity

3

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One of the definite benchmarks in the history of computer games was *Alone in the Dark* from a French software developing group called Infrogrames. It is relevant to this thesis is because of the close relationship it has with traditional games. The connection here is that the story is based on a mixture of tales from the work of the 1920's horror writer, H.P. Lovecraft. This is a popular theme for a vast range of traditional games such as *Grace under Pressure* and *The Horror of the Glen*. The fact that it takes its inspiration from a literary source is not something particularly revolutionary in the adventure game genre – J.R.R. Tolkien's *Hobbit* had been adapted in the infancy of the adventure game in the 1980s for instance. What makes this particular game work, aside from being technologically more advanced at the time than any of its competitors, was that they chose Lovecraft to work from. The significance of this will be explained later.

The game is set in America in the 1920s and the player has a choice of either a male or female character, each of whom has to investigate an empty house in the country. The woman is a relative of the insane artist who committed suicide there and the male character is an antiques dealer who has to examine an old piano in the attic. Hidden in the same piano is a letter from the late owner so this is a reason for the woman to begin the game there too.

An example of the first scene (the attic) might involve the player investigating the piano for a secret compartment, containing the suicide note of the owner. This warns the player to keep the window boarded up. If the player doesn't realise this in time and act on it, a small demonic, Lovecraftian creature jumps through the window and begins fighting with the player.

Technological breakthroughs.

Alone in the Dark was also the first adventure game to appear in 3D. It made its debut in 1992. Although 3D graphics had already made an appearance before this, they were only in
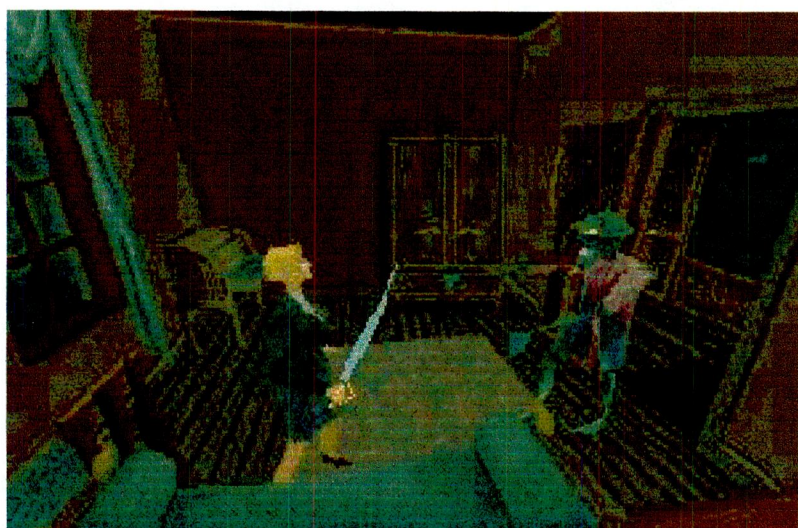

Fig 3.1

Alone in the Dark's female character prepares to fight one of the creatures haunting the house.

Note the exaggerated perspective.

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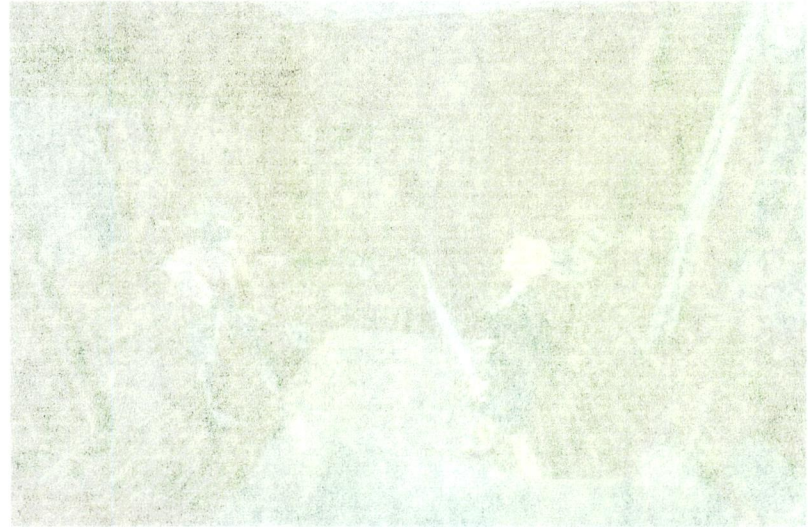Cinema meets interactivity

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some small action arcade games. The game allows the player a choice between a male or female character, rendered in 3D. The environment is also 3D which means that now the interface has to be different. No longer is the mouse needed and the SCUMM interface, (or imitations of the SCUMM interface) is also gone. There is no mouse pointer floating awkwardly on the screen, interfering with the graphics, and the whole screen can now be given over to the action. The controls instead are completely handled through the four directional cursor keys on the keyboard, allowing the player's character to walk/ run forwards and backwards and to turn left and right. This means that the character instantly responds to whatever the player's hands do.

Often what would happen with a mouse-based interface would be that in order to move a character, the player would select some command like "walk to" from the menu and then click on an area of the action screen where he or she intends the character to go. For some awkward reason this always seems to have to be quite a distance away from the character's present position to make it move at all, thus distracting the player from the credibility of the game. Also with 2D games, the animation runs at an average of 15 frames per second, compared with 24 frames per second for film. For certain sequences of a 2D game, some parts are not controlled by the player and are animated automatically instead, such as a character leaving the scene. In situations like this, with scenes involving a character moving through perspective in particular, the short cuts taken with the animation are more obvious.

In *Alone in the Dark* none of these glitches occur. As explained in the previous chapter, the computer accurately calculates the in-between frames of a 3D animation, thus making the action much smoother. The fact that the character and environment are rendered in 3D and that cameras are used means that the perspective is more accurate too.

The attention to detail in this game is what makes it so successful. While the game's virtual environment itself doesn't cover a huge area, it is packed with the detail which, if sub-
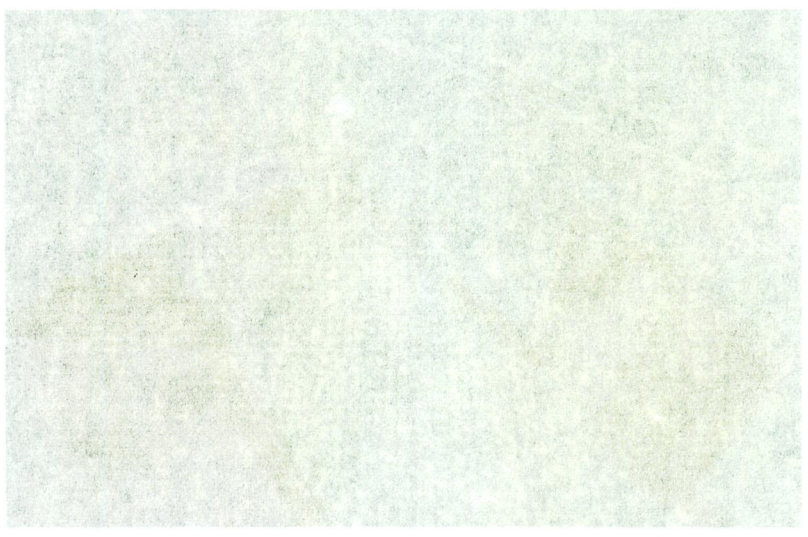

Fig 3.2

The use of the wide-angle lens effect in *Alone in the Dark* gives the player the impression that he / she is being watched.

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stituted for a larger environment, would have spread this detail thin. The attention to sound is quite revolutionary for any kind of game in 1992. For instance, the opening scene contains a wooden floor with a thick rug. As the player walks across the floor, the boards can be heard creaking. When the player walks on the rug the sound becomes dull.

If the player leaves the character on screen standing still, he will gaze about nervously, looking behind him from both sides. Every aspect of the game's animation lends itself to the atmosphere. In the opening scene there is a child's rocking horse in the corner of the room. By examining the horse the player finds that it simply rocks back and forth, having no effect of any importance. The obvious thing to do then is to step away backwards. However, because of the character's animation, he seems alarmed at the horse as he walks away. This detail – which is completely irrelevant to the plot – works much more successfully as a result of the carefully considered animation.

Horror movies on a computer.

As the game progresses, the player discovers that something is lurking beneath the house so at random times, the computer throws in a scream or a dripping noise which seems to come from downstairs, breaking the silence. There is no music, but if the player leaves the character standing idly around, a sudden loud burst of bell ringing comes in to frighten the player. The whole effect is quite cinematic but where it triumphs over many film adaptations (and all previous games) with the same subject matter is that these background sound effects are not linked to key events. They do not warn the player about a forthcoming event or occur in the heat of the action. They merely exist for the sake of the game's atmosphere and because they are randomised, the player cannot predict when they are going to occur.

H.P. Lovecraft's own advice was this: "A certain atmosphere of breathless and unexplainable dread of outer, unknown forces must be present; and there must be a hint, expressed
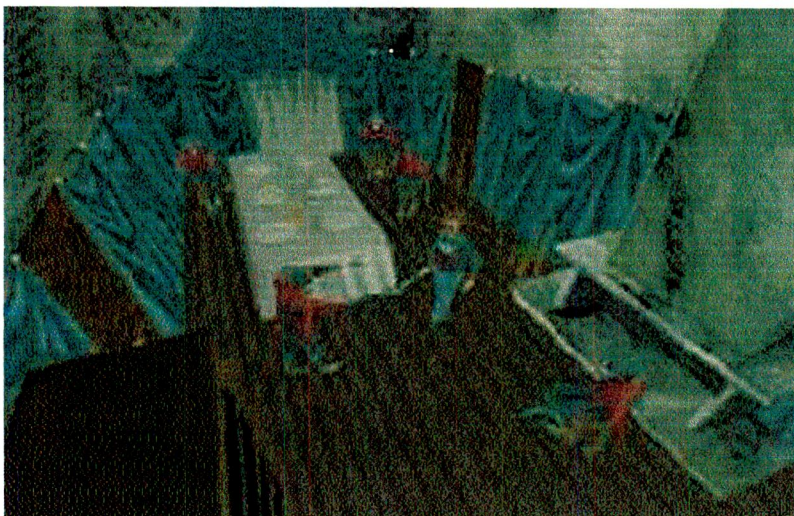
Fig 3.3

The sleeping monsters rise from their chairs one by one to trap the player in the room.

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with a seriousness and portentousness becoming its subject, of that most terrible conception of the human brain – a malign and particular suspension or defeat of those fixed laws of Nature which are our only safeguard against the assaults of chaos" (Lovecraft, 1985 p426).

He was of course, referring to the writing of horror novels but Frederick Raynal, the game's director has certainly succeeded in this direction, bringing the game industry many steps closer to the standard of film and television.

In fact *Alone in the Dark* borrows quite a lot of cinematic techniques stereotypical of horror films. However, where these may look tacky in a film, the effect is quite successful in a game. As the character walks to key areas of each scene, a different camera angle is used to show the action. In fact even wide-angle lenses are used at certain points. This gives the player a sense of being watched – another quirk of Lovecraft's. The key to creating a sense of fear lies in having an enemy lurking, rather than an enemy seen.

Lovecraft always maintained that describing something in its vaguest terms forced the reader to use their own imagination. This is another trick used by Raynal. In *Alone in the Dark* there is plenty to read. The player picks up notes, letters and books from time to time which are scattered around the house – some being quite lengthy. Some of these give clues to some of the problems which need to be solved during the game, but the majority of them are there to give background to the story, which was an unusual feature to find in a computer game. At one point the player has the opportunity to leaf through the diary of the house's owner. He writes about "unspeakable" and "unnameable" things, and makes reference to "The Dark Man" who haunts his dreams. At another point in the game the player comes across a piece of parchment which makes reference to "The Vagabond", who lurks in caves. It doesn't describe the Vagabond in any way and vaguely hints that these caves might be found beneath the house.

It is this emphasis on the story and the creation of an atmosphere which brings the game

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closer to the elements which make traditional games a success. One important factor which is missing, however, is the interaction with other players. The reason *Alone in the Dark* gets away with this is because the game is based on the work of Lovecraft. Almost all of Lovecraft's stories are told from the first person's perspective. They seldom involve any other characters the reader feels capable of sympathising with. A typical story might involve one person up against a town full of mindless creatures who want to kill him, for example.

The traditional games which are based on the stories of Lovecraft do not tend to contain a lot of character development because of the vague way he describes things. The visualisation of each situation is left almost entirely to the imagination of the individual. So the traditional games revolve around problem-solving within a story and the onus is almost entirely on the GM to create an atmosphere through good storytelling.

It is possible to employ many effects to enhance the atmosphere of the game. For example, during a session of a traditional game in which I personally participated called *Arkham Unveiled* (which coincidentally, was about investigating an empty haunted house,) I used a small electric heater which, when switched off at the appropriate time, gave the other players a feeling of coldness when they went *inside* the house. This, while effective, is obviously more cumbersome than the more advanced effects in *Alone in the Dark*.

Probably a better example of a successful Lovecraft-based game is a session of *Grace Under Pressure* in which a friend of mine took the role of GM. The game is set in two locations simultaneously – one team is on a boat and another team (which should ideally number about three people) is in a submersible vehicle deep in the ocean beneath the boat. The teams go into different rooms and the makers of the game advise that the team in the submersible choose a large bathroom and take in an orange lamp to give the effect of a more believable environment. They also advise a tape of whalesong to be played in the background. There is a GM in each room and both teams communicate through walkie talkies. It

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is probably more effective due to the fact that the players cannot see – only hear the other people who are helping them.

During this particular session, as a result of the way the events and situations were described by the GM and the effects used, such as the lamp – one female player, playing a character in the submersible, became so afraid that she was overcome with claustrophobia and the game had to be stopped.

The solitary player.

I have yet to hear of a computer game producing effects such as these, but *Alone in the Dark* certainly comes close. The fact that there is a solitary player and the simulated claustrophobia make it work (hence the name). Had this been based on anything other than Lovecraft it probably would not have done so. The fact that Lovecraft's favourite tales involved one person up against the odds suits a computer game perfectly. It has often been suggested that the playing of computer games can encourage antisocial behaviour – the fact that there is usually one player is perhaps the most obvious reason to give. Terri Toles, in an article on video game violence, published in 1985 when these games were very much in their infancy, states that they provide so much anonymity that they "deindividualise" the characters on screen and subsequently the player. This state of mind apparently leads to a loss of self awareness, a narrowed focus of attention, and other actions which society might deem "inappropriate" (Toles 1985 p217). This is a somewhat alarmist attitude to take towards games, but there are some degrees of truth in it.

However, it could be argued that in the case of *Alone in the Dark* the idea of a solitary player is actually more appropriate. Even playing this game with another person observing can spoil the effect to some extent.

Leslie Haddon, in an article on the history of the medium (computer games) in <u>Screen</u>

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magazine, makes the point that however minimal a game's storyline, if there is some evidence of one the computer game can be seen as a medium, and therefore comparable to other media texts (Haddon. 1988. p62). This is why *Alone in the Dark* and all games of its calibre should be taken seriously. Their technology is becoming more and more advanced and all the creativity in their design will come down to aspects such as their aesthetics, user-friendliness, etc (rather than their technical specifications, such as how fast they run, which is what the majority of game designers seem to be concerned about at the moment).

Following *Alone in the Dark* came a futuristic science fiction game in the same format, called *Bioforge*. It was a more technically advanced version of *Alone in the Dark*, again using the element of a solitary player to its advantage. The player assumes the role of a prisoner who is taken to an inhabited moon to take part in an experiment involving his body being merged with robotic parts and his memory being erased. The majority of the game involves the player trying to discover who the character actually is, and finally escaping from his prison.

Bioforge offers digitised speech, better graphics, more detailed animation and even more plot twists in its story. It is in many ways better than *Alone in the Dark* but the latter still remains the game which first set the standard for this game format.

One of the elements in *Alone in the Dark* which crosses over into the field of traditional games and works particularly well as a horror device is that of the choices a player has to make. In many horror films a character may arrive at a situation, such as a closed door and make a decision as to whether or not he or she should open it. Whatever the audience feels is irrelevant since the character will make a pre-recorded decision and the viewer cannot do anything about it. In a game like *Alone in the Dark* however, this specific situation arises many times and the player has the right to decide not to walk through the door, although eventually it may be necessary to do so. Elements like this help to build up tension and do not work nearly as effectively in a film.
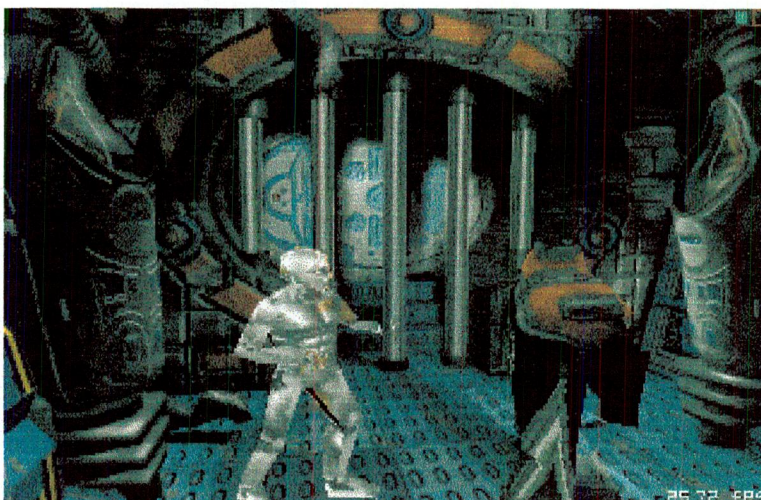

Fig 3.4

Bioforge features the same interface as *Alone in the Dark* but with better graphics, sound, and posibly a better story.

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The only aspect of a traditional game which is missing from *Alone in the Dark* is the element of creativity. It is an extremely effective use of a new medium for horror. Unfortunately however, despite the random sound effects, you cannot really deny that you are playing the same game twice once it has been completed for the first time. But still standing as an icon for many revolutionary ideas in the computer game industry, *Alone in the Dark* proves that it is possible to have such a thing as a classic in this rapidly evolving field.

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A game, however which does offer the features missing from *Alone in the Dark* is *Worms* from Team 17, released in 1995. The makers, at the release of its promotional demo, boasted that *Worms* was the most playable computer game ever. There is always room for argument with a statement like this but they presented a good case.

Worms, it should be stressed, is not what could be defined as an adventure game. Unlike *Alone in the Dark*, *Worms* has absolutely no storyline. Instead, what is important about *Worms* is the fact that it offers so many options for creativity to the player.

The key to this game lies in its simplicity. Strangely enough for 1995, the game is presented in 2D. The players each control a team of four tiny worms who begin the game with a number written above their heads, representing their health. The object of the game is to destroy the other team or teams by selecting, from an assortment of different weaponry, items such as bazookas and shotguns and dynamite. The players take turns at blowing each other up, rather than moving simultaneously.

Cartoon violence.

Again the sound is impressive in this game. The whole game is presented as an interactive cartoon with typically "over-the-top" cartoon violence. The sound matches this action quite well. The high pitched screams and threats fly back and forth across the battlefield in either English, American, German or French accents. This is a decision made by the players at the beginning of the game. In the background, a different recording of sounds plays from the CD-ROM to complement the landscape in question. For instance, one particular landscape might be a farm scene. The computer has a choice of about eighteen different tracks to play from, three or four of which will suit the landscape in question. If a worm is about to make a successful shot, he will cry out, "Die!", launching a missile the size of himself and the receiving worm, having been thrown all over the place might reply with a cry of, "I'll get you".

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Terri Toles makes an interesting point that the anonymity of characters on a computer screen – in this case they are the worms, who account for both player and enemy, or even two players – makes the player detach himself or herself from the "normal" attitudes towards violence, diffusing the responsibility for violent action to the characters on screen themselves. She maintains that an anonymous enemy can easily be dehumanised in such a scenario, thus removing a sense that the player is actually killing someone (Toles 1985 p217). I have to disagree with this, since the player is not actually killing someone – the player's character is attacking another character, who is not real. Aside from this, the action in *Worms* is so cartoon-like that it cannot possibly be taken seriously. However, in the next chapter Toles' argument will become relevant.

Each game begins with an animation of a worm using one of the items at his disposal in the game. These small cartoons are an excellent device to break up the games, giving the worms some character.

The worms themselves appear quite small (on an average screen they measure about 1 cm in height), and there is not at first glance a lot of detail on them. In spite of this, their animation is what makes them appealing. If for example, we take a worm falling, he tumbles down a hill, letting out little cries of pain as he does so – cartoon style. When he finally comes to rest, he is curled up in a ball and as he pulls himself back into shape again there is a small popping noise. Another example is when one of the different weapons is selected with which to attack the enemy, such as a shotgun or a blowtorch, the worms wear flak jackets or hard hats, suitable for the occasion.

The random game.

The whole game is viewed side–on and the worms begin on the surface of a cross section of the landscape. What they can do then, for the purpose of strategy, is dig tunnels

Fig 4.1

A fractally-generated landscape in *Worms*.

Each crater, rocket, etc. comes from a stock of pictures which randomly assemble the picture of the landscape.

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Fig 41

A fractally-generated landscape in Worms.

Each crater, rocket, etc. comes from a stock of pictures which randomly assemble the picture of the landscape.

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and drill holes. They can also lay traps for the enemy. When these and the weapons explode they take away chunks of the landscape with them, exposing anybody hiding below the surface. The players have the choice of playing the next game on the same landscape or on a completely new one. Thus far, it may sound like the novelty of a game like this might wear thin very quickly but where *Worms* manages to keep the gameplay fresh is in the fact that the landscapes are randomly created using fractals. Fractals are graphics which are taken apart into different components and re-assembled to form something else. In this case, they create the landscape. One section of this landscape generator creates the different chunks of land, while the other places random props around the surface. For example, if the texture of the earth is a cratered moonscape, the computer will also place Jules Verne-style rockets and other appropriate items along the surface. From this random generation there is a possibility of creating up to four billion different landscapes to play on, by simply typing in a number or a word and letting the computer generate the landscape from that.

The landscape graphics are made up of about six different pictures. It is from these that the computer takes the seed to create the landscape. So while there are essentially only six of these, the fact that they make up four billion different games is what gives *Worms* some longevity.

The opening menus before a match actually begins are very user friendly and perhaps it these which make *Worms* one of the few computer games to cross the gender barrier. The audience for computer games in general is about seventy-five per cent male (Meggs, 1992, P 25). Perhaps the reason for the broader appeal of *Worms* lies in the androgyny of the worms themslves. In *Alone in the Dark* we saw that the player had a choice between a male or a female character. However, this may not be quite enough to appeal to a female audience. Infogrames – *Alone in the Dark's* developer did not seem to think it was necessary to feature a female character in the two later releases in the *Alone in the Dark* trilogy, and so abandoned

Fig 4.2

Worms Reinforcements allows the player to draw their own levels to play on by hand.

The black box outlines a worm and his crosshairs.

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this option from these two games.

In an article on gender issues in computer game design in ID magazine, Margaret Honey, a developmental psychologist at the Center for Children and Technology in New York, says that while boys are content with basic competition, girls want something more creative. She writes that: "The problem with video games is that they do not give you any voice". She maintains that they are so structured and predetermined that there is no place to insert yourself. (Jacobs, 1994, p42). Where *Worms* gets around this is that the players have the opportunity to name their team and their individual worms. This simple feature makes the delicate lifespan of the worms all that more precious. Now they have characters.

Being quite the opposite to most computer games, *Worms* works best when there are two players. (There can be up to four at once.) Obviously, with recent technological developments, this game can be played over the Internet and through a network of computers. However, *Worms* works best when there are four players gathered around the same computer. It is the fact that the matches are won by having to win two games out of three, and that there are real live people to compete with, that makes the game so addictive. There is no longer the isolated player, playing against the computer. Now that the "antisocial" stigma no longer applies to the players, all of the excitement of the game goes on in the room where the players are, rather than on the screen itself.

Creativity in a computer game.

With a game as simple as this, it is difficult to devise a sequel. There is no "story" as such. So what the makers of *Worms* did instead was to create an expansion pack which made the game even more user-friendly instead.

This was called *Worms Reinforcements*. It gave the players the option of extra weapons, giving each team a different voice or accent, rather than having each team playing with the

Fig 4.3

Warcraft II – a top-
-down viewpoint
makes this an ani-
mated version of a
miniature tin sol-
diers game.

The character
hilighted in green is
the one selected by
the player.

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same accent. There were new background tracks on the CD and the matches could go on for longer- up until somebody had won nine games.

The detail with which it allowed the players to customise the game was far greater. Now there were options like controlling how much wind would be blowing during a game or the likelihood of a landmine going off if a worm walked on it. If it actually *was* going to go off, how much time would that worm have to run away before it exploded? In *Worms* all of these things were decided by the computer. There were also twice as many new graphics patterns which could go into the creation of the randomly generated levels. Players even had the choice now of choosing their own headstone for when one of their worms dies.

However, the really interesting features with *Reinforcements* are those which allow the player to customise their own graphics and sound. There comes with *Reinforcements* a utility which allows the players to actually draw their own landscapes to play on, using almost any art package.

As well as the ability to customise the landscapes, *Reinforcements* also gives the players the option to customise the sample banks of sound effects. It gives the user an example of what the original sound effect was and the simple option of exchanging it for one of their own. Now if your worm fires a rocket, you can threaten the enemy in your own voice. The interface for this, however, could be somewhat better designed but by the time a game reaches the screen now, all that remains of the programmer's design is the little animated worms themselves.

Via the Internet, people are now making their own custom-designed landscapes and sound banks available to the public. Never before has this kind of creativity and interaction existed in the field of computer games.

A comparable game is *Warcraft II* from Blizzard Software. It is a medieval war strategy game, viewed from above. Players control armies which have to be expanded and manoeu-
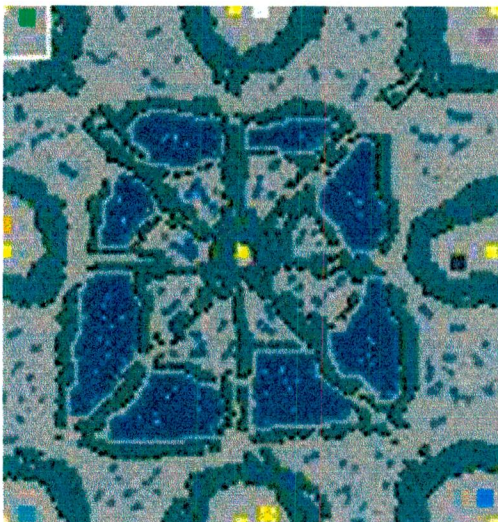

Fig 4.4

A map devised by a player for *Warcraft II*. The grey areas represent snow, green represents trees and blue represents water.

The white box is a scaled-down image of the playing screen in the game itself.

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vred, using the resources available to them. The environment is made up of land and water; which can be navigated quite easily and there are trees which are impassable but can be chopped down for lumber. There is also gold which can be mined from specific locations and areas of rock which can only be negotiated by air.

This game gives numerous options for multiplayer games, one being that provided the correct leads are in place (which are relatively cheap), the game can be played with three computers, only one needing the original copy of the game. On a proper network, up to eight players can join in. Unfortunately, however, it doesn't support a multiplayer game on one computer as does *Worms*.

Warcraft II also comes with a map editor and while it doesn't allow the player to actually draw a map from scratch, it simply allows the player to insert all of the above items into a map, including the various characters in the game, via a menu at the top of the screen. It is extremely user-friendly and is in fact easier to learn than the game itself. Like *Reinforcements*, it also gives the player the option to change the sound sample banks in much the same way, by playing an example of the original sample and giving the user the option to replace it. The interface here, however, is of a better design than *Reinforcements*. Both of these games editors literally contradict Margaret Honey's statement quoted earlier which claimed that computer games do not give the player any voice.

It is becoming more and more clear as time passes in the rapidly evolving industry of computer games that this kind of freedom of choice is one of the most important considerations of the game's design. In the next chapter I will show this at its most advanced level to date.

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In 1992, a shareware game was released called *Wolfenstein 3D*. This game was one of the first in the new wave of 3D games to appear on the home computer market and came from an American group called id Software (who insist on their name always being printed in lowercase).

Shareware is the name given to software which is released by its developers to the public free of charge. Usually it is an edited version of the finished product and the full version is then made available for sale later on. It is a standard form of market research in the software industry.

The game was played from a first-person perspective and involved running around maze-like corridors and tunnels in a Nazi castle. The object of the game was to get from one end of each section to the other by avoiding and shooting the various "bad guys". Extra weapons and ammunition could be picked up along the way, along with medical kits to heal the plentiful collection of wounds. Keys were also needed to open doors. None of this was particularly brain-taxing stuff.

One of the other features with *Wolfenstein* was that after an enemy died, he remained where he fell, rather than disappear which was what normally happened in a typical arcade game.

Essentially, *Wolfenstein* was just an ultra-violent computer game which took advantage of this new 3D technology, thus placing it in the limelight. At one point the player can take a Gatling gun which fires a barrage of bullets at the enemy, causing him to stagger and shake with the force and spatter blood everywhere. It was a rather gory game. In fact, it caused so much controversy that it was banned in several European countries at the time.

The makers then released its sequel, *Doom,* in 1994. This was the same game with an image overhaul, but with one major difference- now the player could walk up different levels as opposed to the flat-floored *Wolfenstein*. However, this did not make the *Doom* environ-
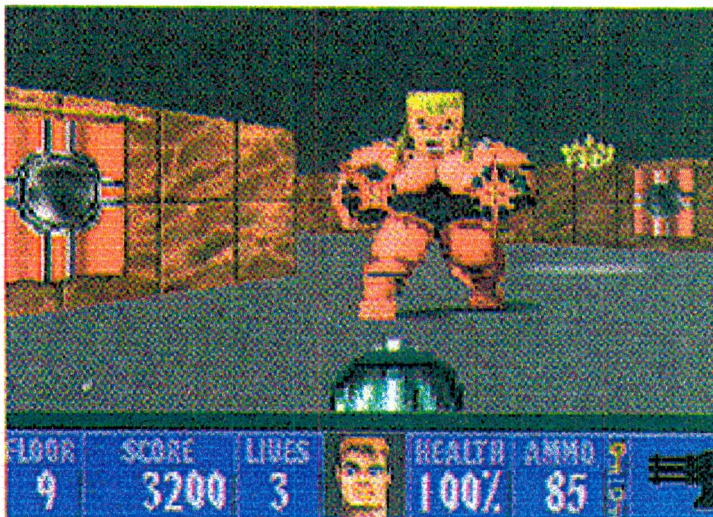

Fig 5.1

Wolfenstein 3D –
the controversial
"3D" game about
Nazis.

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ment a truly 3D one. These different levels were merely solid blocks pulled up from the floor, meaning that such things as bridges which could be crossed above and below were impossible.

Doom had no real plot either, which wasn't something the makers of the game were ashamed of. While promoting the game, they freely admitted that the action was their only concern. For the purpose of a basic theme however, *Doom* was set in Hell and the enemies this time were monsters rather than Nazis. In keeping with the popular technological trends, *Doom* also supported a network game, allowing players to compete against each other (which they called a Deathmatch - this became the standard term even in imitation games to follow) or as a team fighting against the usual monsters.

Military ideology.

The gameplay in *Doom* was so good that the American Marine Corps Modelling and Simulation Management Office in Virginia had their own version of *Doom* created to teach soldiers the basics, such as how to avoid friendly fire, which obviously cannot be done in a real situation. The soldiers, while not in combat, would play a customised version of *Doom* on a network and learn about teamwork in a combat situation and ambush strategies, etc. In this instance, it should be pointed out that Toles' fears regarding computer game violence and military ideology, which were mentioned in the last chapter, now become relevant. In this case, the fear of dehumanising the enemy is justified because the marines are actually preparing to shoot real people.

Doom was easily the most popular game on a world-wide basis that year and the fact that so many other developers imitated it, by using id Software's own *Doom* engine proved this. Various games such as *Corridor 7* and *Hexen* were released, with minor changes (aside from the graphics) to the original *Doom*. *Hexen* even had a similar theme- that of a medieval cas-
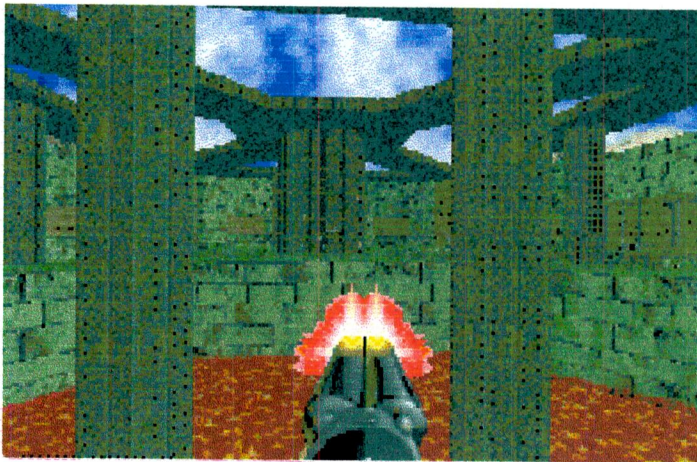

Fig 5.2

Doom was the project to follow *Wolfenstein 3D*.

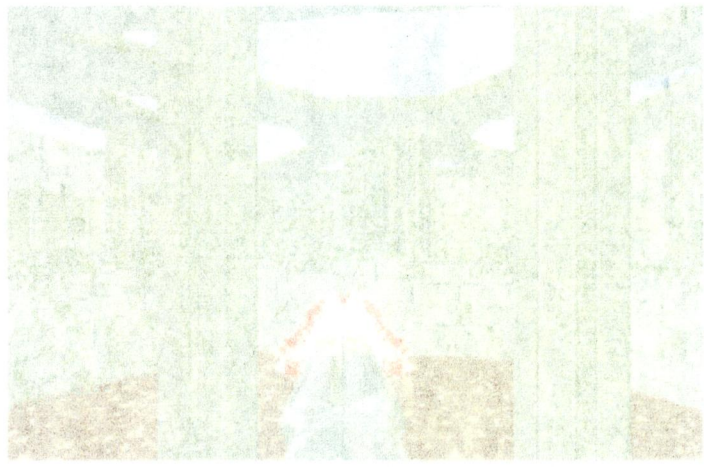It was even more controversial for its violent content.

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tle, haunted by demons and monsters, etc. But the new gimmick with Hexen was that the player could now look up and down within the 3D environment of the game.

Then in 1996 came another spin-off. This was *Duke Nukem 3D*. This caused more interest than the others because now the environment was properly three-dimensional. The player could walk anywhere. However it still used 2D sprites. These are animated graphics which can be manipulated or interacted with, independently of other graphics on screen at the same time. An example of a sprite here would be one of the monsters. The drawback of using sprites in this case was that it is difficult to make them look believable in a 3D environment.

True 3D in a game.

Over the Summer of 1996, *Quake* made its debut around the world. Outmatching *Duke Nukem 3D* in every respect, *Quake* was basically a more advanced version of *Doom*. However, it is to date certainly the fastest game of its kind, as well as having many more features than anything else before it.

The developers joked publicly about spending five minutes coming up with the plot for *Quake*. The setting is a medieval castle and, when the player has overcome four levels of difficulty, the fifth involves fighting (by pure coincidence) a Lovecraft-inspired monster, who is supposedly the root of all your problems.

The soundtrack and sound effects were created by a heavy industrial band called Nine Inch Nails, whose own image goes along with the game quite well.

id Software, again despite all the controversy, jumped up the violence of *Quake*. They created 3D models of the enemies, which means that they are more believable for a start, as well as being better animated. It is, as in *Duke Nukem,* possible to swim under water but the difference here is that the water actually refracts the player's field of vision, causing the environment to seem to wobble. When the player rises to the surface, a gasp of breath can be heard.

Fig 5.3

Quake – a fully 3D version of *Doom.*

Even more gory than *Doom*, the zombies in this picture tear off bits of their flesh and throw them at the player.

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Violence.

The violence too, is more believable. Repeatedly shooting the first enemy of the game (a soldier), causes him to fall stumbling backwards. However, he finds his feet again and continues fighting until the next barrage of bullets kills him.
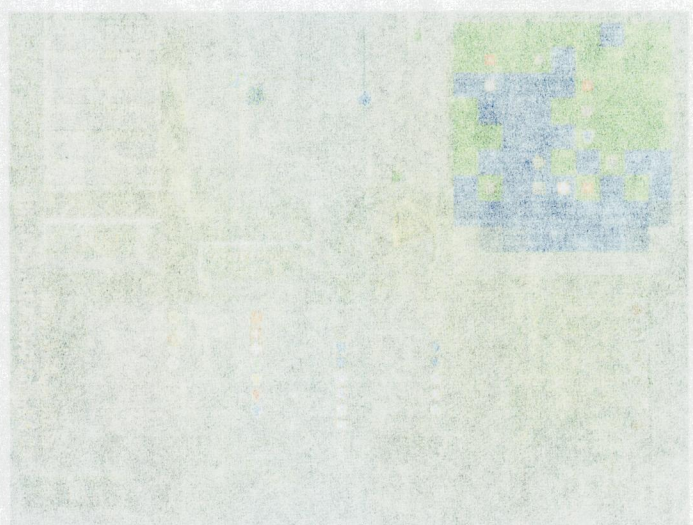
In most of the research for this thesis which directly concerned computer games, the question of violence usually cropped up at least once. With this come the usual concerns about "violence corrupting the children", etc. This argument doesn't really concern the main points of this thesis but it would be naïve to ignore it altogether. The reason for the success of *Quake* and all of its kind to go before it, is that it is completely action-based. The makers of the game specifically made it so because it is well known that the majority of the computer game consumers are adolescent males. It is also extremely violent.

Regarding violence in games, I support the opinion of H.G. Wells, who is considered the father of miniatures gaming. He probably put it best when he said in his book, *Little Wars* that tin soldiers leave behind no orphans or widows and ventured the thought that if more people were busy "fighting" such "little wars", they would have no time for big (real) ones (Gygax, 1989 P 23).

Virtually unlimited creativity.

but *Quake* is not because it is an adventure game. Even now the meaning of "adventure game" in this context is becoming less and less clear. What is particularly interesting about *Quake* is *Quake C*, its programming language. id Software released this to the general public along with the game itself and made it available over the Internet. Normally a game would be written in a standard programming language of some sort. *Pascal* and *Cobol* are examples of these – most art and graphics packages would be written

Fig 5.4

Fractal Quake by a programming team called Modesty allows the player to randomly generate 3D levels to play in *Quake*.

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Pascal and *Cobol* are examples of these – most art and graphics packages would be written in *Turbo Pascal* for instance. A favourite for games writers is called *C* and there are other versions called *C+* and *C++*. id Software realised that to make *Quake* as powerful as they wanted it to be, they would have to write their own language altogether. This was *Quake C.*

This meant that anyone with a knowledge of *C* could understand *Quake C,* and the files that ID created their game with, called .pak files, could be unpacked and investigated and manipulated by a competent programmer. The programmers of the *Quake*-playing world responded by creating user-friendly editors for people who have no knowledge of programming. These are presented quite like graphic design applications. Other useful programs allow people who are competent at an already existing 3D graphics program such as Autodesk's *3D Studio 4* to create their own monsters and architecture with that and then convert those files to ones compatible with *Quake*. There are still limitations as to what can be done with these editors. These are only because programmers have not expanded enough on the programs compiled by id Software themselves. However, programmers are using *Quake C* to create more user-friendly and versatile editors for the non-programming users. This will allow the user to create more detailed and intricate virtual environments.

One particularly interesting editor is called *Fractal Quake*. This one does in three dimensions what the game of *Worms* did for random game-play in a 2D game. As its title suggests, *Fractal Quake*, from a developer called Modesty, randomly generates files for *Quake* and then converts them to playable levels. It randomly inserts land, lighting, water, items of use to the player and monsters.

id Software gave the public the freedom to change absolutely everything about the game apart from its engine, which is what produces the 3D graphics on screen at such high speed. The editors allowed some freedom to anyone ignorant of programming languages. The real creativity becomes evident however, when those who can program go to work.

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There is an add-on available called *Ultimate Quake*. This includes some extra weapons and modifications to original weapons. It is merely a more detailed game in that respect. However, the huge difference here is that it allows the player to execute magic spells. There wasn't even a hint of this in the original game. Players can now earn points from killing enemies or solving puzzles, all of which go to the player's ability to use these spells. Now players can levitate for short spells of time, using a mouse, or summon lightning to annihilate everything in sight.

There are bigger projects than this, of course. Entire new games are being developed. The interesting thing about these is that while id Software almost completely ignored the idea of a plot or a story for *Quake*, there are numerous programmers and groups of programmers all over the world who are developing such things as film adaptations. *Terminator Quake* and *Star Wars Quake* (http://www.planetquake.com/quakex/termquake/) are being released at the moment, both of which involve players assuming character roles and following the plots of their respective films.There is also a conversion called *Stigmata* which is set in a swamp. It contains completely new monsters, weapons, levels, sound and most importantly, an original plot.

Fantasy Quake is being developed to mimic traditional role-playing games, featuring among other things a character assembler. However, now that multiplayer games have been worked out so well, the element of human interaction comes into play, possibly on even a broader scale than traditional games of the same theme – *Dungeons and Dragons* for instance – when we consider something as large as the Internet. This means that it is now possible to play a game against several different people in several different countries at the same time. One might think that because *Quake*, although now played on a worldwide scale, is still the same game with the same graphics and sounds and animation, that it will have no more character than any other multiplayer game of *Quake*. This is not true because multiplayer
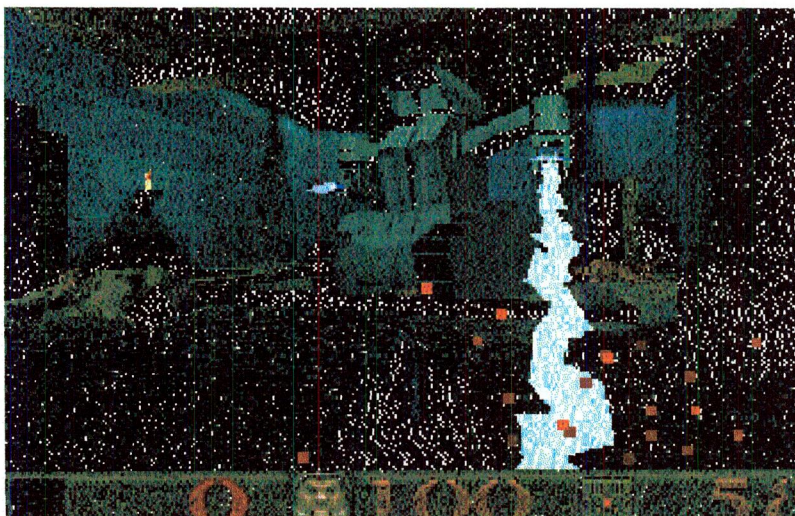

Fig 5.7

This tank is from *Terminator Quake* – another film adaptation.

It is is modelled on a tank from the film, *Terminator*. This was designed by a Quake Clan called Quake-X.

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Quake allows players to send one another messages which appear at the top of another player's screen. So people are actually talking to one another from different parts of the world in real time while playing *Quake*.

Id Software have an official site on the Internet allowing groups of five or more people to play an Internet game of *Quake*. These groups have to register with id Software and they are then declared a "Quake clan". Often these clans are teams of programmers who use *Quake* C to design their own add-ons for the game. Obviously, each clan works on the things they think will improve the game for them. For instance, two clans calling themselves Choyroth and Wedge have designed a rocket ship, capable of carrying teams of players around for a Deathmatch game. They also have a jeep, which requires a driver and room on a back platform for three passengers, one of whom can operate a mounted machine gun. There is also a group called the Klan of Khaos who have built a three-wheeled buggy for much the same purpose. None of these are designed to make the game any easier- just more interesting. It is also worth noting that at the time of writing, *Quake* C has been available to the public for only five months.

A virtual world.

Finally, the official project id Software are presently working on is called *Quakeworld* and its objective is to link the clans of the world together, through a series of Internet servers, making the Internet version of *Quake* faster. At the moment it is too slow to use effectively. However, these add-ons can presently only be used specifically. That is to say, playing a game with new features created by one clan means that it is not possible to use add-ons created by another clan at the same time during the same game. The program format is not open enough to do this. The objective of *Quakeworld* is to make this possible.

Now one clan should be able to log onto an Internet game of *Quake* with a rocket ship of

Fig 5.8

This buggy does not feature in the registered version of *Quake*. It was created by a group of programmers called Klan of Khaos.

It carries players around at high speeds. There are no features like this in the registered version.

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Now that games and their editors have become so user-friendly the room for creativity has been broadened dramatically. The technology involved, such as visual graphic effects and sound is such an asset to the games' production quality that in many ways they now surpass the traditional games in all respects.

It is now almost a necessity when designing a game to include a multiplayer option, making the game fit for use on a network or on the Internet. More importantly, game designers have realised that it is extremely important to include an editor with the game or even to do as id Software have done and release the whole programming language, allowing the public to design their own editors.

On the Internet there is a site in Nottingham, England, belonging to a programmer who has written a generic 3D game source code - i.e. the basic bones of a program for a 3D game. Its name is *Raydeal* (http://ww.primenet.com/~weirdo/raydeal.html). He has released this to the public without charge, intending any interested programmers around the world to work on it and create games using it. The rationale behind this is that he believes there is currently a slump in the computer game industry and that id Software need some competition. His sole intention is for people to be creative using what he considers to be a more versatile source code than *Quake's*. There is no motive for profit behind this particlar project, although he does claim to be using his program to prepare an actual game of his own for commercial production.

In the relatively short history of this medium, it has without a doubt developed faster than any other – this century at least. We have seen how computer games have gone from being an attempt at an interactive book (a text-based interface) to being an attempt at an interactive film (*Alone in the Dark*) and finally, to something like *Quake* which is approaching something that could be called a computer game without imitating any other medium.

It seems now that game designers have seen that people would prefer to create their own games rather than play someone else's. We have seen how versatile *Quake* has become and

now this seems to be the most important factor in the design of a computer game – how creative does it allow the player to be? *Quake C* is essentially the first computerised version of *GURPS* – it allows people to create their own games. In many ways it surpasses game creators such as *GURPS* in that it has technology on its side. This too, it might be argued, might be a negative thing – the novelty of technology has often proven itself in the computer game industry to take precedence over creative ideas. In any case, it has become clear that the most important element of a game is the player's imagination.

At this stage it would be naive to try and predict what will happen next in the computer game industry. It is, however, reassuring to see how the designers of computer games have matured enough to notice that people prefer to be creative while being entertained, rather than sitting passively in front of the screen, watching a set programme of events unravel.

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2D:	Games presented in a two-dimensional format – this often restricted the players control over the game's virtual environment. See sprites.
3D:	Games presented in a three-dimensional format. These allow the players more freedom to explore the 3D virtual environment of the game and therefore help to heighten the game's realism.
Engine:	A piece of software which makes the game run in a certain way.
Software:	Files written on a computer
Fractals:	Graphics which are broken down into their subdivisions and re-assembled to create other images at random. In this case the *Worms* landscapes were made up of several small pictures which the computer randomly re-arranged to create the final picture.
Game editors:	Programs which allow players to change parts of the game in order to create their own games.
Megabyte:	A unit of measurement for computer files. In ascending order: Bit; Byte – equal to 8 Bits; Kilobytes (K or Kb) – equal to 1024 bytes; Megabytes (Mb) – equal to 1024 Kb; Gigabytes (Gb) – equal to 1000 Mb.
Programming Languages:	These are different applications which allow programmers to construct their programs in different ways. Examples of these are the languages called *Cobol, Pastal, Turbo Pascal, C* and *C+*. id Software wrote their own programming language, *Quake C* because they felt that existing languages would not run their game the way they wanted.
Quake Clans:	Five or more people who register with id Software to play as a team in an Internet-based game of Quake. Often these are teams of programmers who invent the various add-ons for the game.
Shareware:	A software application or an edited part of the application which is released to the public free of charge. It is a standard form of market research, as well as being used to promote the software.
Sprites:	A 2D graphic which can be animated and moved around the screen. To construct a game from sprites, each one would have different properties, such as collision detection which would, for example, prevent a player's character on screen from walking through a wall.

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Collins Concise English Dictionary. Harper Collins Publishers, Glasgow. 1992.

D'AMATO, Brian. "VR the art world", Artforum. Vol. 33 January 1995. p 9-10

DELAHUNTY, Nova. "Nothing is Certain [Flesh, the Postbody and Cyberfeminism]"
Ars Electronica 96. Springer, Wien/New York. 1996. p 180 – 189.

GYGAX, Gary. Role Playing Mastery. Grafton Books, 1989.

HADDON, Leslie. "Electronic and computer games." Screen, Vol. 29, Spring 1988, p
52-73

HARCH, R. and Greenberg, A. The Storyteller's Handbook. White Wolf. 1992. p7.

HERBER, Keith, MORRISON, Mark, WATTS, Richard. Arkham Unveiled. Chaosium Inc.
1990

JACKSON, Steve. GURPS Basic Set. Steve Jackson Games 1989

JACOBS, Karrie. "Robo Babes." ID Vol.41 May/June 1994. p 38-45

KELLY, Kevin. "Yoda is My Hero", Wired, September, 1996, p168.

LOVECRAFT H.P. Omnibus 2 Dagon and Other Macabre Tales (Supernatural Horror in
Literature). London, Harper Collins Publishers, 1985.

MARKS-GREENFIELD, Patricia. Mind and Media – The Effects of Television, Video
Games and Computers. Fontana Paperbacks. 1984.

MORE, Max. "Thinking About Thinking". Wired, December 1996, p252 – 253

MATHEWS, Tom Dewe. "Clocking the censor." Sight and Sound. No. 4, June 1994 p
30-1

MEGGS, Philip B. *"Will Video Games Devour the World?"* Print, New York, Vol. 46 November/December 1992. p 24-30

O' BRIEN, Paul. *"Art and Technology"*. Circa. No. 44 Mar/Apr 1989. p15 – 18

O' BRIEN, Paul. *"Virtual Redemption: The Role of Interactive Art"*, Point, No. 1, Winter 1995. p4-7

OKI, Keisuke. *"Brain Wave Rider."* Leonardo. Vol. 28 no 4 1995. p 307-10.

PONDSMITH, Michael Alyn. Castle Falkenstein. A to Z Printing, Chicago, 1994

SOUT, Lindy. *"Good game,good game."* Creative Review, Vol. 14, January 1994, p 49.

TEATHER, David. *"Rulers of the Game."* Creative Review, v14 March 1994, p 36-7

TOLES, Terri. *"Video Games and American Military Ideology"* The Critical Communications Review, Vol. 3, 1985.

WEINBREN, Grahame-String. *"Mastery – Computer Games, Intuitive Interfaces and Interactive Multimedia."* Leonardo. Vol. 28, No. 5, 1995 p 403-8

MEGGS, Philip B. "Will Video Games Devour the World?" Print, New York, Vol. 40, November/December 1992, p. 24-30.

O'BRIEN, Paul. "Art and Technology." Circa, No. 44, Mar/Apr 1989, p15-18.

O'BRIEN, Paul. "Virtual Redemption: The Role of Interactive Art", Paul, No. 4, Winter 1995, p4-7.

OKI, Keisuke. "Brain Wave Rider." Leonardo, Vol. 28 no 4, 1995, p 307-10.

PONDSMITH, Michael Alvin. Castle Falkenstein, A to Z Printing, Chicago 1994.

SOUL, Lindy. "Good game, good game." Creative Review, Vol. 14, January 1994, p 42.

TEATHER, David. "Rulers of the Game." Creative Review, Vol. March 1994, p 39-7.

TOLES, Terri. "Video Games and American Military Ideology." The Critical Communications Review, Vol. 3, 1985.

WEINBREN, Grahame-Sting. "Mastery – Computer Games, Intuitive Interfaces and Interactive Multimedia." Leonardo, Vol. 28, No. 5, 1995 p 403-8.

Bibliography

List of software

"Alone in the Dark". <u>Infogrames.</u> – 1992

"Bioforge". <u>Origin</u>. – 1995

"Doom". <u>id Software.</u> – 1993

"Fractal Quake". <u>Modesty.</u> URL: http//www.modesty@id.com – 1996

"Quake". <u>id Software.</u> – 1996

"Rebel Assault" <u>Lucas Arts</u>. – 1995

"Warcraft II". <u>Blizzard Entertainment.</u> – 1996

"Wolfenstein 3-D". – <u>id Software</u> – 1992

"Worms". <u>Team 17</u>. – 1995

"Worms Reinforcements". <u>Team 17</u>. – 1996

List of websites

http://www.planetquake.com/quakex/termquake

http://www.primenet.com/~weirdo/raydeal.html

http://www.voicenet.com/~ntropy/clan/kok-tc.html