The Ethics of Computer Games

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2   Computer Games as Designed Ethical Systems

Let us start with a moral assassin. It all starts in a beach. I have been washed ashore. I cannot remember who I am, or how I got here. I have some shredded memories, nothing that makes sense. I am helped by a lifeguard. I follow her to a cabin. Then hell breaks lose: somebody tries to kill me. But I am better: I can use any weapon with deadly precision. I am an assassin, and my memory is returning.

My next step is to recover more pieces of my identity. I go to a bank. In the vault, ghosts from the past numb my senses. A bomb explodes, an alarm goes off, the police come. I have to get out of here. As I walk up the stairs, a policeman shoots at me. I shoot back. He dies. I read: "Game Over."

This is a brief summary of the first levels of the first-person shooter *XIII*.[1] This game puts the player in control of an amnesic assassin. The player is presented with fragments of a story that she will have to complete by following the game's linear narrative. One of the goals of the game is to reconstruct the story of the main character. Players are only presented with the fact that this character is a skilled assassin. There is no sense, at the beginning of the game, of this character's values.

Yet when players reach the the bank, they are commanded not to shoot the police. In fact, if they do so, the game will stop and force them to replay. Of course, this is a contradiction with the narrative of the game: if we are amnesic assassins, why is it that we cannot shoot the police? Why does that (unethical) action interrupt our gameplay?

Most computer games are systems of rules that encourage players to work toward goals in a virtual environment. And many computer games address players by means of a story. There are, then, two fundamental elements to these computer games: systems and worlds. These two elements have to
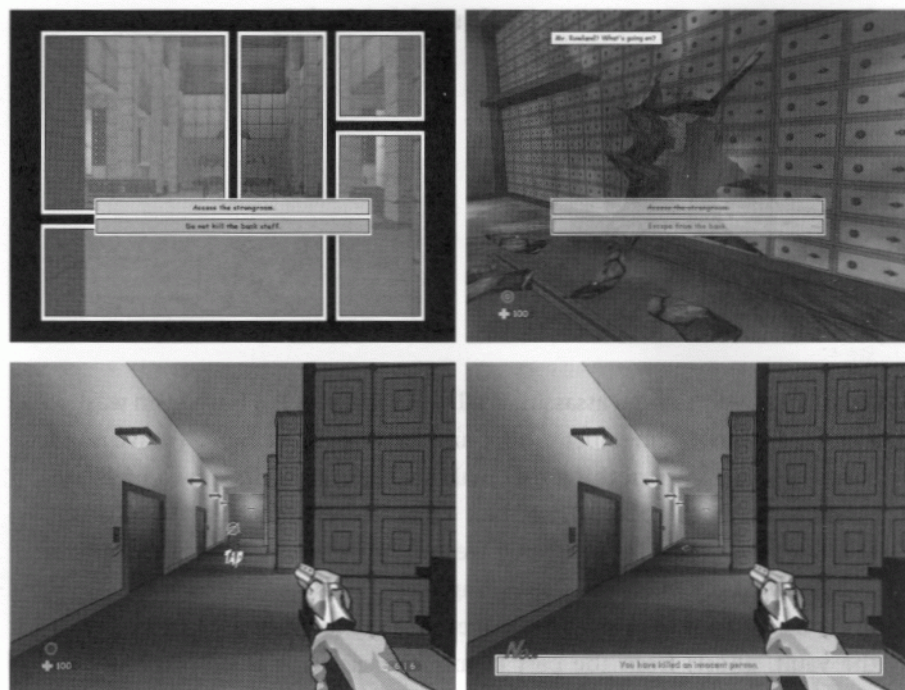
Figure 2.1
XIII: Game Rules as Ethical Design Affordances

be coherent, creating entertaining gameplay while crafting a game world. The ethics of games as designed objects can be found in the relations between these two elements.

Let's return to *XIII*: the fictional element of the game is telling the player that her character is a ruthless, skilled killer. On the other hand, the rules are forcing the player to behave in a specific way: police officers and innocents cannot be killed. There is a game rule that creates the values we play by, in clear contradiction to the game fiction. The design of rules, then, can create values we *have* to play by.

In this chapter I will explore the relations between games as systems of rules, and the worlds and fictions they create. I will argue that the representational aspect of a computer game—its visual and narrative elements— is of secondary importance when analyzing the ethics of computer games. Games force behaviors by rules: the meaning of those behaviors, as

communicated through the game world to the player, constitutes the ethics of computer games as designed objects.

But what are computer games as designed objects? Despite what it may seem, this is not a trivial question. There is a relatively large body of theoretical work that tries to address this ontological problem from different perspectives.[2] This game research tradition explains from a variety of perspectives what the specificities of computer games as cultural objects are, and how they relate to nondigital games and other forms of expression. The purpose of this chapter is to provide a definition of what computer games are and how they operate, as relevant for the understanding of their ethics as objects. This definition will illustrate how and why these games can be a challenge to our ethical capacities and to our cultural environment.

In this chapter I will be writing about concepts like game rules, game systems, game mechanics, and game design. These concepts will illustrate the decision to understand games as designed systems, a key element in the description of their ethics both as objects and as experiences. My goal is to strike a balanced definition of games that both appeals to game theorists and game designers while providing a sufficient basis for claiming that computer games are moral artifacts. To achieve that balance, I will first review critically the computer game theory approach to the ontology of games, providing a framework for defining game ontology that will then be fine-tuned by applying the perspective of game designers. The result will be a formal understanding of computer games as systems that can have embedded ethical values, an essential element in the analytical framework I am introducing.

There is a caveat that needs to be made: this chapter focuses on theoretical abstractions of what computer games are. This means that players are defined as the necessary input providers for a game to be played. I will be writing about an implied player who always follows the rules in order to achieve the goals of the game. Since the focus of this chapter is on games as systems, this approach should not pose any problem. It is reasonable and enriching to have this implied player in mind, for it tells us much about how games are designed, understood, and how they have historically evolved.

This chapter will define computer games as systems of rules and mechanics guiding player behavior toward the achievement of goals by means of

specific actions and behaviors. I will argue that the systemic core of computer games, their rules, is of fundamental importance in understanding the ethics of games. If we want to describe the ethics of a computer game, we should first analyze its rules: what the player is forced and/or encouraged to do. Only when we have described the rules of the game can we analyze the game world, the narrative, and other audiovisual elements in relation to the core values and behaviors proposed by the game system. In other words, a computer game's morals rest in its design.

Playing games is interacting with systems that have been created with the intention of encouraging their users to perform a number of actions to reach some predefined goals in pleasurable or engaging ways. As ethical beings, we have to be interested in what those actions and goals are. Thus, we need to understand why and how computer games are designed systems for interaction, and how that design can affect our moral fabric as ethical players.

2.1   Game Research and the Ontology of Games

As I have already mentioned, the question of the ontology of games has a somewhat recent but very influential tradition. The foundational work on nondigital games of Johan Huizinga,[3] Roger Caillois,[4] and Brian Sutton-Smith[5] brought games to the attention of a wide variety of researchers from different fields, and their formal concepts describing games are still present in many of the key texts of computer game studies. The cultural and economic importance of computer games, achieved in the closing decades of the twentieth century, contributed to the blooming of digital games as an academic research topic of its own, becoming a legitimate area of research in the field of game studies.

In this academic tradition, the ontological research of what games are is a common topic. Since this book is focused exclusively on digital games, despite the occasional reference to nondigital games, my ontological approach will be limited to defining the nature of computer games from an ethical perspective. Similarly, I will take into consideration only the research done on the ontology of digital games, leaving aside the broader perspective on traditional, nondigital games.

Computer game studies describes the properties that make computer games interesting cultural objects. The focus is not only the fictional layer

of games, understood as its visual and narrative contents, but also, and more crucially for this chapter, the use of interactive simulation in creating their ludic experiences. This discipline argues that computer games are not just some new kind of game, but a cultural object of intrinsic value with essentially original characteristics that calls for specific analytical approaches.

What is, then, a computer game? In one of the foundational texts of the field, Jesper Juul's *Half-Real*, a game is defined as "a rule-based system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels attached to the outcome, and the consequences of the activity are optional and negotiable."[6] And video games would then be "games played using computer power, where the computer upholds the rules of the game and the game is played using a video display."[7]

Juul defines games as objects that have a level of systemic rules, and it seems to consign to a secondary level of importance the computer game's fictional level, at least when it comes to understanding what games are. This definition covers the game as a system of rules with which agents interact, paying attention to the emotional attachment of players to games. Rules will be, in Juul's approach, the "real" element of games, connected to the fictional element, the game world. This distinction means that games can be analyzed as systems, as fictional worlds, as both, and as the ways they interrelate, implying at least four dominant modalities of understanding games. These modalities, as I will argue throughout this book, are crucial for understanding the ethics of computer games.

In the case of *XIII*, this distinction describes the way the developers approached the ethical behaviors they wanted to create: while the fictional world is focusing on the character development of a killer, the game rules force players to act in a specific way. The fictional world may describe the main character as ruthless, but players have to play as ethical beings that respect the innocents, or the game will end. The actual gameplay, the actions taken by players, is forced to be ethical by the game rules.

But before unravelling the connection between rules and virtual worlds, it is necessary to argue for the specificity of computer games from a cultural, historical perspective. What makes computer games different than classic games?

Obviously, the answer is computers. Salen and Zimmerman provide four reasons why digital games are different than analog games:[8] first of all, a computer provides games with "immediate but narrow interactivity,"[9] meaning the game system reacts immediately to player stimuli. For example, rhythm action games like *Dance Dance Revolution*[10] provide a rather narrow interaction space for players, but the game system reacts immediately to their input, thus creating gameplay based on the same principles as dance: measured reaction to rhythmic input. Incidentally, this type of game shows how narrow the interactivity can be: it does not matter how players *play* a rhythm game, if they master the dance floor with the whole range of possible bodily expressions, or if they are just barely able to follow instructions without any sense of rhythm whatsoever: what the game requires is a specific input. It does not care about how that input is actually provided, or about the aesthetics and kinesthetic elements of dance.

Second, computer games excel in the storage and manipulation of the data required to run that same computer game. For example, a game like the massively multiplayer online role-playing game (MMORPG) *World of Warcraft*[11] is a number of files that add up to 1.5 gigabytes of data, comprising a whole world of graphics and textures, plus all the other elements that make it work, from the memory management software to the client-server protocols allowing multiplayer gaming. A computer stores and manipulates that information with almost no effort, allowing the player to experience a world of vast proportions in an almost seamless fashion.

Third, the computer is capable of manipulating that data at a high speed and often without hampering the user experience, allowing for some interesting evolution of game genres in digital media. For instance, a very popular game engine[12] is the Wizards of the Coast's D20 system, which uses, in its analog version, the roll of a 20-faced die against some statistical tables in order to evaluate success, failure, and the different degrees of each. While playing a game like *Knights of the Old Republic* it is difficult to perceive that in the background the game engine is doing calculations based on a digital simulation of that engine, yet that is the way combat is resolved.

Finally, computers are very good networking machines, a feature that translates into games that can be simultaneously experienced by thousands of players, creating new types of gameplay that could not be imagined prior to the use of networked computing technology—online games,

online communities, and digital distribution channels are examples of the scale and importance of computers in turning the games they run into interesting, innovative cultural objects.

Nevertheless, there is one element that clearly distinguishes computer games from analog games and that has a strong influence in the understanding of computer games as ethical objects: when games use computers to uphold the rules, it is not possible to discuss the rules during play. Except in professional settings, nondigital game rules are often the subject of discussion among the players, resulting in unconventional rules being applied only at the moment of playing.[13] It could be said that rules in analog games are seen as negotiable institutional conditions: all the players have to agree about the rules by which the game is going to be played. Computer games *impose* the rules: they are not subject to discussion. Computer game rules are insurmountable laws the player has to acknowledge and surrender to in order to enjoy the game. The possibility of bending the rules jumps outside the formal aspect of the game and belongs exclusively to the social level. Players of a multiplayer game can discuss which rules they will implement, how they will interpret the outcome of the game, or the specific gameplay. But they all have to submit to the hardwired set of rules, which are beyond interpretation or discussion.

For instance, with regard to the classic game *Warcraft: Orcs & Humans*,[14] game designers Andrew Rollings and Ernest Adams noted that "the Orc player producing warlock units would almost always win."[15] There is an imbalance in the game due to a combination of game rules and unit parameters that provides an unfair advantage to one player over the other. And because it is a computer game, and those rules are inaccessible and impossible to manipulate by players, there is no way of solving this design problem. Players can talk and agree about rules for *how to play* the game, but that does not contradict the fact that they cannot modify these rules.

Another ethically interesting outcome of the use of computers for playing games is the "black box syndrome,"[16] which describes how digital technology applied to computer games obscures the actual presence of a system of rules that determines the victory conditions and the inner workings of the system. By not showing how the games' rules are enforced, digital games tend to strengthen the supremacy of the rules system in the experience of the game.

Nonetheless, there are examples of players overriding the obscurity of the box to see, and exploit, the workings of the system. For example, it is not strange to read dedicated players of *World of Warcraft* discussing in the official forums the differences in skill attributes that provide advantages in combinations of actions and objects. These advantages are in the 1 to 2 percent range, which is nevertheless quite significant when engaging in player-versus-player gameplay. These players are consciously aware of the complexity of the algorithmic calculations that determine their possibilities for success in that online world—other players just experience the game without requiring a deep understanding of the mathematical models that construct the game experience.

Besides their implementation of digital technologies, computer games are reasonably similar to traditional games. It is precisely the use of these technologies that brings forth some of the interesting ontological properties of computer games as formal systems: the black box syndrome, and the difficulty for players to modify rules in the best interest of a specific group in a specific situation. Computer games are just one more of the Western world's cultural objects whose ethical implications and nature have been affected by digital technologies. What has been affected is the formal nature of the game, its systemic core.

This systemic core has to be understood as the rules of the game, which have an extraordinary importance when describing the ethics of computer games. Since rules are the operational parameters that encapsulate and guide both player behavior and the nature of the virtual world, it is of crucial importance to understand the ontology of rules. What then do we mean by rules?

In Salen and Zimermann's approach, rules are "the inner, formal structure of games."[17] The properties of rules are their unambiguous, explicit nature; their commonality to all the players of the game; and the fact that they are fixed and binding. Rules have also operational values: they limit what players can do, and they also reward certain actions; they create the winning conditions and the limits and boundaries of the games. The rules of a game create the possibility of the game by being easily shareable statements that limit and reward players' actions.

Salen and Zimmerman define three kinds of rules: constitutive (abstract, mathematical rules), operational (behavior rules for players—directly experienced by them), and implicit (rules of etiquette and sportsmanship).[18]

For example, the constitutive rules of the oriental board game *Go* would be the mathematical logic and combinations that allow gameplay; the operational rules of *Go* would be those printed in the game's box; the implicit rules would be thhose created during the game experience between a master and a student, which would allow the latter to learn the game by, for instance, correcting her mistakes. In computer games, the rules contained in the code are the constitutive and the operational, while the implicit usually derive from the player repertoire and the player communities, which I will explain in more detail when I focus on the ethical player.

Game researcher Espen Aarseth defines the systemic layer of digital games as "game-structure;" that is, "the rules of the game, including the simulation rules."[19] According to Aarseth, a game is a process that has a structure formed by sets of rules and that can only take place when there are players experiencing it. The reference to the rules of the simulation is rather interesting. As it turns out, most contemporary computer games use the processing power of the machines they run on not only to uphold and enforce the rules (among other things such as facilitating player communication), but also to create a simulation of environments and/or physics. While not every game is a simulation, and therefore need not have simulation rules, it is of particular interest to note the assumption that if a game is a simulation, then those simulation rules are a part of the game structure just like the game's rules are.

An example in which the rules of the game and the rules of the simulation operate alongside each other can be taken from *Half-Life 2*.[20] In this game, the rules that determine the simulated world are at least as important as the rules of the game. For instance, there is a moment early in the game in which the player is cornered in what seems to be an industrial pool. The only way of getting out is to flood the pool so the nearby wood crates will float high enough that the exit can be reached. Players have to understand the rules of the simulation in order to solve some of the puzzles and explore the game within its rules.

Additionally, it is worth mentioning that the rules of the simulation are often limited by the rules of the game. For example, I have several times tried to shoot the nonplayer characters that try to help me in my quest in *Half-Life 2*. But it is not possible: every time I point the gun at them, my avatar immediately lowers the weapon and does not respond to the firing
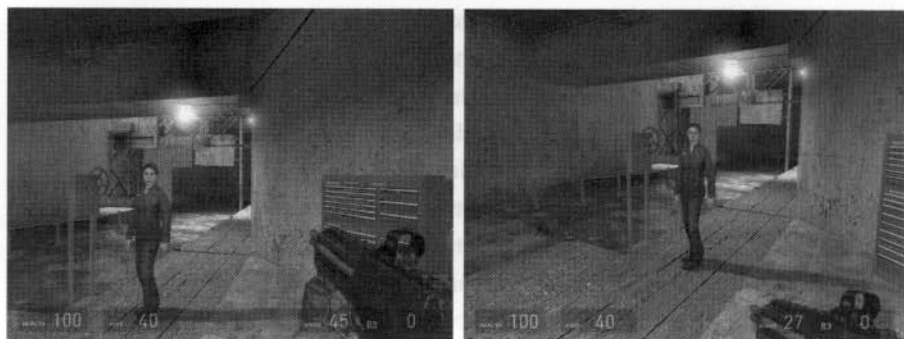
Figure 2.2
Half-Life 2: Don't Shoot Your Allies!

command. There is a game rule—no friendly fire allowed—that supersedes a simulation rule. And these types of overrulings, as I will argue later, are key elements for the understanding of computer games as ethical objects.

Up to this stage, I have focused on games and rules from a formal perspective, thus describing them merely as objects. Nevertheless, games are ontologically both objects and experiences; they are objects designed to be experienced, and they only exist fully in that process. Computer games can be described from a formal, procedural perspective, but the complete understanding of games and their capabilities is only possible when described as experiences. Those experiences have a formal, material sense that conditions the possible ways the users perform those experiences. In game research terms, games have an *ergodic* nature.

Ergodics, a term coined by Aarseth,[21] is a fundamental concept in the history of computer game research. Ergodics is the property of a system that evaluates the interaction according to some rules, most of them known by the user, and that determines a success state that the player strives to achieve. In the case of games, that process is playing. Ergodics is a structural property of an object: there are certain layers in the object that *contain* the ergodicity of the object.

What do these layers consist of? Succinctly phrased, these layers comprise the rules for the interaction with the game and the criteria for the success and/or failure while experiencing it. This statement implies that: 1) ergodic objects always have rules, and they tend to create systems with

winning criteria; and 2) those rules are hardwired in the material level of the object. These rules are discrete and nonambiguous because they enable the system to discriminate between successful and unsuccessful users. As the system we are analyzing is a state machine,[22] the instructions it runs have to be formal, discrete, and unambiguous.[23]

In the case of a game like *Deus Ex*, the game evaluates the player's interactions with the nonplayer characters and reacts in consequence. There are three possible endings for that game, and a large but limited number of distinct outcomes for different situations. *Deus Ex* is a game that takes the ergodic component that is present in every game and makes it a key element in how the game is played. By acknowledging that games are played by interacting with an ergodic structure that reacts to the input of the player as agent, *Deus Ex* proposed a branched structure in which the choices the player made would affect the outcome of the game. And those choices were of a moral nature: shall I kill the enemy, or avoid it?

Computer games, though, are not exclusively an algorithmic system of rules with which players interact, and as such these moral dilemmas have to be seen in the larger perspective of a game played in a game world. In fact, what players usually reckon as interesting in a game is precisely the world where they can play. That world is also a part of the ontology of the game, and its feedback mechanisms with the systemic layer of the game offer interesting insights for the ethical analysis of computer games.

Let's start with a general assumption: the rules of a game tailor their world according to the challenges and goals of that game. This implies that
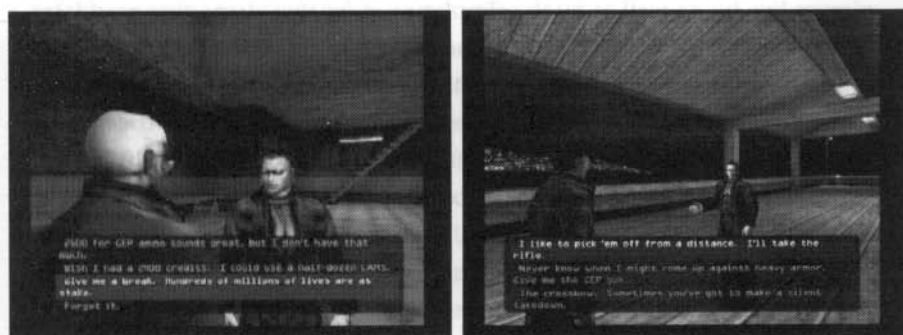

Figure 2.3
Deus Ex: Ethical Gameplay Choices

a computer game need not simulate the complexity of the world: it is enough to create a simulated world where play is interesting. Nevertheless, because rules configure the interaction possibilities in the game world, it is not possible to understand a game by only looking at its virtual world or aesthetic layers, as the world is largely determined by the rules of the game. This implies that the formal structure of the game, understood as its rules and mechanics, is to some extent accountable for the end result of the fictional world. This also means that level design and world design are also determinant when it comes to constituting the ethical values of a game, and therefore they may be considered as ethically relevant.

For example, a game like *Burnout 3: Takedown*[24] presents the players with a closed circuit in which car races take place—nothing new here. These circuits are not only designed to be dangerous, but also to be the only possible circuit in what seems to be a big city, an example of the notion of incomplete worlds that Juul applies to games.[25] In addition, these tracks have been designed to facilitate crashes between players, as there is a game rule that gives points and an extra speed boost to those players who make other cars crash without crashing themselves. The formal structure of the game—that is, the need for closed circuits where the rules of the game can be easily implemented—has determined the way the fictional racing world of *Burnout 3* can be experienced. And it has also determined that, in the competitive world of this game, making other players' cars crash is a desirable action, thus defining some actions as desirable or interesting to perform.

The virtual environments of games, then, are affected by the rules the players live by, as well as by the simulation rules that shape that world. In *Grand Theft Auto: San Andreas*,[26] some areas of the game world are locked at the beginning of the game, with the clear intent of guiding the player through a predefined gameplay progression. Nevertheless, if the player wants to explore those areas, she will be able to do so, since this game allows players to toy with the environment and game props in ways that are not predefined. So, for example, a player can climb the walls to the airport, steal a plane, and fly to those parts of the game world. But there is a game rule that states that before accessing those areas, the player has to complete a number of missions. This rule is enforced by a computer-controlled fighter jet that hunts down the player if she flies to those temporarily forbidden zones. The fictional world is limited by a game rule,

showing the intertwining of rules and fictional worlds. Rules create the game; the fictional world contains it.

The importance of this linking of the virtual world to the simulation rules is that the virtual environment where the game happens or takes place is constrained, limited, and conditioned by the rules of the simulation. That is, the simulation rules determine what is possible and what is not—without needing to explain why—in the virtual environment where the game takes place. This ontology can be explained by using Juul's concept of computer games as *half-real*: their reality is provided by the rules, but the fictional element is also of relevance in the configuration of the game's actuality, in its experience.[27]

If the rules of the game have the ontological status of reality due to their objective existence, then there must be something else in computer games that is not real. According to Juul, that element is the fictional world. The fictional world is the instantiated world in which the game takes place, and that is created by means of several props, such as graphics, sounds, texts, cut-scenes, and all the other paraludic objects (the box, the advertisements) that shape what a game is.[28]

The worlds a game creates are fictional; that is, incomplete and possible worlds where the gameplay takes place. By incomplete, Juul means that fictional worlds created by games do not provide all the information about those worlds.[29] Some games use such incompleteness as a creative asset: *Shadow of the Colossus* is set in a world about which the player knows very little, and that lack of information becomes ethically relevant, since, as I will argue later, it empowers players to act like ethical agents within a game world governed by ethically designed rules.

Rules might create ethical discourses that are then implemented in the game world. But the fictional world, despite its incomplete nature, might also create some ethical instances that are not related to the rules, but to the cultural experience of the game. For instance, the player community around the first-person shooter *Counter-Strike: Source*[30] only accepts camping, understood as the act of staying still in a privileged space in order to ambush the opponents, in certain maps, even though there are no built-in game rules forbidding, limiting, or controlling that behavior. The world is also interpreted and experienced by the player, who can afford ethical discourses into the game that are not predicted or controlled by the rules of the game. For example, take harassing newbies in *World of Warcraft*:

while there are no rules against that behavior, players tend to view the practice as undesirable, and thus try not do it, or they publicly complain about those players who do it.

Game worlds are where gameplay occurs. A game world, in the case of computer games, is either the simulation of the material conditions of a game, like in the case of computer-simulated board games, or a simulation of another world. That simulation presents both simulation rules and game rules: in fact, virtual environments are constrained by the game rules, since all the elements that are not fundamental to the game are a mere setting for the actions of the game.[31] There can be simulated objects that have no game relevance, but interaction with those objects is usually guided by the simulation rules: for example, the wood crates in *Half-Life 2* are breakable and float, but except in some physics puzzles, they have no direct role in the gameplay (understood in this case as the optimal actions taken to achieve the winning condition).

A game world is of lesser complexity than the real world. But the complexity of these worlds cannot be stated in comparison with the real world, because they are fabricated worlds largely constrained by the boundaries of the game and simulation rules. As players, we compare the virtual environment with the real world because physical reality is a reference point that makes the learning process easier. We intuitively know that falling from a certain height is bad, and so we behave accordingly in virtual environments, unless there are some clues in them that explicitly break this assumption, or if we know from our previous experience in similar games that falling is not dangerous. This comparison implies that there are actually connections made between the real world and the game world in the mind of the player. These connections are related not only to the game world as a system (the physics simulation, the level design), but also to the player as an embodied being. This will be crucial when explaining the ways a moral player interacts with a game.

For understanding the ethics of computer games, it is necessary to keep in mind that these game worlds are, in Juul's terms, "optional worlds"[32]— worlds with a fictional layer that can be called off by the players for different purposes. One study of *Quake III*[33] hard-core players[34] shows that the more expert a *Quake* player is, the less the graphics matter, as the player tunes out all superfluous visual information, getting faster and better machine performances in order to master multiplayer conflict. It could be said that rules overtake the importance of the detailed *Quake* world, and

that the players in the study focused only on the visualization of a formal system of rules. The players were only interested in the informational aspects of the computer game: playing a video game might be primarily understood as interacting with a formal system of rules hosted and refereed by a computer.

The game world, on the other hand, can also modify gameplay. That is, the rules are localized in a space that can also dictate behaviors. The game world has a certain pull over the way the game is experienced because it is the representation of the rules as well as their container. The game world is the immediately accessible system of rules information for the player. Rules are experienced *through* the game world in the process called gameplay. In the case of *Burnout 3*, the design of the game world guides and encourages players to crash into other vehicles, and specific parts of this world, like tunnels or bridges, are particularly effective since they give more points to the aggressor.

Once we have understood the importance of game worlds, it is time to briefly turn to the concept of gameplay. I will define gameplay for digital games as the phenomenological experience of interacting with a computer game, restrained by the formal structure of the game and its technological layout. The phenomenological experience of the game is what Salen and Zimmerman define as "interaction:" to interact with a system is to create meaning. The interaction we find in games is "explicit interactivity; or participation with designed choices and procedures."[35] Games are objects designed to be interacted with by accepting some rules that can/will grant a ludic experience. This design needs to bring ethical values to that experience, values that will be accepted and analyzed by the players in order to successfully experience the game.

To recap, game research has argued that a computer game is both a formal system and a ludic experience. It is possible to describe a game as a formal system that will then generate an experience when played. Given these conditions, what are the most relevant characteristics of a computer game, from an ethical perspective?

Game systems are designed systems, rules and procedures that create a ludic experience. Understanding the ethical implications of playing a computer game and how computer games can actually be moral objects requires an ethical analysis of the formal structure of the game.

Rules, defined as formal systems that arbitrarily constrain possibilities in a game, can create ethical values that are afterward enacted, interpreted,

and judged by the players.[36] The rules forming the ontological structure of the game are not only the obvious rules of the game (what is right and wrong, how to win), but also the rules of the simulation: what the world is capable of, and how the player can manipulate it and inhabit it. This ontology of games calls for an expansion of our moral universe to take into account the simulated environment where a game takes place, because it is not about how we inhabit a world, but how that world allows us to inhabit it.

Rules can have embedded values determining how the world is constituted, like in the case of *Half-Life 2* not allowing players to shoot nonplayer characters who are supposed to be allied with them. Therefore, rules are relevant for the understanding of the ethics of computer games. If games as ethical objects were only their rules, then the values imprinted and interpreted from those rules would be the ethical values of the game. But players interpret the rules and they create rules. Though playing a game is an experience patterned by a formal and fixed set of unambiguous rules, it is also an experience of evaluating the game and creating implicit rules. Computer games seem to obscure and impose the rules due to their digital nature, but players are still empowered when playing a game, and the game experience is always under the sign of those rules that are not written, but that tell us how to play the game.

This concept of empowered players explains why in any massively multiplayer online role-playing game, users who participate in "ninja-looting" tend become social pariahs.[37] When a player, individually and without permission, loots the monsters killed by a larger group of characters, her avatar's name is publicly exposed so that other players will not party with her. Players understand that even though ninja-looting is allowed by the constitutive and operational rules of the game, it is ethically problematic and so they have to create rules governing that behavior within the world.

This does not rule out the analysis of the game as an object. A closer look into the ethics of the formal system of the game can yield only a partial knowledge of what the game as an ethical experience might be. But understanding what kind of values are embedded in the formal system can illustrate how games are experienced from a moral standpoint. The formal system of rules is determined by its ergodic nature. Those rules are formal, nonambiguous parameters that include the criteria for success or failure

within the game experience, and these criteria are also of an ethical nature.

When considering games as designed systems from an ethical point of view, it is possible to conclude that those systems might have been designed with certain embedded values. Rules are restrictions that encourage behaviors and reward actions. If we want to understand the ethical nature of computer games, we need to pay attention to the ways their rules and their worlds are presented to the player. It is not only a matter of what the fictional world looks like—it is also, and more importantly, a matter of what kind of choices and constraints the players are presented with, and what these mean.

Ethically interesting games are those in which the existence of the rules predicts a game world in which ethical values can be deduced from the actual gameplay. If *XIII* fails to be an interesting ethical experience it is because there is an inherent contradiction between the game world and the system's ethics. As players, we are deprived of the ethical reflection that the fiction promised us. This process can be ultimately defined as unethical game design.

In summary, game research can be used to define a game object as a system designed to be interacted with in order to achieve an experience that is entertaining and absorbing. It is thus crucial to pay attention to the work done by game designers. Their reflection on their own practices will enlighten the theoretical approach taken by game research, and can be used to strengthen the notion that games, as designed systems, can have embedded values encapsulated in their rules and game worlds, where they are experienced by players who can morally relate to those design affordances and constraints. Besides, since game designers are responsible for the creation of computer games, it is also worth presenting an initial reflection on their responsibility regarding the ethical nature of computer games, and what types of morally driven decisions they take when creating a computer game.

2.2   Game Design and the Craft of Making Systems

Game design is a crossover discipline of many other fields, from software engineering to psychology to mathematics. We could broadly define game design as the discipline that focuses on the creation of successful ludic

experiences with the use of different arts and technologies. For understanding the ethics of computer games as designed objects, then, it is crucial to understand how game designers think about their practice, and what techniques and thoughts inform the process of creating rules and game worlds.

I will now focus on two crucial questions: what have game designers written about the nature of games as designed systems, and what are the ethical responsibilities of game designers as creators of game rules and worlds with embedded ethical values?

Game designers create an object and try to map and predict the ways its users will experience it. In this sense, game designers are somewhat behavioral engineers: they craft objects that will afford behaviors in their users. But games can transmit more than just behaviors: the rhetoric possibilities of games, from *Monopoly* to *Counter-Strike*, are an almost untapped source of political, social, and cultural commentary. Though games have traditionally been identified with the very fuzzy concept of fun, games like *September 12th*[38] exemplify the powerful tools that games provide for engaging players in critical thinking. Thus it also puts game designers in the role of cultural opinion makers, of creators with a large role and responsibility in the shaping of our culture.

Game designers face the problem of creating meaningful gameplay through formal systems that generate the virtual worlds in which gameplay takes place. For designers, a game is the outcome of a creative process, an object that will be judged and evaluated by players. Most game designers have approached the ontological question of games trying to find the key to developing successful games. The computer games industry demands success, and designers have tried to distill what makes a game successful by answering these essential questions: what is a computer game, and what is computer game design?

Greg Costikyan and Chris Crawford, two well-known designers interested in the theoretical aspects of their craft, have provided definitions that prove interesting for arguments on the ethics of computer games. Crawford defines games as "conflicts in which the players directly interact in such a way as to foil each other's goals,"[39] while Costikyan argues that games are "a form of art in which participants, termed players, make decisions in order to manage resources through game tokens in the pursuit of a goal."[40]

Games are, then, an activity for players where goals are important. Even though designers tend to praise what appear to be goal-less games such as *The Sims*[41] or pen-and-paper role-playing games (RPGs),[42] most of the theory on game design[43] insists on the presence of goals (or success criteria) in their definitions: games tend to have goals, and if they do not, players will most likely provide them. In Crawford's definition, the presentation of the goals and the different strategies for succeeding are limited to stating that games consist of conflicts that need to be resolved by the players, using their creativity. These conflicts, in general, set players in opposition to one another, meaning either that single-player games are an anomaly, or that the game system in itself is a player, an opponent in the field. Costikyan solves this problem by not constraining the conflict to players, but presenting the conflict in a more abstract way. In any case, games have goals in the shape of challenges that have to be solved by players.

These two definitions include as well a crucial element for the understanding of the ethics of games: the responsibility of the players. Players are present in every game, but their presence is oriented toward their decision-making activities within the game experience. They decide which weapons to use in *Counter-Strike: Source*, or how to hit the controllers at the right time in *Dance Dance Revolution*, whether dancing or just sticking to the most effective strategy for achieving points. In clearer terms, a player's role in the game is to make choices. Games present a delimited set of choices to players, who have to find strategies, mostly optimal but in cases also aesthetic, to achieve these goals.

Following this same line of thought, game designer Raph Koster has compiled a list of the characteristics of games that summarizes the previous definitions:

- [Games] present us with models of real things—often highly abstracted.
- They are generally quantified or even *quantized* models.
- They primarily teach us things that we can absorb into the unconscious as opposed to things designed to be tackled by the conscious, logical mind.
- They mostly teach us things that are fairly primitive behaviors, but they don't *have* to.[44]

Koster suggests that games are systems that are quantified or quantized—similar to what the concept of ergodics implied, games have the rules for success built into their systems. If ergodics meant that computer

games are systems with built-in rules for their manipulation and the evaluation of input, Koster's approach considers games as systems that use algorithms and computer code to model a reality, thus converting the act of playing into the process of interacting with that model in ways predefined by the tools used precisely to simulate the real thing as a model.

These systems simulate reality, albeit a highly abstracted one. The fiction of games has its roots in a model of the real world that is present in the ergodic core of the game; in other words, there is a relationship between the game fiction and the rules that are determined by the game's ergodic system. In the game *Manhunt*, for example, the fictional world in which the game is set simulates the grim industrial landscapes of a modern city, but that city is not totally open for exploration, so in fact the game world as experienced by the player is rather narrow. Furthermore, the model of those industrial landscapes is configured to enhance the game's gameplay: there are plenty of hiding spaces, shadows, and, in some situations, predefined optimal routes through which the player can actually sneak up on enemies and slaughter them. Conditioned by the design of its space, there is no other possible way for a player to inhabit the world of *Manhunt* than that which is sanctioned by the model—in this case the game world constrained by the game rules. To play *Manhunt*, to inhabit that world, is to play in a limited universe where the only means of interaction is savage murder. And, as I will argue later on, this makes *Manhunt* one of the most interesting games as an ethical experience.

Returning to the work of game designers, there seems to be an agreement on considering games as systems modeled with built-in success criteria, experienced by players who have to overcome a series of challenges by manipulating the system in order to achieve certain goals. A game designer takes an ideal model of players into consideration when creating a rule system, which has to ensure a successful experience and generate an engaging world where the player is voluntarily forced to follow the steps the designer plots.[45] A game designer is both an architect and an engineer, someone who lays the foundations of an experience, but who gets her hands dirty with the building itself by designing the rules and the success criteria. A game designer creates artifacts that are experienced by players in search of a particular emotional, rational, or moral outcome.

As Langdon Winner[46] has argued, artifacts can have political affordances. I am using the concept of affordances in the same line as Norman: "the term affordances refers to the perceived and actual properties of the thing, primarily those fundamental properties that determine just how the thing could possibly be used."[47] These "perceived and actual properties of the thing" actually have ethical properties too, for the design of an object's use is ultimately decisive in how we experience that object. Games can have ethical affordances because they are designed *and experienced* by moral agents immersed in specific cultural situations and times.[48] The game designer is responsible for most of the values that are embedded in the system and that play a significant role during the game experience, in a similar way as industrial engineers are responsible for the proper functioning of the objects they create.[49]

This does not mean that designers are exclusively responsible for the entire value system of a game. As a matter of fact, their ethical responsibility is rather limited: a designer is responsible for the object, but the players and their communities are ultimately responsible for the experience. What ethical values a designer hardwires in a system are only relevant when seeing the game as an object—when it comes to the act of playing, and being a player, those values are only relevant if they directly affect the experience. For instance, the developers of a game like *Counter-Strike: Source* are not responsible for the levels and content that players may create using the software development kits distributed by the developers. In the case of the *Counter-Strike* modification *Velvet Strike*,[50] a group of players decided to implement the game's spray function to flood this first-person shooter with antiwar and pacifist graffiti, in a subversion of the game's dominant discourses. The choice of implementing ethical discourses in the game was open to players, and the Velvet Strike team did use it to subvert the main discourse of the game.

Game designers and game researchers agree that ultimately, games are systems. That is, from a formal perspective, and ignoring the *act* of playing, games are a set of unambiguous rules projected to the player and designed to create a user experience. The role of a designer goes beyond implementing the rules: a designer has to create the rules and the settings and the props for the activity of playing, predicting also the strategies and techniques players might want to use to achieve the given goals. Game designers have to create gameplay.

Figure 2.4
September 12th: Winning is Not Playing

Sid Meier defined gameplay as "a series of interesting choices,"[51] a popular notion in the game design literature. Even Rollings and Adams built their formal definition of gameplay on Meier's classification: "one or more causally linked series of challenges in a simulated environment."[52] Choices are the core of game design. The designer's task is to create a space of possibility, plotting a number of decisions the player has to take, from which her strategies originate. A designer presents these choices to the player, usually with clues as to which choices are actually better than others for achieving the game's goal. But these choices are only created and presented by the designer, and thus they exist exclusively in the game as object. It is up to the players to understand these choices as relevant, and make them. Players are responsible for the choices made, and designers are responsible for the ways these choices operate within the game system.

Designers seem to have, then, responsibility over the way their systems are experienced by players. For example, the graphic adventure *Grim Fandango*[53] presents the player with the challenge of navigating through a

story that can be solved in only one way, following one linear path. On the other hand, the more recent *Fahrenheit*[54] presents the player with the same genre conventions, but a branched game architecture based on reaction to player's choices makes players think about the consequences of their decisions. In *Grim Fandango*, the game designers are ethically responsible for how they limit the players' choices: there is one fixed path, but players should not get stuck, for example. In *Fahrenheit*, designers are responsible for the choices given to the player, and how those configure the experience of the game.

In computer games, the player must believe she is free when she is actually not; she must also believe in the inevitability of the choices she is presented with. What game designers do is manipulate this dialectic, presenting the choices they offer as the only possible solutions for the player to take into consideration. Games are systems in which we are voluntarily immersed with the clear goal of being manipulated—we believe in the freedom the game designers give us in order to achieve the successful ludic experience.

A computer game like *September 12th* plays with these conventions in a way that illuminates the understanding of the ethics of game design. In this game, the player controls what seems to be a sniper crosshair that can scroll through a simulated Middle Eastern village where civilians and terrorists move freely. The player will try to shoot, most likely at a terrorist. Then there is a conscious break of the game rhetoric: it is not a sniper rifle but a missile launcher that the player is using. When the missiles hit the village, terrorists and civilians die. For each civilian dead, a group of other civilians will gather, mourn, and then transform into terrorists. The game has no end. By removing the winning condition and manipulating the ergodics of the simulation (the action that could lead to a conclusion of the game is actually punished by multiplying the enemies), *September 12th* makes a powerful ethical statement: the only way of surviving this game is not playing it . . . but not playing it means letting those simulated terrorists "live." The Brechtian[55] destruction of the convention and the illusion implies a strong ethical discourse, a discourse that limits the choices given to the player via a conscious manipulation of the game ergodics and the fact that games tend to have winning conditions, and need to be played to win. In *September 12th* there is no victory, and the most valid strategy is not playing.

Game designers have reflected on the ethics of the objects they produce, paying attention to these moral issues as they are related to the media attention that computer games have attracted. Some game designers have even elaborated on how to apply ethics to the intended experience of the game. Chris Crawford points out the main reason why ethics is an interesting parameter to consider when designing a computer game: "the fascinating paradox of play is that it provides the player with dangerous experiences that are absolutely safe."[56] Furthermore, "the sense of underlying safety amid horrific dangers is an irresistible allure in a movie . . . games should do the same."[57] Play is engaging in an experience based on the controlled subordination of the player to a game's system of rules and the virtual world it provides—that is, engaging in a world that is not *real*. This lack of reality is perceived both as the great advantage of games and its great danger. Much of the research done on the effect of computer games on their users[58] shows a related concern: the "unethical" actions that take place in a game, because they are not real, desensitize the users to the real consequences of those same actions. I will formulate a critique of these analyses from an ethical theory perspective in chapter 6.

What Crawford calls for seems to be what Juul defines as the emotional attachment to the outcome:[59] we enjoy mastering a game, and we might get sad or disappointed when we lose. The experience of the game is so real that it affects our well-being. That experience is mediated, encapsulated in a fictional environment—the game world. The choices we take, our actions, all take place in the world of the game. They are *real* actions that take place and affect a ludic environment, a virtual world where interaction is limited by game rules. A game gives us the possibility of engaging without risk in ethical decision making in which we would otherwise never engage. From this point of view, the choices the designer creates in the game do not suppose any kind of moral risk for the player, as they are only relevant in the game world.

In multiplayer games like *Counter-Strike*, players usually die. Furthermore, the less skilled the player is, the more she dies. And even though there is a penalty for dying—waiting until the game round is over before being able to play again—death is quite safe, since it only means a temporary inability to interact with the system. The player's choices and actions in a

game are real, because they have influence in the interaction with the state machine. The actions are real as well, but they take place and have consequences in a virtual environment and on their users, placing the player in an optimal space for exploring the possibilities of the system.

Rollings and Adams discuss ethics and the ethical role of the designer from a wider perspective. Without contradicting Crawford's reflections on the assumed safety of the risks in computer games, these authors do place a certain moral responsibility on the designer: "as designers, we are the gods of the game's world, and we define its morality."[60] Game designers should consider how the possible means of winning the game are presented to the player, and the nature of those choices, as they set the moral tone of the game. By stating this, Rollings and Adams are effectively extending the moral responsibility for the design of the game as an object to the developers. Their perspective empowers them, at the cost of, at least rhetorically, placing players in the role of ethical puppets with little judgment about the actions they are taking. They seem to deny the possibility of the player to actively participate and elaborate on the ethics of the game experience.

Rollings and Adams also try to define and categorize what they call "moral challenges"—that is, those choices the player has to make using her moral reason.[61] In their praise of *The Sims* they argue that this game is interesting because it leaves the player the freedom to self-evaluate the moral reasons for her choices. The problem is that Rollings and Adams create only one category of decisions that can be made in a game and that could be labeled as ethical, and those are the decisions that imply meta-ethical thinking by the player. While there are certainly those kinds of games in which the choices given to the player are those of an ethical nature, the ethics of games cannot be reduced to a single set of morally engaged challenges. The ethics of computer games do not necessarily depend on the nature of the choices presented to the player, but in the whole set of design and gameplay practices games encourage.

Raph Koster's work offers insights on the nature of the formal system of the game, which can be used to understand the ethical role of designers, and overcomes these criticisms in an elegant way. In Koster's model, fiction plays a secondary, yet quite important role: "Players

see through the fiction to the underlying mechanics, but that does not mean the fiction is unimportant."[62] Koster states that the fiction is an important part of the game, but if we need to consider them as artistic objects, then "the art of the game is the whole,"[63] and that is so because what constitutes games is a core of game mechanics and what Koster calls a "dressing," a fictional world.[64] Koster's perspective is that of integration. It is not enough to look at the fiction; we also need to look at how the game's formal system is designed, and how that affects the game as a whole.

Nevertheless, Koster's approach is somewhat lacking because it implies that ethics are a semantic quality[65] of the game, while they have much more to do with the ontological nature of the game, as well as with the phenomenological experience of games. A game is not exclusively an object to which we can assign certain semantic values, even if we can do so to its formal system. A game is the experience of a system by a player or players in search of achieving goals that are coded in the game. Any game presents design affordances and constraints, some of which can be of an ethical nature. The designers are responsible for those affordances and constraints, since their task is to create interesting interaction modes in virtual environments that challenge players.

A game is a device created with the intention of providing a user or users with a series of challenges and the tools to conquer those challenges, limiting them by a set of rules hardcoded in the design. This design has to be invisible: the player has to be offered the feeling of freedom, but the designer must make clear which paths and choices are offered to the player. Computers are used to exert force on the player by their rigid implementation of the rules of the game and the limitations, constraints, and affordances of the game design.

Game designers are ethically responsible for the ways they have created the formal system of rules; that is, according to the behaviors they want to encourage in players. The rules of games are strong and constraining, formal models that force users to behave in certain ways by rewarding or punishing them. Designers are responsible for those player behaviors their game design encourages as a formal system.

Game developers define the products they create as objects that create experiences by limiting players' behavior, and by encouraging behavioral strategies that are immediately rewarded by the system itself.

In this sense, designers aspire to guide their users with an invisible hand through the limited possibilities of the world they present to them. The task of the developer, then, is to create behaviors in players by means of constraining and encouraging their actions. This task is, almost by definition, an ethical task, and as such game developers have to both be aware of and bear the responsibility for the ethics of computer games as designed objects.

I have presented the basic arguments for understanding games as designed objects, using concepts from computer game research and from computer game design theory. I have argued that computer games can be understood, from a formal perspective, as systems of rules designed to create a game world with which players will interact in interesting ways. Those interactions will be regulated by the game rules, which allow or disallow actions in the game world, and reward or punish accordingly. Game worlds are fictional, while game rules are real—and the uniqueness of games as designed objects is that they are ergodic: they include as part of their ontology their rules for use and success criteria.

So what are games as designed objects? Computer games are systems of rules that create and are experienced through game worlds in which the rules, a syntactic element, are often coupled with a fictional, semantic layer, in order to communicate with the player the ways in which she should successfully interact with the system. These rules are also coupled with a system of rewards and punishment for actions that guide the player experience. A computer game is also the space of possibility for player interaction created by those rules in that game world.

All these elements are essential components of games as designed systems created for ludic interaction. I will now explain in more detail how can we understand the ethics of computer games as designed systems, both in relation to what was presented in this chapter, and the larger theoretical approach of this book. Understanding games as ethical objects will also be of crucial importance when prescribing what good game design is and how it can be achieved. For now, though, it is enough to understand that games are designed systems for interaction that create a game world ready to be experienced by a player. The rules we play by in those worlds confirm the interesting aspects of computer games as ethical objects.

2.3   The Ethics of Computer Games as Designed Objects

So far I have defined computer games as objects, focusing on how they are systems of rules and means for interaction that create a game world, which players will experience in ways predetermined or preconceived by game designers. I will now present the conditions for understanding games as moral objects and what limits we might draw when considering the ethics of computer games. I will also analyze the main argument for considering games as moral objects: that they can have ethical values hardwired in their design, which condition and affect the player's experience.

The first question to ask is: can all games be considered ethically relevant? In other words, do all computer games, by nature, create ethical issues that need to be explained, addressing their formal properties as a designed object? If the answer is "no," a logical question follows: which games can be considered interesting moral objects, and why? I have already argued that for understanding the ethics of computer games it is necessary to pay attention both to the game world and to the game as an object, to the system of rules and mechanics. My approach has been inclusive: not only is the game world subject to ethical analysis, but also to the set of rules as a pattern for behaviors. As a matter of fact, we need to analyze games as systems in order to define the ethics of games as objects.

I have suggested that we have to extend the moral responsibility of computer games from the fiction to the rules, from taking into account exclusively the game world to including the game system and its design. Of course, this implies that computer games such as *Tetris*[66] or *Space Invaders*[67] are ethical objects, because they have rules. But the rules of *Tetris* or the rules of *Space Invaders* do not afford any kind of ethical values that have to be enacted, interpreted, or experienced when playing the games. Thus, these games are not interesting from an ethical perspective.

Comparing these games with a title that clearly calls for moral reasoning, like *Carmageddon*,[68] shows the conceptual difference between these two types of experiences. *Carmageddon* places players in a world where the meaningful, rewarded action is to run a car race, but with a twist: running

over pedestrians will grant extra time and help achieve a higher score. The rules of the game *afford* certain behaviors that are culturally considered unethical. Similarly, *Grand Theft Auto: San Andreas* is a game about carjacking, crimes, and violence, in which having virtual sex with prostitutes is rewarded with extra health.

What makes both *Carmaggeddon* and *Grand Theft Auto* ethically interesting is that the rules afford player behavior that is violent, and player behavior that is not violent. In *Grand Theft Auto: San Andreas*, the player can only totally complete the game by performing vehicle stunts that are rewarded with points and completion percentages, among other harmless collection activities. And it is possible, though quite difficult, to play *Carmageddon* without actually running over any pedestrians. Therefore, both games can be understood as games that might have unethical affordances, but that are not necessarily unethical—it depends on the player's perspective and experience.

I will define an ethically relevant game object as a game in which the rules force the player to face ethical dilemmas, or in which the rules themselves raise ethical issues. An ethical game as object presents a game world that is ethically influenced by the rules in the way it is presented to the players. In other words, to understand the ethics of computer games as designed objects, we need to analyze first the rule system, then how those rules are actually experienced by the player and mediated within the game world.

Let's take a nondigital example: a game like boxing can be ethically questionable because the only way of playing it according to the rules is by hitting another human being. The rules are there to make the game possible, for it would otherwise be sheer violence. Yet those rules encourage controlled violence toward another person with the goal of knocking them down. It would be possible to argue that boxing is a game that raises ethical questions due to its rules.

On the other hand, a game like *Grand Theft Auto: San Andreas* raises ethical questions because of its game world and how we can play in it. Not, as it would seem at first, because of the representation of violence and urban decadence, but because of the ways the game as a system allows for player interaction within the game world. It is true that players are encouraged to interact with the world of *Grand Theft Auto: San Andreas* by means

of what we would consider simulated unethical acts, but as a matter of fact, crime is penalized in the world of *Grand Theft Auto*. Committing a crime in the streets of San Andreas might raise the awareness of the police, and if the player is caught, then she will lose some money and all of the weapons she was carrying, which is a considerable gameplay penalty. Thus the rules of the game modify the player's interaction with the world, because if the player wants to survive, she has to take into account the police punishment. It is not a game about gratuitous violence, for each crime has a punishment.

How can we then analyze games as moral objects? The ethics of games are related to the ways players experience them, so it could be counterargued that considering games as moral objects is futile—the players will ultimately make the experience moral. This counterargument does not explain why some games are more prone to the construction of complex ethical discourses than others, and why abstract games[69] tend not to create ethical discourses (though remember that player communities can always create ethical discourses out of any game experience). There is something in games that cues the ludic experience, and makes it successful. That something is contained in the intertwining of the rules and the game world, in the space of possibility. As the space of possibility is partially defined prior to the game experience, and it is the outcome of the design process, this is where the ethics of computer games as objects has to be found.

Let's return to *XIII*: the game rules do not allow shooting the police, and thus there is a constraint in the player behavior, a constraint that clearly enforces an ethical discourse. To put it in the terms I have been using, *XIII*'s space of possibility is delimited by a set of ethical values afforded in the rules, which constrain the player's experience of the game world. Therefore, it is not correct to say that the *XIII* game world contains ethical values; neither is it correct to say that the rules of *XIII* are the embodiment of that specific ethical discourse. *XIII* is a moral object because it creates a space of ludic possibility that is determined by a set of ethical values.

As I have already stated, not all games are moral objects. Abstract games, which include a vast number of different genres and gameplay types, often cannot be considered moral objects because understanding their rules or their game world or both, from an ethical perspective, is an exercise of

interpretation of the game world. Janet Murray read *Tetris* as a social allegory.[70] But it is a metaphorical interpretation: it is possible to play *Tetris* without understanding it as a moral object; furthermore, the possible "ethic" of *Tetris* does not affect gameplay, nor does it come from gameplay. Therefore, while it could be valid in some contexts to understand *Tetris* as an ethical object, the game is not ethical from a rules perspective. And even so, understanding *Tetris* as an ethical object is not productive in terms of explaining the ethics of computer games, or what ethical ludic experiences may be, since this understanding is, as I have said, a metaphorical reading of the game world.

This is not to say that it is impossible to have an abstract ethical game. The way the game system is designed, and its implications for the participation of different agents in the game experience, can bring an ethical dimension to an abstract game. Since game systems can be designed with embedded ethics, it is possible to think about abstract ethical games, though these are not common, and will most likely be confined to multiplayer games. So far I have not found interesting examples of ethical abstract games, but there are some examples that point at this possibility. Thinking about the online game *Cursor * 10* and its core mechanic,[71] based on cooperating with oneself in different iterations of time, the idea of a game in which players are faced iteratively with the consequences of their previous actions could possibly be an approach to abstract ethical games. In fact, it could be argued that *Cursor * 10* can be played as an ethical game, given the sudden detachment from the former self that the game encourages. Nevertheless, that would be another application of a metaphorical analysis of games as ethical experiences. So for now, it suffices to say that although it is not unthinkable that abstract games can be ethical objects, there are no convincing games of this kind yet.

With this in mind, I argue that the games that can be considered moral objects are those in which ethical discourses and values can be found embedded in the practices suggested by the rules and that take place in the space of possibility. If the space of possibility of a computer game can be analyzed using the tools of ethics, and if that analysis is corroborated by actual gameplay, then we can say that a specific computer game is a moral object.

Let's take two examples: the game *Manhunt* presents a set of rules that encourages violent acts, and the fictional world is geared toward
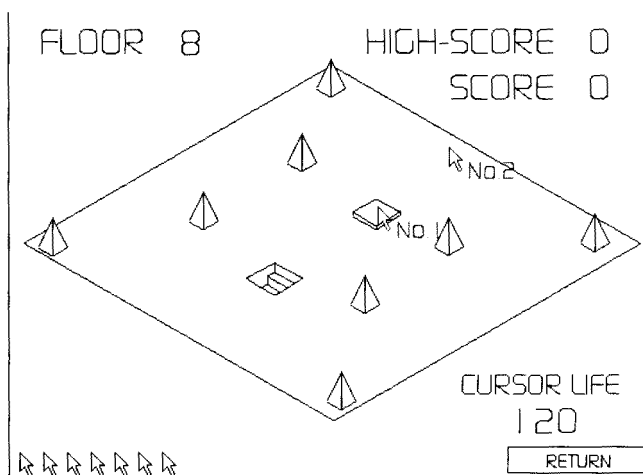
Figure 2.5
*Cursor * 10:* Single-player or multiplayer?

encouraging that gameplay. The game setting puts the player in control of a morally despicable character who is forced, by some mysterious deus ex machina, to commit unspeakable acts of cruelty in order to escape alive from the making of a snuff movie. And, in the fictional world, the player has no other choice: it is either kill, or be killed. *Manhunt* works ethically as a mirror structure, for the game design, the rules, and the levels are constructed to reflect this moral situation. There is only one way of winning the game, and that is to comply with the instructions given in the fictional world and commit these crimes. Both the levels and the rules are designed to encourage those actions while making any other choices impossible for the player. By creating a game world with a set of rules and a level design that limits the player's choices, *Manhunt* creates an ethical experience.

On the other hand, a game like *The Sims* can also be understood as a moral object, but in a significantly different way. While *Manhunt* creates a moral experience by constraining the players' actions accordingly to the fictional world, *The Sims* offers a large degree of freedom to the players—the rules only determine the context in which actions have game meaning, and the game system reacts to them. But this freedom is encapsulated precisely by the rules. While playing *The Sims* I decided
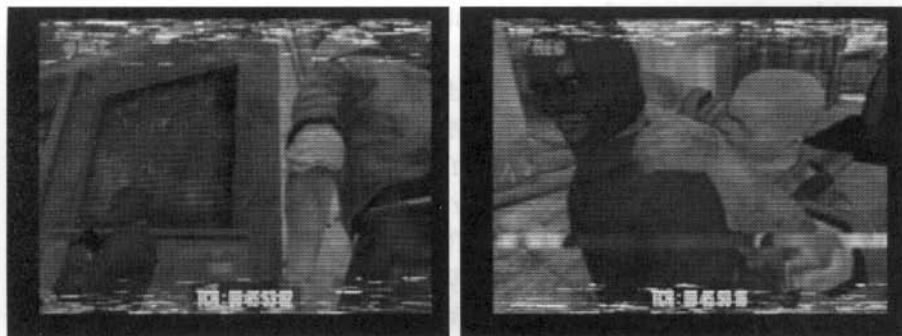
Figure 2.6
Manhunt: An Ethical Game about Murder and Gore

to create an avatar heavily inspired by the grunge rock musician Kurt Cobain. My avatar would have a large amount of money and a big house, but he would do nothing at all except lie on the sofa, play guitar, eat junk food, and drink alcohol. At some moment during this experience, my avatar refused to comply with my instructions. He started cleaning the house, adopted a healthier diet, and slept more. In the world of *The Sims*, the rules are there to enforce a certain ethical system behind the simulation, to the extent that the player is relieved of her interactive duties if the avatar's simulated existence cannot be accepted as a part of what the simulated environment ought to be, according to the rules and their ethical affordances.

Nonetheless, recognizing that the rules of a game can present ethical affordances is not enough to understand the ethics of computer games because this perspective does not take into account that players experience games. Yet it is crucial to acknowledge that the ethics of a game are partially determined by its system, by the game as object. This may also serve as a design paradigm for the development of games in which ethics play a coherent role in the gameplay, as I will argue later on. Games are not only objects, but also experiences triggered by that object. It is necessary to understand not only which games are ethically interesting, but also how we can understand their moral nature. Given the condition that ethically relevant games are those in which moral values are embedded in the space of possibility, it is necessary to understand how that space of possibility has an ontological existence,

and how it relates to the phenomenological nature of games as experiences.

This perspective implies a latent distinction between games as objects and games as experiences[72] or, in Aristotelian terms, the *potentia* and the *actio* of games.[73] I will explain this difference more carefully: I can take the rulebook of any game, like chess, and read it. Holding that book in my hands, I can say: this is chess, and I am not making a mistake. On the other hand, I am neglecting not only the whole history of chess, but also many things that are a part of the game but that are not in that rule book: the physical presence or absence of the players, or the sudden glimpse of a flaw in the opponent's strategies. A game, we can agree, is not only its rules, its material aspect, but also its experience—the act of playing the game. A game is both its rules and the practical expression of those rules.

According to Aristotle's metaphysics, things present a potentiality, the capability of reaching a different and more complete state, which would be the actuality of that thing. The classic example is a boy being the potentiality of a man. In computer games, as in any other kind of game, this would mean that the rules of a game contain the potentiality of the game. But only when the game is played can we actually say something about the game as such. In a game like *Tetris*, the rule set (geometrical pieces fall down at an increasingly fast pace, and if the screen is filled with pieces, the game is over) presents the conditions for the game that the players have to accept in order to play. The rule set, on its own, contains the ways the game can be played, but only the presence of a player will activate those potentialities and make them become a game.

The potentiality of the game is then a designed formal system that predicts a certain experience by means of encouraging users to make some choices using predetermined game mechanics. We can analyze the rules of a game as ethical objects because they constitute the potentiality of a game. Nevertheless, we cannot say that it is the game's rule set or its design that sets its ethical values. A game is not the object we describe when we write about the rules and the game world, but the experience constructed by the interaction of a user with that world. In order to be able to understand the potentiality of a game, or a game as an object, we need to have experienced it first as a process. The understanding of games as objects

provides an extraordinary insight into the formal aspects of the ethical capacities of games.

The distinction between potentiality and actuality provides an adequate framework for understanding games as objects without ignoring their procedural nature and the presence of players experiencing the game. I define the potentiality of a game as the material conditions of a system composed of rules intended to create a ludic experience. In other words, a game's potentiality is its formal system of rules and the game world it can create, without any agent experiencing them.

This game object has the potentiality to become something different yet related, and more complete: a game experience. The game experience is different from the game object because it presents a moral agent interacting with it, and it ceases being purely an object to become a procedural experience. And it is more complete because a game cannot be understood fully without being played. And so, a game as object can be understood as the potentiality of a more complete and different ontological entity, the game as experience.

We can use an analogy from architecture to explain this concept: blueprints predict to a large extent how the building will look and how it will be used. By looking at the blueprints, the skilled eye can imagine the building's possibilities, its constraints, and how those are projected into a concrete experience of architectural relevance. On the other hand, there are things that the blueprints do not predict. There are building uses that are not predetermined by the architect's blueprints, but that evolve from the use of the space. Similarly, there are uses of computer games that are not predicted by the formal system of rules, even though a skilled eye can predict to a certain extent, from the system of rules of the game, how it is going to be experienced by an ideal player.

Then again, the knowledge of games we can infer from their formal system is too limiting—the system of rules and the fictional world of the game say little or nothing about how the game is experienced, how the players will actually act, and what kind of behaviors will be enforced or will be considered unethical by the community. Even though games are objects, even though we can think and analyze the *potentiality* of the games, our inquiries must not stop there. We have to experience the games; we have to see them as *actuality* in order to understand what kind of ethical experiences they create.

Computer games can be moral objects because they fulfill a number of material conditions that predispose their users to experience a certain ethical reflection or behavior, because of their system of designed and engineered rules that create a world in and with which agents interact; a system designed to create a certain kind of experience determined by how the interaction is presented to the player and how the system reacts to the user's input.

Rules create affordances and constraints for interaction. The affordances of a designed object optimally show how the object should be used, and what its properties are. For instance, it is in the rules of *The Sims* and the therein-contained impossibility of playing a depressed character where we can find ethical affordances that determine the game values from a moral perspective—where we will find a first clue to understanding how the game was *intended* to be experienced. In the context of ethics, affordances have to be understood as those design elements that narrow any action the player can take. In the case of *Manhunt*, the level design in general presents a number of affordances cuing the player to experience the game in a certain way: it eases the practice of the most brutal murders, which yield a better survival probability, by strategically placing some architectonic spaces and objects where nonplayer characters' paths are. It could be said that levels are designed to facilitate these simulated brutal murders, the core of the ethical gameplay of *Manhunt*.

Computer games are designed with a set of affordances and constraints that can create or be determined by ethical values, thus making the game a designed moral object. These ethical affordances and constraints constitute the game as an object, the formal system of the game and the game world it creates. The formal system of a game is its rules, both the game rules and the simulation rules. The ways those rules control the player's interaction with the system and the response to that interaction can be ethically relevant.

But games as objects are not exclusively their formal systems of rules. In considering what is relevant when analyzing games as moral objects, it is fundamental to include the game world. For a computer game to be ethically relevant we need a simulated game world with which the player can feel a certain affinity. In other words, the representational layer of the

simulation needs to be familiar. I am using "representational" to define the semantic layer of the simulation (what Juul would call the fictional world); that is, the signs that make it possible for the player to understand that world as coherent within the gameplay.[74]

For a game world to be ethically relevant, the representation and the actions afforded to the player raise ethical issues by means of their relation to the perceived real world. Let's take the infamous "prostitute hack" in *Grand Theft Auto: Vice City*[75] as an example. In this game, a player can have virtual sex with a prostitute, thereby gaining some extra health, and then kill her to recover the money. Here the simulation layers and the representational layers of the game raise the ethical issues: the morals of the rules as well as the morals of the representation. It is true that this is, from a formal point of view, an action allowed by the rules of the game, which gives the player a game-relevant advantage. Nevertheless, it is ethically questionable because of what it simulates and how it communicates that simulation via the representational layer.

A game could also relate to players in ways in which the ethical issues arise from the game situation, and not the rules or the system of the game. The game machine *Painstation*[76] is a total modification of the game *Pong* that has to be played using a specific cabinet. This cabinet is equipped with instruments that, if a player fails, will inflict a moderate amount of pain. *Painstation* is an example of how to embed ethical values in a game of abstract content. By physically punishing the players that commit mistakes, this game mod gives a moral dimension to its design. What raises ethical issues is not the rule system of the game, but the physical punishment that players suffer when failing one of the goals. In other words, it is not the rule system that raises ethical issues, but the particular implementation of the game cabinet.

Let's return to *XIII* and perform a brief ethical analysis of the game as a designed object: the game fiction presents to the player the character of an amnesic assassin. The player controls this character. There is a rule that states that if a police officer is killed by the player, the progression in the level will be stopped and the player will be forced to start from the beginning. Thus, on a first layer, there is ethical meaning in *XIII* as a designed game: a rule controls behavior on grounds of moral reasoning.

If we take into consideration the relations between the game world and the game system, the game shows a lack of coherence: if the player is an assassin, why can't she shoot policemen? Why is the game system evaluating the way the player experiences the game world? This contradiction shows how a rule can have ethical values. It exemplifies the prevailing of rules over game world representation in the ethical analysis of games. But the contradiction is suggesting that we need to take another step: if the police-shooting rule is ethical, yet it contradicts the game world fiction, how will players experience the game? In other words, is it enough to say that because a rule can be interpreted as an ethical statement, the game design is ethical?

I will answer these questions in more detail in the following chapters. For now, it suffices to say that an ethical game design can only be so if the values embedded in the design are coherently presented to the player. A player of *XIII* can feel that the police-shooting rule is actually depriving her of her moral reasoning, of her experience of the game world as an ethical agent. The design has values, but are those values creating an ethical experience? The answer is no, because players are deprived of their ethical thinking capacities. Morally embedded game design is a necessary but not sufficient condition for the understanding of the ethics of computer games.

In this chapter I have argued that the ethics of computer games as objects are the ethics of their design, including the rules and the game world. In order to understand and describe how a game can potentially raise ethical issues, or how it could enhance the experience of the game world by including ethical gameplay, we need to pay attention to its underlying rule structure and how it is projected into the game world. Given that computer games are designed objects, their ethics are present in the formal elements that constitute the game as an experience. Thus, game design can be considered as the task of creating an ethically relevant system. This also implies the possibility of creating games that are conscious about their own ethical ontology, their nature as moral objects.

A computer game is a designed system of rules that creates a game world. These rules and that game world can have embedded ethical values: the behaviors they create, and how those are communicated to players,

constitute the ethics of computer game design. The creators of games are then ethically responsible for the design of the rules and world, while players are responsible for their experience of the game—the ways they interpret and enact the embedded ethical values of a computer game.

Ultimately, the ethics of computer games are the ethics of its system and how players experience that system. In the next chapter I will introduce an analysis of players as independent ethical beings capable of understanding and enjoying the experiences they go through when interacting with computer games from a moral perspective, which will complete this initial approach to the ethics of computer games.

5 Applying Ethics: Case Studies

It is now time to put my ethical framework into practice. So far, most of the argumentation has been purely theoretical, with a number of examples that specifically illustrated the key arguments of this method for describing the ethics of computer games. In this chapter and the ones that follow, I will apply the framework to specific issues, starting with a close reading of the ethics of three games: *Bioshock, DEFCON,*[1] and *World of Warcraft.* These games will also be used as illustrations of more general reflections on the ethics of single-player, multiplayer, and online game worlds. The analyses are not exhaustive, but serve as an illustration of how to analyze computer games from an ethical perspective.

5.1 *Bioshock* and the Ethics of Single-Player Games

The mainstream computer game industry can sometimes be rather conservative. It is true that games push the boundaries of technological development, and they often use the most advanced resources afforded by computing research. In fact, it is possible to claim that computer graphics as a discipline benefits very much from approaches that have an origin in computer game needs. Nevertheless, as much as it is an innovative technological field, the game industry is culturally conservative. The degree of innovation in the technology is seldom coupled with innovation in gameplay, storytelling, or virtual world creation.

Of course, there are economic reasons for this, based on the large budgets game development companies require to produce a high-quality title, and the risk aversion of the investors that provide those budgets. But sometimes there are companies that dare to try something new, and the games that result from this combination of daring, innovation, and talent are

often heralded as the symbols of what computer games can contribute to both the popular and the fine arts.

Launched in 2007 to critical acclaim, and heralded as the definitive step of mainstream games toward the artistic and expressive capacities of media like cinema, *Bioshock* constitutes one of the most significant examples of what the mainstream game industry understands as a game that pushes the boundaries of game design expression, targeting mature computer game players. Furthermore, thanks to its storyline and game mechanics, *Bioshock* was also received as a game in which moral gameplay would be of extreme importance for the game experience. It is therefore of interest to analyze this game in light of the ethical theories I have presented in the previous chapter.

In this analysis I am not going to describe some elements that could be of interest in outlining *Bioshock*'s ethics, like the online communities around the game, the technical problems that the game suffered on release and how they affected some players, or the game's reception by its core target audience. *Bioshock* is interesting because it both failed and succeeded in the task of creating an interesting ethical single-player computer game experience. Understanding this duality and what it teaches us about the development of ethical games is of extreme interest. I am also aware that *Bioshock* is very much a successor to the classic game *System Shock 2*,[2] but again, there is little in that comparison that can inform my interest in the particular ethical experience that this game creates, and how it illuminates the range of ethical gameplay possible for single-player games.

Bioshock is an example of a large-budget production aimed at creating something different and recognizable as worthy of merit even by those who are not interested or invested in computer games. The art direction, combining the impressive graphics technology with a unique vision of how the game world should be experienced, immediately distinguished *Bioshock* from all the other first-person shooters in the market. Nevertheless, this is a rather conservative game in terms of gameplay design: it is a conventional first-person shooter where the player navigates a 3-D environment using weapons and special powers to eliminate enemies. These enemies' resistance increases the more the player explores the game world, with the occasional "boss fight" against a particularly powerful rival. The innovations in the basic mechanics and rules of the game are superficial: players can acquire genetic powers that work in combination with the environment, allowing an "ecology" of

weapons, a set of tools that encourage tactical combat. Nothing radically new, but interesting and rather well implemented.

What makes *Bioshock* unique is the game world where the actions take place, and its consistency as a designed experience. Unlike most other first-person shooters, *Bioshock* does not take place in a space station, the enemies are not aliens, and the protagonist is not a space marine. As a matter of fact, as players we know very little about the main character's past: we do know that the enemies were once human, and that the year is 1959. *Bioshock* builds its unique aesthetic in blending futuristic technology, such as intelligent robots and genetic engineering, with the fictional space of a hypothetical 1950s art deco underwater city. The world of *Bioshock* is unique and refreshing.

But it's not only the world that makes the game interesting. Its storyline has to be taken into consideration, since it is relevant for the ethics of *Bioshock*. The game starts with a plane crash, and the discovery by the only survivor, adrift in the middle of the ocean, of a strange access gate to some kind of underwater facility, called "Rapture." Soon the story unfolds: Rapture is an underwater utopian city created by a man named Andrew Ryan, a Randian objectivist who believed in rational self-interest and a kind of extreme libertarian capitalism where all humans are equals and mankind is the only God.

Figure 5.1
Bioshock: Welcome to Rapture

But Rapture is a dystopia, where the deranged citizens fight for meager resources, their minds forever lost due to the excessive use of genetic manipulation. There is also a latent conflict between Ryan and a mythical character called Atlas, who resisted the forms of despotic order that ended the initial dream of Rapture. The protagonist is drawn into the last efforts of this resistance, and he is progressively guided by Atlas toward the murder of Ryan, and thus the end of Rapture. But of course, interesting plot twists reveal the protagonist to be a pawn in a larger power struggle that only ends with the closure of the dream at the bottom of the sea.

This is a rough summary of the main elements of *Bioshock*'s storyline, which is of course more complex and detailed, and rather compelling in its character-driven depth. Its use of environmental cues in the ruins of Rapture configures a classic and very well thought-through computer game narrative. What makes *Bioshock* the target of this ethical analysis is the importance that the developers gave to moral choice and moral reasoning in the game. The story is of course important, but it is oriented toward a certain reflection on the modes and motives of player agency in the game world. In other words, *Bioshock* was designed as an ethical experience, and it is thus interesting for what it will illuminate about the ethics of single-player game experiences.

The main reason why *Bioshock* is interesting from a moral perspective is its insistence on choice as the game world's reason to exist. Of course, choice is related to the particular interpretation of objectivism the game proposes, but also to the experience of the game. Choice appeals to the ethical player, who has to reflect on the meaning of her actions and their consequences. *Bioshock* has two significant ethical devices oriented toward that ethical player—two methods of creating moral gameplay that I will analyze, in their relative success and failure, in order to cast light on the ethics of single-player computer games.

The first interesting ethical design element is based on the story of the game and how it mirrors the gameplay experience. As I have mentioned, the player is put in the middle of a conflict in Rapture, a conflict between the founder of the city, Andrew Ryan, and Atlas, a mysterious character who, well into the game, reveals his true identity and motives. It is quite clear from the beginning that one of our main missions will be to kill Andrew Ryan: all the actions in the first half of the game are oriented to

disable the defenses behind which Ryan is hiding. As players, we suspect that Ryan will be a boss fight and that we will have to eliminate him using the powers and knowledge we acquire.

But the more information we gather, the more we suspect about Atlas's intentions, and the more the narrative paces us toward questioning the purpose of our actions. We think: maybe we would need to hear him, maybe we should actually ally with him . . . and then the interesting ethical mechanic takes place: we cannot avoid killing Andrew Ryan. Throughout the game, up until that moment, we have been controlled by Atlas, who had implanted some kind of mental domination system that could be triggered by uttering some words— the same words we as players heard in the briefings for the different missions up to that point. In a moment of stellar writing, a cut scene gives meaning to all the previous gameplay, and challenges our experience of the game so far. And it is precisely this intense manipulation of player agency that makes this sequence in *Bioshock* an interesting, successful ethical experience.

Before analyzing the game in detail, it is important to describe some of the less stellar aspects of *Bioshock* as a computer game. The choice of the first-person shooter genre, and the strict allegiance to its tropes

Figure 5.2
Bioshock: A Choice between Two Evils

and figures of style, makes *Bioshock*'s innovations relative: the game still plays like a conventional shooter, and there is no advance of the genre in terms of mechanics. The worst problem, from a design perspective, is that this focus on classic shooter mechanics seems to have come at the expense of game world exploration: Rapture is a fascinating environment, but as players we are only allowed to explore some parts of it, while the rest tempts us from behind the windows and in drawings and stories placed in the environment. *Bioshock* feels more like a theme park and less like a game—the environment is limited, focused on very concrete experiences, very carefully designed, and as such the capacity to explore the rest of the world is secondary. This means that for most of the game, the player merely moves from checkpoint to checkpoint, completing missions in order to unlock new spaces. Rapture seems a theme park, and not a world.

In classic shooters of this structure, player agency was rather limited in terms of thinking about the meaning of the actions that were taken. It is a genre convention not to think about the world around the player and to just focus on moving from one series of challenges to another, much like in the classic *Half-Life*.[3] What makes *Bioshock* ethically interesting is how it intertwines the narrative with this design convention in order to explore the ethics of choice. As players, until the moment when Ryan is murdered, we basically follow Atlas's instructions in order to advance and "finish" the game. When confronted with Ryan, the moment in which the truth is finally unveiled, the process of playing the game comes into new light: the instructions were part of a mind-control scheme, and all the actions have led to a morally questionable conclusion, the death of Andrew Ryan.

This manipulation of player agency is what gives this design choice its ethical nature. As I have argued, a player is an ethical subject that has the capacity to reflect on the meaning of her actions, and of her values within the game. Most computer games do not challenge those values: the player is the hero, the actions are consequent, and there are no moral dilemmas, no need for a deep reflection on means and purposes. *Bioshock* builds on this tradition, as said, in an intelligent use of the player repertoire. We don't expect these missions, the close path we are following, to be anything other than the reflection of the actions the designers and developers want us to experience, in the order they want us to

experience them. We can reflect on what they mean, but we cannot do anything to change them. This is precisely what the narrative of *Bioshock* is actually saying: we had no choice, at all moments we were guided by a force more powerful than our own will. All of a sudden, our actions become moral actions while we are facing Ryan, the character we are supposed to kill.

There is a further mechanical refinement in terms of ethical player agency: as soon as we meet Ryan, our agency becomes even more limited—we can move around, but we cannot interact with the game world, and we are deprived of our weapons. We have no choices, and the game resorts to a computer-controlled scene in which we witness how we kill Andrew Ryan. The change from actor to spectator, from agent to passive being, marks what should be read as a designed ethical experience: we are powerless, contemplating a horrendous act of which we are mere witnesses, yet that we have caused by our previous actions.

The understanding and manipulation of the network of distributed responsibility is what makes *Bioshock*'s mental control plot a brilliant example of the ethical capacities of computer games. Throughout most of the game, it seems that players are central agents in a world designed by the developers to be interacted with in a specific way, shaping in this way a two-way relationship in which developers have the responsibility for the game world and the freedom of the player within it, while the player is responsible for the actions taken within the game. But when the moment of killing Ryan arrives, the balance in that network shifts: suddenly the player is not an agent, but passive in the hands of the computer, which acts with the values of the narrative. By introducing a new element in this distributed responsibility network and showing that there was no choice or freedom, we are forced to reflect upon the meaning of the game and our actions; that is, our weight in the network of responsibilities of the game experience. We are not empowered beings, but mere agents in a larger system in which the extent of our agency will be questioned. And this is precisely the root of an ethical experience: the reflection upon the meaning of the previous actions and our being as players in the world of Rapture.

This design decision in *Bioshock* is particularly fascinating because it presumes a moral agent. I have argued that computer game players are moral beings, but we seldom find a game that appeals directly to

our morality as agents. *Bioshock* requires an ethical player to understand the design decision of depriving the player of control at a specific point, but also of forcing her to reflect upon the meaning of the previous actions taken in the game, all consequent with her player repertoire but clearly unethical in the context of the game narrative. By appealing precisely to the ethical player, limiting her choice and agency in the game world, and creating a simulation structure that mirrors the ethical issues of choice and consequence raised by the narrative, *Bioshock* has a strong ethical component in its configuration as game experience. This argued requirement of a reflective ethical player brings the closed, linear world of Rapture to a dimension of moral experience that defines the game as an interesting blend of narrative, gameplay, and ethics. And it does so by combining the narrative aspects with a moral reflection on the nature of game mechanics and how they are mapped onto the player repertoire.

Bioshock's marketing campaign was focused on another element of ethical gameplay—one that, as I will argue in the rest of this analysis, is both questionable and much less innovative than the narrative-based approach I have just described. This second element was centered on the presence in Rapture of girls called Little Sisters and their importance in the gameplay progression. The alleged moral dilemma focused on the convenience or not of killing these girls to harvest some resources, but the implementation of this mechanic was not successful, for reasons that are closely connected to the merits of the mind-control ethical gameplay.

Little Sisters are genetically modified young girls with zombie eyes and a large syringe. They are always protected by a Big Daddy, a biomechanical monster out of Jules Verne's worst nightmares. Little Sisters are in charge of collecting Adam from corpses, one of the key substances in Rapture's genetic nightmare. Their apparent fragility is compensated by the presence of the Big Daddies, a true challenge for any player who wants to take them down. Little Sisters are precious because the Adam they harvest can be used for buying new upgrades for the player's genetic powers. But to obtain these resources, players first have to kill the Big Daddies, then eliminate the Little Sisters. And this is designed to be the central ethical gameplay mechanic of *Bioshock*—will you kill the Little Sister and harvest her resources, or will you let her live, and survive with fewer resources but with a cleaner conscience?
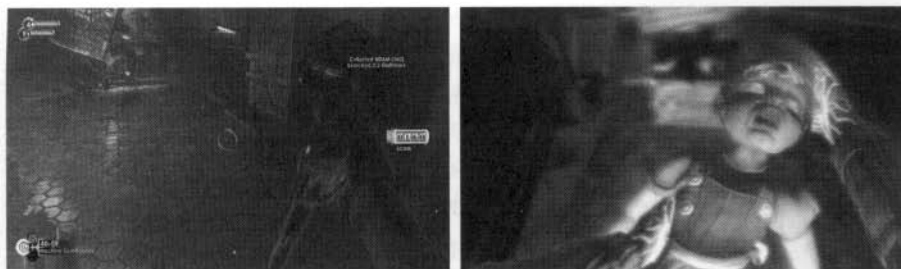
Figure 5.3
Bioshock: Harvesting versus Rescuing a Little Sister

Initially, this type of decision seems to appeal to both the player as subject in the game and to her ethics outside of the game, since the Sisters are portrayed as harmless girls. It could also look like an ethical choice: it involves life or death and reflecting about consequences and actions, involving the player as an ethical agent in the game world. But the Little Sister mechanic turns out to be an incomplete implementation of an ethical mechanic due to the misinterpretation of the game's weight as a designed system in the ethical configuration of the player and her relations with the game world.

Let's analyze this mechanic in more detail: from a purely formal perspective, players are faced with the choice between fewer resources and more resources, depending on a decision that the game's semantic layer insists on telling us is of moral nature. These resources are potentially linked to the difficulty of the game, and how much the player can do to beat it. So far, it seems quite clear that a design of this type would surely yield interesting ethical gameplay, involving the player in the larger experience of the game world and empowering her to take a moral standpoint in her ways of inhabiting it. In this sense, this is a good lesson to learn in terms of the design of ethical computer game experiences: if the player's choices are closely tied to survival in the game world, but those choices about resources will affect her position in the network of responsibility of the game, then we will most likely have an ethical game. More clearly, if the players' choices concerning resources have an impact on how the world perceives and responds to the players' values, then we will have ethical gameplay.

But this is not the case in *Bioshock*, due to a problematic design choice: there is barely any difference between letting the Little Sisters live or die,

since the player will receive Adam as a gift if they are left alive, in a quantity similar to what she would get after killing the girls. Furthermore, the decision to let the girls live or die only has an impact on the ending of the game, and not on its progression, much less in the way the game world reacts to the player's ethical stance. Rapture, it seems, does not care much about the ethics of its inhabitants, and all choices are deprived of meaning—which in itself is an interesting topic to explore, as the mind-control example shows, but not in the way implemented in the Little Sister mechanic.

The problem with this mechanic is that it trivializes the moral capacities of the player to reflect on her actions by depriving the choice of any consequence to her relation with the world. If the inhabitants of Rapture reacted in varied ways to different paths taken with Little Sisters, or even if they acknowledged the difference in these choices, then there would be meaning for this action. If the game design is going to afford a decision as ethical, then it has to implement consequences, subsystems of rewards tied to the initial choices. Otherwise, players will react to the dilemmas not with a moral stance, but with their player logic, focused on achieving their goals in the game experience.

In the case of the Little Sisters, players will most likely decide if they want to kill them or not based on how much Adam they require to explore certain genetic power trees, or if they want to see any of the alternative endings of the game, or if they want to calculate how much Adam is it possible to get, provided the different gameplay paths. Furthermore, those players that may want to experience the game ethically will not receive any kind of feedback for their actions besides the differing amount of resources gathered. In *Bioshock* there is no experience of the player-subject as an agent with creative capacities, constructing their own values within the game world and living by them. The game turns their alleged key ethical decision-making mechanic into a resource management process that does not require any type of moral reasoning for the player to succeed.

It is precisely this that makes *Bioshock*'s Little Sister mechanic an unethical design choice: it taunts the values of the player. It seems to put the player in the central position of the network of responsibilities within the game, as a master of her own ethical presence in the game world. But in the end, there is no meaning attached to choice, and the player

sees her own ethical agency deprived of any content or capacities. It is the developers who have already decided how the world will respond to her actions, in a binary system of outcomes: either she kills the girls, or she doesn't, and if she does so, there will be a negative ending, and in the other case a positive ending. And the resources will be roughly the same, so the gameplay progression is not affected by moral choice.

In most ethical games, gameplay progression is affected by ethical choice. Every choice taken by a player has to reflect her values in the game and see those values reflected in the game system, in terms of resources, mechanics, and the behavior of other computer-controlled or human agents. The fact that the result of the choice between the life and death of the Little Sisters is more or less insignificant deprives the player of any interest in applying her ethical capacities to the game experience, which in turn will make the game less interesting from a moral perspective.

I would like to push this analysis one step toward the field of game design. As I will argue in chapter 7, there are tools and techniques that allow us to analyze, and potentially create, ethical gameplay. What *Bioshock* illustrates are two facts that can hamper the design of any game as an ethical experience: the dominance of the narrative and the obsession with gameplay balance.

Admittedly, the story in *Bioshock* is of very high quality, almost unseen in computer games. Its references to objectivism, dystopian literature, and art deco are a relief in an entertainment form dominated by examples of poor, derivative science fiction narratives. Nevertheless, if what we are interested in is computer games as ethical experience, even good narratives have to be subordinate to the player-system relation and its ethical implications. A story must not prevail over player agency, unless that story brings something to the player as ethical subject: the example of the mind-control plot is effective because it forces players to see actions and consequences in a different light. But the lack of significant consequences when facing the Little Sisters dilemma deprives the game of interesting ethical outcomes, only because there is a story that needs to be told. Any story, then, in any single-player game that wants to become an interesting ethical experience, should be either subordinate to the ethical actions taken by the player, or should illustrate the

actions taken by the player, forcing her to reflect on the meaning of her presence in the game world.

Similarly, any action that ought to be understood as a moral one in the game has to be supported by the game design; that is, reflected by the game system and providing a sufficiently distinct outcome so the player feels that her actions are of a moral nature. This means thinking about game balance in a different way than classic game design theory has reflected on. A game needs to be balanced in its overall experience, but it does not need to be balanced in the particular outcomes of ethical choices; further-more, imbalanced outcomes are a particularly relevant tool for game designers to make statements via game design. If *Bioshock* feels ethically dull it is because there is little to no difference between saving and killing the Little Sisters—players don't need to think about their actions, since the outcome of the design always benefits them.

In classic conceptions of game balance, this is probably a positive thing: the game is balanced to different play styles. But when it comes to devel-oping ethically relevant games, this balance is ineffective, since it is discon-nected from player agency. There is, then, the possibility of thinking about some kind of ethical balance, a design choice that needs to be made when creating the game system, and that is related to how the game reacts to actions in which the player's ethical agency is at stake. In this sense, game imbalance can yield interesting ethical balance—and of course the task of the game designer is to allow for the game to be playable, despite these imbalances. Developers interested in creating ethical gameplay experiences with single-player narrative games should consider classic game balance principles as a tool, a guide toward establishing an interesting relation between players, game worlds, and stories.

Bioshock is a worthwhile game, a bold attempt at pushing the boundaries of computer game expression. Its art direction, the carefully crafted, yet some-times too obvious narrative, and the thrilling world of Rapture make this creation depart from most conventions in the world presented to the player. But the player's experience is unfortunately mediated by an overly conven-tional take on first-person shooter mechanics. And the same allegiance to conventions harms the otherwise noble intention of turning *Bioshock* into an interesting ethical experience. If *Bioshock* is interesting from an ethical perspective, it is not because of its alleged moral game mechanics, those

related to the choice of letting the Little Sisters live or kill them for their resources. *Bioshock* is interesting from an ethical perspective precisely when the player is devoid of choice, when an interpretation of game conventions and the player's repertoire are used to cast light on the meaning of actions in the game world and the overall nature of choice. The mind-control sequence is probably one of the most intense ethical experiences a computer game developed with commercial intent has ever created.

The failures and successes of *Bioshock* in its attempt to create ethical gameplay point to the two main aspects that any single-player game that wants to create ethical gameplay should consider. A single-player game places the player, as ethical agent, as the sole and most important agent in a system that is designed to react to her input. The relevance of the player's ethical agency in the network of distributed responsibility is high: the player has to feel empowered to either apply her own values to a world that acknowledges them, or to live the values of the system and reflect upon its consequences and meanings. In other words: choice has to be meaningful and the system has to react to it in moral ways—the game design has to acknowledge and support the player as an ethical agent. Or it has to be designed to reinforce the values the player has to live by, the ethics of the persona she is becoming in the game world.

A single-player game experience is, from an ethical perspective, the exploration of the meaning of choice and values in the game world by an empowered moral agent. *Bioshock* succeeds in turning the experience of the game into a reflection on actions and consequences, but it fails to give meaning to choices. Its ethical discourse is somewhat contradictory, and not supported by the game design. Any single-player ethical game is a system designed with a moral agent and an ethical experience in mind, and classic notions like game balance, difficulty, or even replayability are secondary. The design of single-player games that want to create an ethical experience is a challenge, an exploration of the player alone in a game world destined to be its ethical counterpart. A single-player ethical game is the exploration of who we are as ethical players.

5.2 *DEFCON* and the Ethics of Multiplayer Games

Historically, single-player games are somewhat an anomaly—if we look at both digital and analog games in our culture, we will notice that a vast

majority of them are, in one way or another, multiplayer. Single-player computer games are mostly the outcome of the simulation possibilities of computers applied to the creation of semi-intelligent autonomous agents that can be used to wrap and enhance a particular mode of player interaction with the game world. Multiplayer games, on the other hand, tend to fall short on the narrative or fictional side, and focus much more on two classic forms of multiplayer game design: cooperation versus competition.[4] What is interesting about multiplayer games is not the story, or the world, but how that story or that world foster either of these basic elements of gameplay experience.

It is not my intention to write about the ontology of multiplayer games as opposed to single-player games, despite the obvious interest of that subject; my goal is to analyze a multiplayer game in the light of the ethical theory I have presented, with the intention of introducing some of the key elements that need to be taken into consideration when analyzing, and perhaps even designing, the ethical modalities of play in a multiplayer game. My focus is on games where more than one agent plays in nonpersistent worlds,[5] games like *DEFCON*, but also *Age of Empires*, *Civilization*, *Guitar Hero*, or *Dance Dance Revolution*. What is interesting about these games is not their online persistent world, but how gameplay sessions are experienced by multiple agents simultaneously.

My case study will be *DEFCON*, an independent multiplayer game developed by Introversion Software and launched to critical acclaim in 2006. Before introducing the game, I would like to add that *DEFCON*, as opposed to the other two main case studies I am presenting, is a game developed with a low budget, by a small team, and with different publisher/developer relations than the other two mainstream titles. Some could argue that the design decisions I will analyze here as ethical choices may have been a consequence of these production constraints. Nevertheless, any game that tackles the slightly controversial topic of worldwide nuclear war is making itself a target for ethical scrutiny, and as such my analysis of *DEFCON* as an ethical experience is validated.

Anyone who has seen the classic 1983 film *WarGames* will understand how to play *DEFCON*: the player is presented with a vector graphics representation of the globe, and the sounds immediately cue the fiction of an underground nuclear silo, a doomsday refuge in the advent of nuclear war. The game is played like a classic real-time strategy game:

players are given a territory and a number of units they have to manage while trying to eliminate most of their opponents. The difference is that *DEFCON* simulates nuclear war, and as such is a rather radical game: there is no victory, only degrees of defeat. The game world is there to be destroyed, cities will not produce units, and their populations are the mere statistics that generate meaningful strategies. Playing *DEFCON* is engaging in a dehumanized simulation of nuclear war where the goal is to lose the least.[6]

The basic *DEFCON* gameplay places the player as the commander of a specific territory, with a population of 100 million and a number of military resources that need to be deployed. There can be up to six other players in the game, competing for the best strategies of setting their attack and defense elements in place for the unavoidable conflict. The game goes through a number of states, named after different DEFCON codes: DEFCON 5 and 4 allow for the positioning of units, but not for attacks, nuclear or otherwise; DEFCON 3 and 2 allow for conventional combat, but not nuclear weapons; DEFCON 1 signals the last stage of the game, where nuclear missiles can be launched, and where the fate of the game is

Figure 5.4
Defcon: We're All in a Bunker Now

decided. Depending on the game type, the score is calculated on the basis of the number of population units that have survived, and the number of "megadeaths," or million population units eliminated by each player. The score is a result of the balance between these two numbers. In other words, the winner is not always who kills the most, but also who loses the least.

An interesting design choice, to which I will return later on, is the possibility of making alliances: players can create alliances between them, which grants them access to their allies' radar units, which in turn allows for a more detailed vision of the environment, since *DEFCON* also uses the classic strategy game mechanic of the fog of war, or the inability of players to see beyond their territory or the space their radar units can cover. But there can only be one winner: alliances are always broken at some stage in *DEFCON*, creating an interesting tension between players' wish for maximized information on their rivals, and the dependency on what they know is going to be a broken alliance at some moment. The social dynamics that emerge from these contradicting mechanics are also of relevance for understanding the ethics of *DEFCON*, and of multiplayer games.

DEFCON can be a game of patience, of tactical psychology, waiting for other players to make a move and predicting what that move will be so that it can be countered. This is a game that puts players in an isolated environment, but with the knowledge that there are other humans there, in front of similar maps, plotting similar strategies to get rid of the enemies. This sense of isolation dehumanizes the other players, but as players we know that they are human agents—this tension between how the game is played and how we understand it is, in my opinion, crucial to understand the depth of *DEFCON*'s ethical gameplay, as I will argue later on. But for now, it suffices to say that the game, in its audiovisual design, cues the player to think as if inserted in a bunker environment, isolated from humanity, in a place where population and enemies are just numbers that can be adjusted, modified, and deleted.

The reception for this independent game was quite positive, and many reviewers actually noticed a certain degree of ethical thinking in the design of the gameplay.[7] *DEFCON* is a shining example of the independent game industry: a well-made, original, independently produced title that brings some new experiences to players by means of cleverly

manipulating genre conventions. These facts make *DEFCON* interesting from an ethical perspective as well. This is not to say that all good independent games are ethically relevant—*DEFCON* is interesting because its innovations, its essential mechanics, and the score system are ethically interesting.

But why is *DEFCON* so relevant, so enticing for an ethicist? First of all, it is a game about the ultimate war, about the annihilation of the human race by means of atomic weaponry—and it is fun to play. But beyond its topic, *DEFCON* is interesting for the game experience it creates around it: the feeling of isolation, the calculations of megadeaths and victory, the ultimate tension between detachment and attachment to the game world—all these elements configure a ludic experience of enormous relevance. In *DEFCON*, players are calculating how to maximize their nuclear strikes to annihilate as much of the enemy population as possible without suffering severe losses in the game's inevitable outcome. This calculation is part of a process of reflection on the meaning of the game world, and it appeals to players both as subjects in the game, and as ethical citizens.
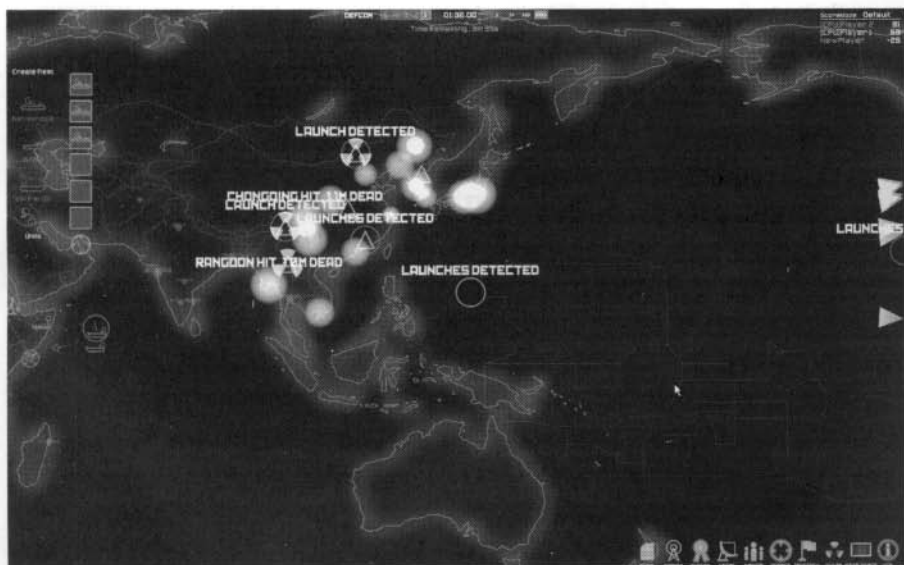

Figure 5.5
Defcon: The Aesthetics of Atomic War

Two of *DEFCON*'s design choices require ethical analysis: the alliance system and the calculation of victory based on the number of losses in population. The alliance system regulates the behaviors of and relations between agents in the game system, and as such is of primary interest for the understanding of the ethics of *DEFCON*. The winning condition rule, on the other hand, brings forth the more direct implication of game designers in the value systems of the games they develop, and how they are projected into a specific game experience.

DEFCON is also interesting because it is a multiagent environment that pits moral agents against each other under the agreed and sanctioned rules of a game, following the mechanics afforded to them by the designers. Multiplayer games are ethically important because they are designed mediators of player interactions, and since both the design and the agents are ethically relevant, the ways they affect each other are of extreme relevance for understanding the particular ethics of a game experience.

In this chapter I am going to analyze the alliance system and the winning condition design in *DEFCON*. They will both illustrate aspects to take into consideration when describing the ethics of a multiplayer game, since they cover the way agents relate to the game world and to other agents in it, and the influence of game design in the experience of the game by these moral agents. My reflections will be based on *DEFCON*, but they will apply to multiplayer games in general, except those played in persistent worlds, which I will analyze in the next chapter.

We start with the alliance system: in *DEFCON* we have a plurality of agents competing for resources, in this case space, with limited time and opposing goals. There can only be one winner, so the domination of space and the deployment of units that allow for massive strikes and defensive networks are crucial. These processes are troubled by the players' lack of absolute information: the visibility of the map is rather limited, and choices have to be made in light of those limitations—unless, of course, players engage in alliances. Alliances are useful because they allow players to have a wider perspective on the playing field, sharing the radar visibility with the other players in the same alliance. Alliances also have their own, private, chat channel. These benefits make it a tactical advantage to establish alliances.

But alliances, as I have already pointed out, are counterbalanced by the fact that there can only be one winner, regardless of the alliances

established during the game. Both alliances and the winning condition show the developers' special interest in creating a type of designed experience based on the equilibrium between information and mistrust, a balance crucial for understanding the historical balance of power during the Cold War, elegantly simulated by Chris Crawford in the classic game *Balance of Power*.[8]

From an ethical point of view, any multiplayer game designer will have the challenge of managing the presence of a number of moral agents in her game world. This challenge is twofold: on one hand, players need to be respected as ethical agents, capable of reflecting on the meaning of their actions and how they treat other agents in the game experience; on the other hand, developers have to ensure that whatever ludic experience they set out to create with that game is present when players interact with their game, and that this experience is, closing the conceptual loop, respectful to the ethical being of players.

DEFCON achieves the goal of creating a compelling moral experience with the combination of the two mechanics, showing a way of both respecting players and imposing on them, via system design, a specific behavior that will lead to desired, successful ethical experiences. Players of *DEFCON* see their ethical agency respected by allowing them a great degree of freedom in the selection of the strategies, especially in terms of alliances. Players can enact their values to a certain extent in the game experience, being collaborative or secretive; remaining individualists, helping other players, or directly conspiring against others. This degree of enhanced agency allows for the player's deep moral engagement with the game world.

We could argue that multiplayer games that want to introduce ethical gameplay as a part of the ludic experience need to design the patterns of interaction between players, allowing them to enact their own values, while guiding the ways these values can be used in the game world. In any system that manages the simultaneous input of different ethical agents, it is necessary to think about those modes of interaction in ethical ways: what types of ethical issues are going to arise, and how can players solve them, without a direct intervention of the system designers? Players can self-manage abusive alliances in *DEFCON*, since there is no rule that states that there cannot be massive alliances against one player; in this sense, the game empowers players to reflect about

their own actions to others during the game experience, which is a desired outcome of any multiplayer game that wants to create an ethical experience.

This ethical experience is nevertheless created and guided by the designed system of rules. In the case of *DEFCON*, the relative openness to ethical agency of players in the game world is limited by the presence of a strong design constraint: there can only be one winner. While players are respected ethically, the developers created a very intense ethical experience by ultimately turning that freedom against their own intentions as players. Winning the game means to survive the strongest alliances and to break them at some moment. In this sense, the game is affording a type of behavior that can have interesting ethical interpretations by players. *DEFCON* wants, by design, to spiral down in a storm of broken alliances and treason, only to mimic, by means of design, the insane last moments before nuclear dawn.

Multiplayer games construct their ethical systems by means of modifying the behavior of the agents in the world through the use of game rules and game mechanics. The balance between the freedom of ethical agency provided by these and the constraints dictated by the winning condition and end state of the game are crucial to understanding the ethics of any multiplayer game. In *DEFCON*, the ethical experience is created by conflicting interests in terms of ethical player agency and the game system's end state: there can be alliances, but only one winner. These types of tensions, which are created by means of alternatively manipulating the players' intentions of cooperating and of conflicting by means of game design, can create relevant multiplayer ethical experiences, forcing us to reflect on what we have to do, and how those actions affect the other agents of the system.

The other ethical design choice that makes *DEFCON* relevant as an illustration of moral multiplayer gameplay is its understanding of the score system. As stated, *DEFCON* is a game about nuclear war From an ethical standpoint, nuclear war is absolutely evil: it not only indiscriminately massacres by the thousands, it also ruins the environment for future generations. And yet for many years nuclear warfare was considered a part of the legitimate arsenal of the Cold War superpowers, and the world lived under the shadow of a war that would, this time around, end all wars.

This absolute nature of nuclear war is simulated in *DEFCON* by means of its scoring system. Conventionally, the winner of any game is that who wins the most points. There are exceptions to this rule, but in general most games have a correlation between number of points and declaration of the winner. In *DEFCON*, playing in the default scoring mode, players win by accumulating megadeaths, but also by avoiding them. As a matter of fact, players who suffer severe losses, no matter how well they perform in their attack, will lose. In the Survivor scoring mode, players have to lose the least in order to win, no matter how well they perform in their offensive mode. And this reflects an ethical affordance in the game design: nuclear war is always lost.

I have argued that computer games are designed systems for interaction that can have embedded values. Some of these values, as in the example of the amnesic killer in *XIII*, are experienced as clumsy interferences in the ethical agency of players. In fact, it is not easy to create a game that is ethically relevant by means of design while encouraging its users to think and experience the values they play by. In *DEFCON*, this balance is created precisely because it is a multiplayer game, and the focus is not on the
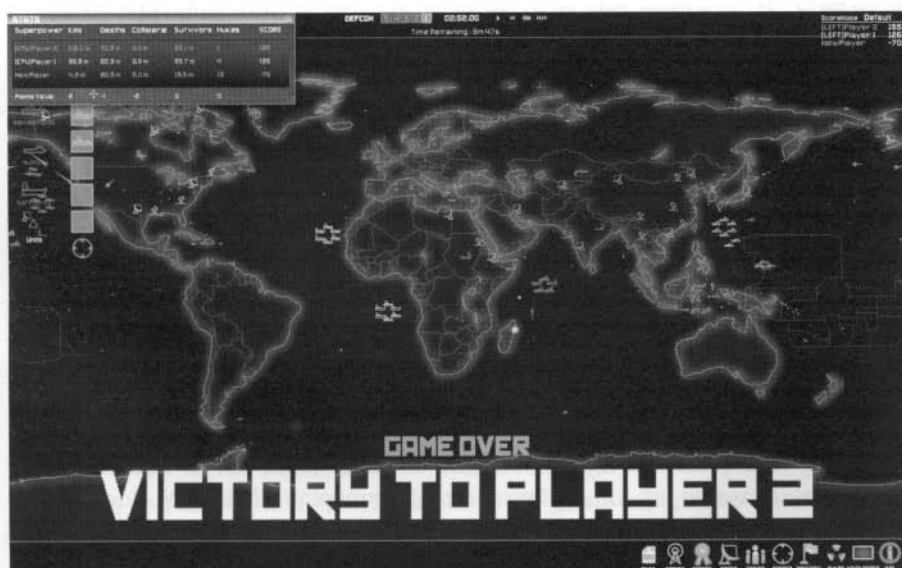

Figure 5.6
Defcon: Endgame Score Screen

development of a narrative within the game world, but on the dynamics of interaction between players. This is not to say that it is not possible to create an ethical multiplayer game with a strong narrative—but interesting moral gameplay in these games takes place not in the way the story unfolds, but in the ways players relate to others through the system, thus the importance of looking at the game design.

DEFCON cleverly manipulates our conventions concerning victory conditions by changing the meaning of the final score and turning victory into a measurement of defeat. Of course, this choice has meaning within the semantics of the game world, but it is arguably designed to resonate in the ethical fabric of players: their actions, their strategies, everything done in the course of the game session is oriented to the extermination of their rivals' populations. And that fact is highlighted precisely by the scoring system. Any score is an evaluation by the system of the players' behavior, but it is also an enticement for players to optimize their behaviors following the rules of the game, and to play the game again. Pinball machines, with their scores in the millions, have largely set the trend in scoring design: encourage players to earn as many points as possible, and greet them not with 10, but with 10,000 points.

DEFCON modifies this rhetoric with an ethical approach: players are encouraged to score by the millions—actually, by millions of population kills. And not only that, but in two out of three game modes, players are also punished for allowing their own millions to be annihilated. What is relevant is both the fact that the winner is not who scores the most but who loses the least, and also the semantic layer added to the notion of points: these are not abstract units, but "population," a metaphor enhanced by the design of the user interface and the game world. Players own, protect, and destroy "cities" with populations of millions—those populations are their scores.

Of course, *DEFCON* can be played ignoring this metaphor, and it still holds as a cleverly designed multiplayer strategy game. But playing it that way is ignoring one of the reasons why this game is a fundamental example of multiplayer moral gameplay: *DEFCON* does not only appeal to the passive, button-mashing player, but also to the ethical player, who will play, and win, but still reflect on and be affected by the experience of the game. And that player is appealed to by the combination of game world design and game design, by the way the

rules and mechanics are wrapped in an intense metaphor directly targeted to the thinking player.

Multiplayer games have to be analyzed as ethical objects and experiences, keeping in mind that these are multiagent systems where the network of responsibility, unlike in single player games, is not a process exclusive to the developers, the system, and the player. In multiplayer games, there is also an element of player-to-player relations that needs to be taken into consideration: the ways players relate to each other, the ways they compete, and how they determine the validity of their actions in the game world.

In the case of multiplayer games, though, the weight of the design in the ethical experience is of extreme relevance. It is by means of design that we relate to others during the game experience, and so they shape at least partially our moral agency in the game world. Of course, game design is a rather large task, and not all of it can be ethically relevant for multiplayer games. As I have argued using the example of *DEFCON*, there are three elements that need to be taken into consideration when analyzing the ethics of a multiplayer game design: the winning condition, the player-to-player specific mechanics, and the way the game world coherently reflects those mechanics. In *DEFCON*, the rule that states that the winner is the one who loses the least, the alliance system conditioned by a single winner, and the aesthetics of nuclear war as a desensitized experience all configure the game ethics. In any other multiplayer game, starting the analysis with these elements is a first step for the description of its ethics as projected by an object to a moral player.

This does not mean that players will blindly follow whatever instructions, goals, and mechanics the game affords them—players are, or ought to be, empowered users who can reject some strategies or actions that the game provides if they feel they are contrary to their values as players or as human beings. But this ethical empowerment has to be understood in connection to the importance of behavior design in multiplayer games: players will create their ethical values in the game experience oriented by the game design, and that can have a strong influence in the actual ethics of the game as experienced by ethical agents. In this process, the importance of player interaction design is crucial, and much more determinant than in single-player games, or even than in online worlds, since in

multiplayer games there are no persistent communities, at least not with power and presence in the game world.

DEFCON is a rare gem, a computer game that feels and plays as a rather complex experience, a combination of the exhilarating features of multiplayer games coupled with the depth of reflection traditionally only present in other media. Despite some of its shortcomings, especially in terms of usability (for all its aesthetics, *DEFCON* is a rather complicated game to learn to play), this is a very interesting ethical computer game. It does not try to teach or educate its players, and it never renounces the goal of creating fun—but it does so by appealing to our rational, ethical minds. *DEFCON* is a multiplayer experience that makes us, its players, face our own values and thoughts—we are alone in its world, and the others are just blips in an impersonal depiction of a possible world. Many computer games are about exploration: exploration of worlds, of narratives, or of human relations and the sense of competition. *DEFCON*, a multiplayer game, is a game mostly about exploring our own values as ethical agents, while we push a button and the screen laconically informs us that New York is gone, and we have scored another five million deaths.

5.3   *World of Warcraft* and the Ethics of Online Game Worlds

So far, I have analyzed both single-player games and multiplayer games. It is time now to tackle the most complex of all contemporary gaming phenomena: virtual worlds designed for creating ludic experiences. But before I embark on this case study, there are two caveats that need to be mentioned: first, I am here analyzing those virtual worlds designed to be experienced as games,: that is, *World of Warcraft* or *Eve Online*, but not *Second Life* or *Habbo* (a social networking site). Second, this chapter should be read as an introduction to the analysis of the ethics of virtual worlds—the sheer complexity of these multiagent systems calls for detailed and exclusive analysis, deeper than what I will present here. Nevertheless, my intention is to provide a snapshot of the applicability of this framework, used for analysis of computer game ethics, to the understanding of virtual worlds.

I will use the MMORPG *World of Warcraft* as an illustrative case study. The phenomenal success of this game, which as of February 2008 had

reached ten million denizens, has made it somehow the classic case study for online worlds—so much so that it could be possible to say that there is a burgeoning field of *World of Warcraft* studies. But my decision to analyze this game is not tied to its popularity, but to the fact that, while I was playing it, there was an interesting event that showed me in a very clear fashion the network of responsibilities at play in online worlds, and how that network affects communities and the moral fabric of gameplay.

Even though *World of Warcraft* is a rather well-known game, I will give a short description of it, including its universe, essential gameplay mechanics, and aspects of the game community. I will focus on the honor system, its implementation and how it affected the ethical being of the game. The honor system is a gameplay rule that rewards and encourages player-versus-player combat and its implications for the game experience. I will argue that the honor system is a perfect illustration of ethical affordances in the design of the game and how the player-subject may relate to them from a moral perspective. The analysis of the game I am presenting here is based on my personal experience playing, observing, and participating in the community. The portrait of the community I am going to present is based entirely on my observation and participation: no empirical data sampling has taken place, thus all the derived caveats should be applied.

I played *World of Warcraft* an average of three hours a day, from its European launch in March 2005 until December 2005, reaching levels 60 and 40. The period of time reflected in this case study description, though, comprises only a fraction of that time, between patches 1.1 to 1.7 (September 2005). The nature of an online virtual world like *World of Warcraft*, in constant development, suggested an approach that limited the timeframe of this research. I decided to stop my analysis of the world with the advent of patch 1.7. Since then, there have been interesting examples of ethical issues arising in the online world, and no doubt there will be more in the future, some of them related to the perception that Blizzard has of the player community and the use of its end user license agreement to pattern and control behavior.[9] Nevertheless, for the sake of this research, I have put some time boundaries on the description of the world. In this chapter, then, there is a description of *World of Warcraft* and a history and analysis of the honor system, since the public release of the game until the release of patch 1.7.

World of Warcraft is a massively multiplayer online role-playing game based on the Warcraft franchise, started by Blizzard Entertainment in 1994 with the launch of the real-time strategy game Warcraft: Orcs & Humans. This initial title, followed up in 1995 and 2002 with two sequels, as well as complemented by three expansion packs, created the game world of Azeroth, where the epic struggle between the Horde and the Alliance takes place. I will not describe here in full detail the mythology of World of Warcraft, but I would like to give readers an impression of the fictional layer of the game, which is important for understanding some design decisions that influence the gameplay mechanics and community values and practices.

Azeroth, the world of Warcraft, is a place where magic forces of good and evil are entangled in a battle for supremacy. The world was originally home to a number of races that cohabited in relative peace. The invasion of the "evil" orcs and other magical events destabilized this world, starting a never-ending war between the Horde (orcs, undead, trolls, and tauren)

Figure 5.7
World of Warcraft: Flying is a Pleasant Experience

and the Alliance (humans, elves, dwarves, and gnomes). These two main factions fight for control of the ruined world of Azeroth, but they are both threatened by the presence of other forms of evil, such as the Scourge (an undead infection of evil) and the Silicid (huge wasp-like insects). There is no time for solace or peace in Azeroth, as dangers lurk in every inch of this vast world.

World of Warcraft is played on servers divided by play style: player-versus-player, role-playing, or player-versus-environment, with the added combination of player-versus-player role-playing servers. Furthermore, there are important differences between the gameplay in the beginning of the game and in the end of the game. What I am about to describe is an account of the steps a player goes through in order to experience a fraction of what *World of Warcraft* offers as a game experience. This account will not be systematic, but focused on those elements that will be of relevance for the following discussion on the ethics of computer games. Also, it is worth mentioning that my own experience playing does not include some endgame content, such as large raids, simply because I never got to that level of involvement in the game. The following, thus, is a partial vision of *World of Warcraft*, albeit a reflective one.

The first thing a player of *World of Warcraft* will do is choose and design an avatar. At that stage, the player has to choose between the Alliance and the Horde. Once the faction is chosen, players have to choose one race out of four (currently five), and then which class they will play. Class is particularly important because it determines which kind of gameplay the player will engage in the most. These classes have different gameplay attributes: there are damage dealers (mages) and primary (priests) and secondary healers (shamans), melee damage dealers (rogues), ranged damage dealers (hunters), and so on.[10] Gameplay depends largely on the class of the player; any other choice (except that of faction, as I will argue further on) is more or less cosmetic. Nevertheless, it is important to mention that players grow fond of the physical appearance of their avatars, and that they use magic and enchantments to personalize, within very narrow margins, the look of their characters, by means of clothing or "glowing items."

Once all these aspects have been chosen, the player is inserted into the world of Azeroth. *World of Warcraft* is a huge environment with dozens of different settings, from deserts to high mountains, where day and night

are differentiated, but where the world does not change—not even as an effect of the weather conditions. It does not matter what the actions of the players are, the world is immutable to them. Killing computer-controlled characters, even those that will be in charge of giving quests, does not have a lasting impact on the world, as they will eventually respawn.

In this world players can talk to nonplayer characters that will command them to do quests, which are rewarded with money or items and experience points. Players need equipment in order to improve their skills and thus their survival rate. The more powerful a player is, the more regions of Azeroth she will get to know. Accepting a quest usually implies going somewhere else and slaying some monsters. Players can also spend their time killing monsters outside of quests, because each kill usually gives some loot of different economic value, and experience points, depending on how difficult to kill or rare the monster is.

Acquiring experience points, money, and gear is the main goal of the game, and its mechanics are oriented toward it. Even though there are

Figure 5.8
World of Warcraft: A Gnome and a Cow, Two Faces of the Conflict

some players who enjoy the social aspect of meeting other players, or speculating in the in-game economy to make money, *World of Warcraft* is relatively unsuccessful in providing tools for expanding the gameplay beyond the repetitive actions of slaying monsters, together with others or alone, in search of better items or money that can buy them. Mastering *World of Warcraft*'s game mechanics means mastering the player's character class, both in playing solo and with others, so the chances of improving her gear and economy are better.

Combat and communication are then the two pillars of this experience. Combat is performed by activating the avatar class's powers in the most effective way according to the enemy at hand; meanwhile, the system calculates the success of the attack and the damage depending on statistical data related to the player's class, race, and equipment. In *World of Warcraft*, combat is dependent on skills like timing, coordination, and knowledge about the game mechanics and the rules of the game.

Communication, or socialization, on the other hand, usually takes place in those spaces where combat is less likely to happen, such as cities or villages. Communication is usually made via the text chat, complemented by emoticons or "slash commands," which trigger avatar animations related to the input command.[11] Communication is organized around a number of chat channels, some of them common to the world, meaning anybody anywhere in Azeroth can read them; some of them common to the world but exclusive to groups or guilds; and some of them limited to specific provinces or cities, and only heard in those spaces.

Essentially, *World of Warcraft* consists of a series of repetitive and relatively similar quests, which the player has to complete alone or in the company of other players (up to 40 if it is a raid instance, up to five if it is a normal instance).[12] Some of the quests take place in the persistent world, and other quests take place in instanced maps, which exist as they are experienced only by the group that enters them and only for the period of time in which they are inside. All high-level content takes place in instanced dungeons.

One of the most controversial aspects of the design of *World of Warcraft* is its player-versus-player mechanics. Allowing players to attack other players brings forth issues related to the values of the game, arbitration and game balance. Games like *Anarchy Online*[13] and the already classic

EverQuest allowed player-versus-player actions only in certain areas. Balancing the design of this type of gameplay with the sheer number of players involved in a MMORPG, combined with the experiential ladder that these games present, has led some designers to view player-versus-player gameplay with contempt.[14]

But *World of Warcraft*'s designers chose to enable player-versus-player combat in a different way. In the player-versus-environment and role-playing servers, players can choose to be eligible to engage in player-versus-player gameplay or not. A player of the opposite faction cannot attack a rival who has chosen not to participate in player-versus-player. Nevertheless, Blizzard provided servers where there was no need for consent in order to engage in this kind of gameplay. If any player spotted an opposite faction character, they could attack and then a duel would start. In this way, Blizzard ensured that the dangers that the fictional element of the game suggested for players, this never-ending war, could be matched with the gameplay players could experience.

The possible pitfalls of player-versus-player revolve around how the players will behave with each other. Given the fact that a difference in levels of experience implies differences in powers and abilities, there is always the risk that players with more power will harass players of lesser power—not to mention that players can always group and hunt down lower-level players. But in some way, it seems like the developer conceived that as a part of the fictional level of the game, and thus as a set of behaviors against which policing is superfluous. In fact, in the policies stated by the developers,[15] when harassing is mentioned (in the form of griefing other players), player-versus-player content seems to be beyond these laws of conduct, quite coherently within the game world's fictional basis.

World of Warcraft is, at the moment of writing, not only the most successful MMORPG in the world, but also the design example for other developers to follow. With a very careful balance of classes and races, a fascinating game world, and engaging gameplay that attracts both casual and hardcore players, *World of Warcraft* is an example of excellence in game design. But, how good is it from an ethical point of view? To answer this question, I will describe a design choice, which I will argue demonstrates the ethical affordances and constraints that players of *World of*
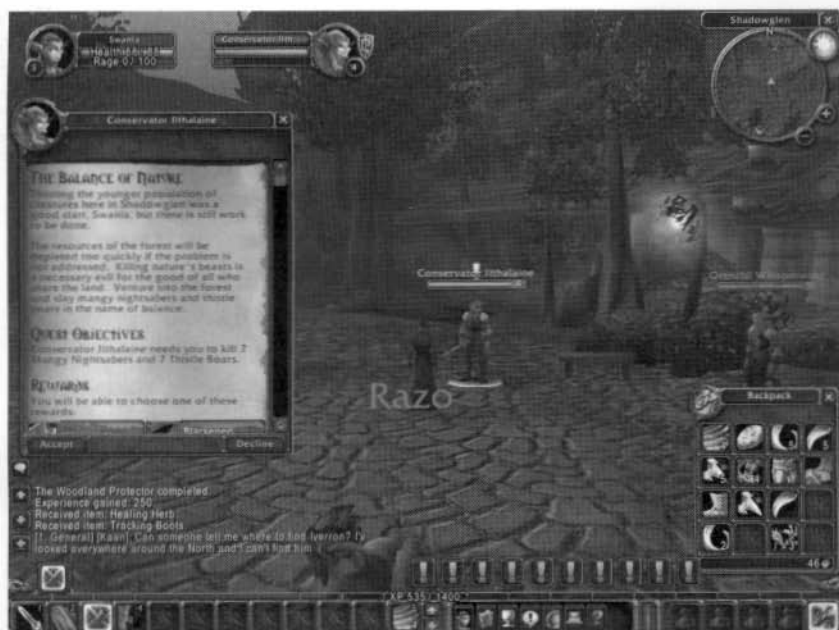
Figure 5.9
World of Warcraft: Quest Structure and a Sense of Story

Warcraft are faced with. This design choice is the honor system, as implemented and modified before the 1.7 patch.

The honor system illustrates the effects of embedded moral values in the design of the ludic system, and how they affect the community. When the game was launched in March 2005, it came almost as a surprise that the designers had implemented a system for player-versus-player combat on certain servers. For the first months of gameplay, there were no rewards for engaging in that activity. Player-versus-player combat was reasonably limited in low-level areas, and quite extensive in zones where only those characters that had already reached the end level of the game could survive. There were large-scale battles, but as a general and not always respected rule of sportsmanship, high-level characters would spare the life of lower, less powerful players.

Everything changed with the introduction of the honor system.[16] In the beginning, the honor system was a reward points system based on

the number of "honorable kills" of other players. By "honorable kills," the developers meant those kills that took place in a gap of eight levels, meaning that a level-60 character could slaughter level-52 players and so be rewarded. Those honorable kills were translated into player-versus-player points, which were used to access rewards. The honor system did not contemplate any kind of punishment for any kind of behavior.

As it turned out, the honor system created certain chaos in this game world: the large number of players that had already reached the endgame level saw the system as a way of adding content to their gameplay, engaging in major battles in specific points of the geography of the world, in search of honorable kills and player-versus-player points that could give them the glory of new items and social recognition. This situation created major lags in areas of combat, because the servers were not prepared to support such a large number of players battling others simultaneously, and because end-level players were actually strolling around the world engaging in combat with low-level characters, which spawned a large amount of ganking[17] and other player-versus-player-related behaviors. With these rewards came also a rupture of the sportsmanship that had characterized player-versus-player gameplay—deviant behaviors emerged, exploiting the fact that the honor system rewarded aggressive play styles against other players, with no risk of punishment.

The honor system divided the community of *World of Warcraft* players. There were a number of players who considered it highly unbalanced, shattering the hitherto well-crafted gameplay balance. On the other hand, numerous players found the new player-versus-player system an extra encouragement to continue playing with more people, seeing it as a way of extreme socializing within the gaming environment of *World of Warcraft*. This situation rapidly changed when the honor system was completed with the introduction of "battlegrounds," instanced maps specifically dedicated to multiplayer player-versus-player, outside of the flow of the game world. Battlegrounds introduced specific places for player-versus-player gameplay, as well as unimaginable rewards. Players who just want to engage other players meet at the battlegrounds and do not interfere with the rest of the world, and therefore with the rest of the players. Sportsmanship is valued again; gankers and other kinds of griefers are not so ubiquitous.

If we were to analyze the honor system from a virtue ethics perspective, we could argue that it is unethical, because it encourages and fosters aggression toward other players without putting in place any punishment system. With this system, the possibilities for players to practice and use their moral reasoning are limited, and it creates behaviors that are deemed unethical by the player community, which is at the same time disempowered to react to this embedded ethical affordance. Again, it must be stated that the player is a virtuous being. When immersed in a game situation, players apply their ethical reasoning. In the case of *World of Warcraft* and the honor system, they at first accepted the open, self-regulated player-versus-player gameplay as an exciting element of gameplay mechanics. Some ethical rules and values were created for exploring the possibilities of this kind of gameplay. Even though there were players that enjoyed harassing weaker rivals, or that engaged in grievous actions,[18] players enjoyed the casual duels, self-arranged battles, and the dangers of possible mousetraps. It was a dangerous world, Azeroth, but a world of honor.

When the honor system was first introduced, players reacted, as I have already stated, in very different ways. The game system rewarded player-versus-player gameplay, and did not punish the potential advantages of engaging in combat with weaker adversaries. Furthermore, the honor system rewarded those players who engaged in player-versus-player, giving them access to items that made them even more powerful, and it did not punish those players who exploited an evident weakness in design: there was no punishment for harassing other players of weaker capacities. The reaction of those players who rejected the honor system shows that players reflect ethically about playing a game and about the consequences of the design affordances. Many players showed their disgust for a system that unbalanced the game, which allowed and encouraged actions that a part of the community saw as contrary to those values that the same community had tacitly agreed upon. Some players that complained threatened to close down their accounts, even though those threats may have been just a verbalization of their disaffection with the game.

What this example shows is players reflect on the values that the game system tries to impose on them. If the community of *World of Warcraft* player-versus-player users had not been split, if it had not disagreed about

the effect of the honor system on their gameplay experience, then we would have to think of players as mindless subordinates to the game system. But players, some at least, reacted; they argued against the honor system using reasons that concerned their experience of the game, reasons that were of a moral nature. Players behaved like moral, responsible agents.

This best possible player-subject is not only one who can win the game, or achieve more of the game goals (in the case of games without a clear winning condition). The virtuous player is the one who is capable of adapting her behavior to the situation of the game as well as to the goals and constraints it creates. What kind of player somebody wants to be is not determined by the promise of victory, but by how to win; that is, the virtuous player will try to win by playing virtuously, using her ludic phronesis to assess the strategies and choices made. In this sense, the players who refused to accept the honor system in *World of Warcraft* showed how this reflection process takes place: there are unethical affordances in the new design of the game, and those affordances actually collide with what they consider to be the best way of playing, thus they publicly show their disagreement with that design decision.

If we apply the ludic hermeneutic circle to the case of *World of Warcraft* and the honor system, it can be seen as follows: a player agrees to play on a player-versus-player server, assuming the inherent affordances of the game design. Nevertheless, the player interprets those affordances, giving a certain meaning to the act of playing against another player. It could be deemed as something wrong, or avoidable, to harass other players of inferior powers. This player then participates in the player community by the mere act of playing the game, developing a tacit moral system for the game in player-versus-player mode, created by the players, and run and judged by the players. This behavior seems to be enjoyable, and justifies the monthly fee for the game.

When the honor system is instituted, the player assumes that by killing other players, some of them of inferior powers, she will get rewards and no punishment. But her reflection as a moral player deems that wrong, for reasons that the player feels are important. These values are also those of the player community, or, at least, of that part of the player community who cherishes one type of experience of *World of Warcraft*. The community perceives this change as an immoral affordance in the game design. For

some members of that playing community the ethical dilemma reached beneath their player-skin—they found it wrong also in their real-world ethics: paying for a service that provides means for unethical behavior is not to be accepted.

In the case of *World of Warcraft* and the honor system, I argue that the game does not provide a sufficiently strong ethical framework, which led to the problems caused in a part of the community. The implementation of the honor system, the battlegrounds, and the lack of punishment for possible grievous behavior were all done in a top-down manner by the developers. The game design was significantly changed, including ethical affordances that collided with those created by a part of the community. This lack of openness in the ethical experience produced reactions against it by those members of the community who had an ethical investment in the player community. Moral agents complained, and were neither heard nor respected by the game's ethical development.

In the case of the honor system, *World of Warcraft* provides an example of unethical game design: it did not respect the creative and ethical capacities of players and their communities, and it imposed by force an ethical design affordance that caused an unwanted and unnecessary disruption in the game world. The player and the community are partially responsible for the ethical values of a game, together with the possible ethical affordances and constraints that the game may have in its design. Because in the case of computer games access and modification of most of the design is quite difficult, if not impossible, game developers have a share of responsibility for how that design encourages players' values and actions. A player is responsible for her acts in a game, for the way she behaves and for what she makes of a game. The ethical issues that a game may create are the responsibility of the player, to the extent that the game designers have allowed players to create and afford their own values in the game.

Understanding this ethical imbalance in the game, and how the informational relations between the agents and patients of the infosphere shape the ethics of the game, requires using of the concept of levels of abstraction. In *World of Warcraft*, the four relevant levels of abstraction are:

1. the game as a system of rules, mechanics, challenges, and goals; that is, the world of Azeroth as a space for play.

2. the player as an in-game agent; that is, the player that selects a class and plays according to the affordances and constraints of that class, leveling up and completing the quests relative to that class.

3. the player in the world; that is, the player as how she relates to other players by means of the tools, challenges, and methods provided by the game.

4. the player as a *homo poieticus*; that is, the player in the community creating and actively enhancing values on the good play.

It is in the third level of abstraction where we see the ethical implications of the honor system in *World of Warcraft*. The informational charge that the honor system brought to *World of Warcraft* changed the relations and dependences of the beings in the game. By assigning value to a certain part of gameplay, and considering that gameplay could be defined as the exchange of information as required by the game system to achieve ergodic experiences, the designers introduced an element of disruption into the game balance. Now potentially grievous actions such as corpse camping were rewarded, and became, on the game system level, desirable actions. But those actions disrupted the gameplay for a majority of players who complained and found their experience shattered by those players who did not see that the game is more than the system in itself—the game is the system as infosphere, including all the agents and informational beings that comprise the system.

If we contemplate the honor system from the fourth level of abstraction, where the player does adopt a more proactive approach, we could argue that the players of *World of Warcraft* showed their care for the game experience where they are player-subjects. Players of this virtual world, and of every virtual world, effectively present active stewardship in the construction of the values and behaviors of that world, and they can do so from inside the game, if that is possible, or by participating in the game community. Again, the importance of the game community is revealed. In this case, ethics explains the presence of players as active elements of the game world, casting a shadow over the procedures of the *World of Warcraft* developers: if the players are in fact morally capable of reflecting on the harm that a specific design implementation causes, but yet are not heard and their influence is not rewarded in the design of the game, can *World*

of Warcraft on player-versus-player servers be then considered an ethically sound game?

From my perspective, the answer would be no. By design, and by the developers' policy, World *of Warcraft* is a game in which one party can cause the users ethical harm, whereas the users are not capable of implementing their ethics in the game. Assuming that a player is a *homo poieticus*, voluntarily engaged in this game, then she has to be allowed to intervene in the structure of the game. Only if the player complaints had yielded a reaction from the developers that restored the balance of the game according to those values that the users believed were appropriate— or better, only if the players were able to actually police themselves, and the developers acted only as a guarantee against harmful informational imbalances (cheating or grieving)—only then could *World of Warcraft*, in its implementation of the honor system, be considered an ethical game. But the game is still closed to players' self-policing, and the developers remain the only ones capable of creating policies and enhancing design choices, ever hoping (or expecting) that players will adapt to those choices as they ultimately did adapt to the choices derived from the honor system.

Despite being one of the best-designed and most successful MMORPGs in history, the player-versus-player implementation in *World of Warcraft* (at the time I described the game) made it at least partially unethical. Its structure does not take into consideration, nor respect, the possible influence that design choices with embedded ethical values have on the game experience. Furthermore, players are denied their capacities as moral agents—once there is a formal implementation of unidirectionally appointed player-versus-player rules, the player's voice is not heard, nor are the player's self-created ethical policies, which did actually preserve the informational balance of the game before the honor affordances, respected. In this respect, *World of Warcraft* is an unethical game.

World of Warcraft is a symbol of dominant trends in virtual world game design. Its tremendous success, grounded in an excellent design and compelling environment, will most likely ensure that online worlds will look like it for some years to come, and furthermore that innovation will always look at the essential design mistakes that this game made. One of the

elements that could be improved is the ethical balance of the game, especially the capacity for players to create their own values in the game, and live by them.

Managing 10 million players, or even managing some thousands, is a complex task, and by no means do I want to downplay the quality of this game. But the absolute control over the game world and how players experience it that Blizzard showed with the implementation of the honor system is a misstep on the path toward the implementation of ethics in online worlds. The most effective way of creating ethical experiences in games is to balance the network of responsibilities in such a way that players are responsible for behaviors within the game experience, without any interference from the developers, while developers focus on maintaining the game system and dynamically responding to player needs in terms of game world evolution or balancing the economy.

A game like *Eve Online* shows a possible way of understanding the ethics of online worlds: by letting the players manage the values of the game, the developers are contributing to the expansion of and attachment of players to the experience of their game. Because players are reinforced as ethical agents with relative constructive capacities within the game experience, *Eve* is a better example of applying the principle of players as *homo poieticus*, and how that can affect game design.

Online worlds are fascinating environments of almost unlimited potential. The games and the social experiences that players have at their disposal are symptoms, perhaps, of the types of games and worlds we will be inhabiting in the future. But for these worlds to be ethical, they need to be open to our ethical being—they need to respect and reflect the ethical agency of their denizens. The ethics of online worlds are simple to summarize: give players a world, and word in that world, and let them determine the values they are going to play by. Developers have the ethical duty of facilitating that process, and players the moral obligation of inhabiting those worlds not only as denizens, not only as players, but as full, mature, ethical beings.