4 The Ethics of Computer Games

Metal Gear Solid 3: Snake Eater[1] is a stealth game. The player controls a soldier commanded to infiltrate and eliminate renegade Soviet and American units in a 1960s alternative universe. Even though players are presented with a heroic character, Naked Snake, trained for combat and survival, the game does not encourage violent solutions. By using nonlethal surrendering techniques, players can accomplish the mission killing only those enemies the game narrative requires. *Metal Gear Solid 3* encourages intelligent use of environments and resources, where violence tends to be the least optimal strategy.

The freakish world of *Metal Gear* is inhabited by characters beyond humanity, in touch with other fragments of reality. The most interesting character in the third iteration of the series is The Sorrow. When we meet him, he is already dead, and we are clinging on to life. After barely surviving a great fall into a river, Naked Snake awakes in a shallow river of burning trees and nightmare skies. He will soon meet The Sorrow—the ghost of a powerful psychic who reminds us that the world of *Metal Gear* is a world of sadness. The Sorrow will remind us of death and the meaning of combat actions: Naked Snake will have to walk up the river, against the stream of all those he has (or we players have) needlessly killed.

The Sorrow remind us, the players, of all the deaths we have caused. We will walk up a river, facing the spirits of the dead, walking our memory. If we have played the game as intended, as a tactical stealth challenge, and we haven't killed more than those required to make the story progress, we will only face a few ghosts. But if we have been reckless, if we have executed soldiers who needn't have died, then we will have to face them. We won't

die, and they won't kill us, but the trip up the river will be slow and painful and it will take much longer to finish this sequence. We will have to face the consequences of our actions.

This gameplay sequence is one of the most accomplished translations of the ethical possibilities of games into actual game design, and is the perfect introduction for the core chapter of this book. Let's analyze it within the perspective of the two previous chapters: from a design point of view. The Sorrow is a clear ethical affordance in the design. Players ought to engage in stealth more than in combat. The more soldiers they kill, the less accomplished players they are, and as such they will be punished with a slower game progression. This ethical affordance indicates that killing soldiers is unnecessary, and the experience of the game will be altered accordingly. Through a rule, the game is communicating a series of values about how the game should be played.

From the perspective of the ethical player, this rule is translated into ethical values during the game experience. *Metal Gear Solid 3* encourages a number of virtues, all based on the stealth mechanics. If the player fails to build these virtues, she will be faced with the tortured ghosts of all those she has killed. Actions now have consequences, and appeal to our ethical mind. The Sorrow, as a villain, can only be understood from the perspective of the ethical player: the character is designed for reflection and redemption, two qualities that can only apply to a moral agent. This trip through the river of the dead, resonant of classical Greek mythology, appeals to the ethical player, understood both as the agent that interacts with the game world to complete goals following rules, and the as the body-subject who understands the semantics of these rules and goals and the ethical meaning of the game.

The Sorrow punishes us for being unethical players, and that punishment affects our gameplay experience (the game is longer and more tedious), as well as our moral reflection. The Sorrow reminds us of who we are as ethical players, and how games can be ethical experiences.

In this chapter I will take these lessons and formulate a comprehensive ethical framework that can be used to understand, analyze, and perhaps even predict the ethical issues computer games pose, as well as the possible solutions that developers, players, and theorists can apply.

As a general method for the analysis of computer game ethics, I suggest first defining games as experiences, then applying an ethical theory that can be used to identify the relevant ethical issues taking place in that game experience, and how they relate to the different components of the phenomenology of the game (player, object, community).[2] I interpret the ethical problems posed by computer games by applying two consolidated ethical theories, virtue ethics and information ethics, each providing a specific analysis of these ethical questions. Nevertheless, these theories present a number of shortcomings when strictly applied to computer games, which leads me to argue for a framework that can surpass those limitations and operate as an ethical analysis method specifically tailored to computer games.

After this framework is presented, I will put it to use in concrete analyses of games (chapter 6), as well as in the explanation of academically and culturally relevant topics (chapter 7) and in a more practically oriented application of the theory for game design (chapter 8). As with all comprehensive frameworks, there may be aspects that need deeper argumentation, but it is my ambition to provide an operational framework from which detail can be derived. Some examples of how to extend the original framework can be found in those aforementioned chapters, though other approaches and issues will be left unresolved in this book.

This chapter ties together and puts in perspective the notion of games as designed ethical systems and the arguments for considering players as ethical beings. Most of the theoretical work has already been done—it is now the time to consolidate these points into a unified theoretical statement. But first I will apply the two ethical traditions that will inform the arguments of the framework presented in this book.

4.1 Virtue Ethics and Computer Games

I will now introduce the analytical notions that virtue ethics provides to the study of computer games, introducing as well the shortcomings of an exclusively virtue ethics approach. I will argue that this theory is of the most use when applied to the relations between the game object and the player-subject. The analysis of game ethics from a virtue ethics perspective will conclude with an interpretation of Gadamer's hermeneutical circle that will describe the ethics of computer games. This hermeneutical circle will be the legacy of virtue ethics to the ethical framework presented later

on in this book. I will conclude with an outline of the limitations of this approach.

Even though Aristotelian virtue ethics were already present in the last parts of chapter 3, I will now introduce ithem in a rather more comprehensive manner. The reader will nevertheless be already familiar with some of the concepts presented here.

4.1.1 Defining Virtue Ethics for Computer Games

Virtue ethics is one of the oldest schools of thought in moral philosophy. Reaching back to Plato and Aristotle and spanning from the Fathers of the Church to contemporary feminist philosophy, virtue ethics has proven to be one of the most solid yet flexible ethical theories of the Western world. Roughly stated, virtue ethics attempts to define the ethical virtues that human beings and human communities should aspire to exercise in order to be ethically sound. Virtue ethics is an ethical theory about the practice and development of the moral characteristics and practices that make human beings moral animals who aspire to the good.[3]

Virtue ethics provides a cross-cultural connection to the Eastern world, because much of the ancient ethical thinking in the East, such as Confucianism, shares principles and rhetoric with virtue ethics. Without being a universalist theory, virtue ethics provides a framework that can be understood and translated to different societies across physical and cultural boundaries. This characteristic itself could arguably justify its use in the study of a global phenomenon like computer games, in which the importance of the Eastern world and culture is undeniable.

Virtue ethics as applied to computer games are essentially focused on the act of playing. From this perspective, the ethics of the game as object are a condition for the morality of the experience, but not a central issue. The game as object, the system of the game, may have embedded values, but this virtue ethics approach will only focus on those values that are actually experienced in the game. Thus, the importance of the connection between this approach and Gadamer's hermeneutical phenomenology: it is in the experience of the game object where we shall find the ethics of the game. That experience is a process of interpretation of the game system, the game situation, and of the very subject of the player, considered from synchronic (while playing the game) and diachronic (as all the games ever played) perspectives. In that hermeneutical interpretation the use of practical wisdom, the Aristotelian phronesis, provides the basis for computer game ethics as a ludic experience.

It is possible to describe which values a game may enforce via design, but it is only when the game is experienced that those values can be analyzed, described, and prescribed. As an example, the possibility exists of winning in a strategy game like *Age of Empires*[4] by building a Marvel (such as a pyramid), and it may lead to a nonviolent resolution of the game.[5] Nevertheless, most players do not perceive that possibility as a valid strategy in the multiplayer version of the game; therefore it has little relevance in the ethical experience of the game. Because the system is designed to encourage conflict, players don't perceive other strategies as valid possibilities. The Marvel is a very expensive unit, and it requires a large amount of resources that are usually needed just for securing the borders of the empire. The fact that nonviolence is an option for the players is interesting, but its embedded values of nonviolent problem solving are denied by its actual impracticality as a game strategy. Players do not experience *Age of Empires* as a game that can be won by nonviolent strategies, and in that experience virtue ethics finds its research space.

This virtue ethics approach is essentially player-centered, both from an individual perspective and from a player-community perspective. It defines players as virtuous beings who make gameplay choices informed by their practical wisdom, guided by the presence or absence of a number of player-specific virtues. Surprisingly though, game designers consider players those final necessary elements in their ludic architecture, trained users who will trigger the predetermined actions they have so carefully designed.[6] While many game designers do respect players and give them a lot of importance, this discourse of the player as a somewhat passive figure,[7] whose interaction with the system has been already plotted and is rather constrained, remains dominant.

This is a paradox because games need players to exist. The presence of a player/user who actively engages with the system is crucial for understanding the ethical configuration of the game experience. Players are not passive receivers, and they are not just bots clicking on the button to get their ludic fix. Players are reflective, virtuous beings; they think about their

strategies in more ways than just trying to figure out the success criteria and the best ways of achieving these goals. Players act in a game as ethical beings as well as goal-oriented, rational players. There is a responsibility in their actions; they are not passive victims but active moral agents when they play.

For example, playing a game like *Grand Theft Auto: San Andreas* is an ethical action of several dimensions. First, given the sheer size of the game, the player may be compelled to cheat in order to unlock some of the world's interesting items, such as vehicles or locations. But *Grand Theft Auto: San Andreas* is also a game known for its violence. Choosing to play this game, and to engage in the acts of simulated violence that are a crucial part of the gameplay, is also an ethical action. A player can actually play *Grand Theft Auto: San Andreas* without committing any crimes,[8] just exploring the virtual world of the game. That is a gameplay choice derived from the ethical reflection of the player-subject.

Being a player and being immersed in a cultural community of players is also an ethical action. Our relations with other players, within the same game experience or in the social instances that surround the game, is a practice of playing a game; a practice that, I argue, is moral. It is moral because being a part of the game community implies creating the shared values by which this game will be experienced, both alone and in the company of others. There is a responsibility in how players construct the ethical environment of the player community, how players relate to others, and what kinds of practices they allow or disallow in the game experience.

When defining the player as a virtuous being, I use the Aristotelian concept of practical wisdom, or phronesis, to refer to how a player determines which choices can further develop her virtues as a player. I define ludic phronesis as the moral wisdom that is developed as players experience games, which is used in evaluating the actions and dilemmas players are confronted with when playing and when being members of the community. On one level, being a player is also an act of learning: of learning the rules, how to achieve the goals, and in which ways we can and should relate with other players. There is a learning of the ethical maturity needed to play games, not only due to the complexity of the game systems, as it is not the same to play Tic-Tac-Toe as to play *Eve Online*, but also due to the relevance of other players in our experiences as game players. Playing games, alone and with others, is also the act of developing

the ethical wisdom that helps solve those dilemmas we face when playing games. Ludic phronesis is, in this virtue ethics context, the operative ethical knowledge present in the act of playing games, which evaluates the morality of the player's actions. This practical wisdom related to games will not only develop the ethical maturity that can inform the decision-making processes during a gameplay experience, but it will also act as an operative mark of the player-subject as body-subject.

Ludic phronesis operates on two levels: one, within the player-subject, determining the player's best choices and behaviors in order to preserve the game experience, and making it pleasurable as well as relevant for the development of the player virtues. And two, ludic phronesis operates the ethical triggers that dismiss the player-subject when the game experience actually forces the player to make choices that are deemed unethical by the being who is external to the game. We stop being players in the middle of a gaming session when our practical wisdom connects the player-subject with who we are as ethical beings outside the game experience. This double functionality of ludic phronesis is of crucial relevance for understanding the issues related to the simulation of unethical activities in computer games.

Good judgment in computer games, meaning the correct development and application of ludic phronesis, enhances the virtues of the player-subject as a user of a designed environment. The correct use of phronesis strengthens the ethical relevance of the player-subject, and is of paramount importance to the player in the ethical experience of the game. A good player from a virtue ethics perspective uses ludic phronesis to preserve her ethical integrity both outside the game, via the critical interpretation of her acts in the game experience, and inside the game, making those choices that enhance her virtues and the well-being of the player community.

Virtue ethics applied to computer games can be defined as a player-centric ethical discourse that gives the most importance to the player as ethical agent within a game and as a part of a community. Players' responsibilities are evaluated as the praxis of ethical virtues that leads to the development of a kind of ludic phronesis. The player as moral agent is an embodied, ethical agent in a culture outside the game, which affects the ethical interpretation of the game and the game culture and how it is reflected in the moral character of players.

4.1.2 Virtue Ethics and the Computer Game as Moral Object

Even though the virtue ethics approach taken here will make the player the focal point of the reflection on the ethics of computer games, it is useful to consider the moral nature of the game as an object and how it relates to the more player-centric virtue ethics perspective. Computer games are moral objects. If the game object becomes a game experience and contributes to the player's subjectivization process, then it is relevant to think about the relations established between the player-subject and the game object, and how virtue ethics can cast light on the ethics of the game object.

As I have previously argued, computer games are moral objects because they present values embedded in their design. Those values can be found in design choices as well as in game world simulations. It is the combination of both the system and the world that makes games interesting objects. For example, in the case of a game like *World of Warcraft*, where players of different factions cannot use the chat function to communicate with each other, it is possible to argue that this design choice implies a series of ethically significant constraints and affordances.

In *World of Warcraft*, the fictional world and the developers' intent to feed the endless war, creating the game's central topic, provide an explanation for these communication affordances. By imposing such a constraint, the developers have stated that players in opposite factions will have a hard time trying to settle their differences, or uniting against computer-controlled characters of extreme power. The gameplay, the experience of the world, and its fictional level are highly conditioned by a design affordance that constrains possibilities for the players.

This brief illustration shows how games are, above all, systems designed to create and facilitate practices. These may not be neutral or, as I shall argue later on, the player or the community of players may not interpret them as morally neutral. Within the ethical approach of this book, this means a type of agency-constraining design that focuses on limiting the behavior of an ethical agent with reflective capacities concerning her actions. It is important then to keep in mind that players act in games within the boundaries defined and allowed by the system. In this virtue ethics framework, players are not to be taken as passive subjects, but as active ethical agents. Nevertheless, it is also necessary to remind ourselves that players are actually constrained by the voluntary experience of a system designed to create, enhance, and enforce behavior. Players can evaluate that behavior from an ethical perspective, using their moral judgment, but they are still constrained by what is possible and what is not within the game.

Even though players of *World of Warcraft* might want to make a truce in specific areas, such as high-level instances, so gameplay can be more satisfactory by eliminating the need to fight the computer-controlled characters and players of the opposing faction, the game is designed so that this communication is hard to establish, if not impossible. As such, it would be incorrect to say that players do not want to solve their differences in nonconfrontational ways—rather that players actually cannot easily engage in that kind of communication because the system is designed to thwart that possibility.

From a virtue ethics perspective, the game design is relevant when the origin of an ethical dilemma can be tracked back to it, as in the case of *World of Warcraft* and cross-faction communication. But it is the players who, as active agents, have the responsibility in the process of accepting and experiencing those ethical values.

There is a relevant perspective that virtue ethics can provide to the understanding of the game object: to analyze the design of the game in terms of the constraints and affordances that allow players to reinforce their good virtues, first as players, and second as human beings. Virtue ethics could argue that a game like *Manhunt* fosters the development of ludic phronesis because in its design it takes into account how the player is constrained in order to make choices in the game, and how those constraints are parallel to the fiction of the game. The *Manhunt* player is, by design, encouraged to explore the limits of her player-subject—how far can she push the ethical boundaries of her subjectivity before her actions in the game are deemed unethical by the ludic phronesis, effectively halting her experience of the game?

The ethical values embedded in game design are of interest for the virtue ethics approach to computer games, as they are relevant for understanding how experiencing the game can foster the player-subject's virtues. Moreover, there are some principles that virtue ethics can suggest to game designers in pursuit of ethical games; principles that affect not so much the game design per se, but the game design in interaction with a moral agent. These principles have to do with the inclusion in the

design of options for players to practice their ethical understanding of the game, changing them from guided users into informed practitioners of the ludic experience. Virtue ethics provides a solid framework for understanding the game as object when put in the perspective of players as moral beings.

4.1.3 The Heart of a Good Game: The Ludic Hermeneutic Circle

From a virtue ethics perspective, the player has to be understood as a virtuous being. When immersed in a game situation, players use their motor skills, their capacities for abstraction and logic, and their intelligence to solve the challenges posed by the game. And they also apply their ethical reasoning. This implies that players are responsible for their acts in computer games. Players have the moral responsibility of creating values in the experience of computer games; they are the ones who will create the experience that will make a game ethical or not beyond the limits and constraints of its design. The responsibility for the affordances in the design is still the developers', but players must be considered responsible for the game experience and for how that game experience creates values for the community.

A virtuous player reflects upon her actions not only in the strategic, goal-oriented sense that we traditionally associate with games, but also in a moral sense. The virtuous computer game player ought to critically and ethically reflect on her actions as well as on the design of the system she is engaged in. The virtuous player is so in her reflection about her actions, alone or in the community, and through her behaviors in the game experience. Also, the virtuous player is one who seeks to participate in a virtuous community.

There are, then, three elements at play: the game system that conditions the players' capacities, the player's individual reasoning and ludic phronesis, and the player as a member of a community. It is in the interplay between these three, which can be effectively understood as the core of the virtue ethics approach to computer games, where the ethics of computer games is to be found, and more specifically where the virtuosity of players can be clearly outlined.

Within the perspective defended by virtue ethics, the ethics of computer games are the ethics of the agent who engages voluntarily in the game. Two issues have to be then taken into consideration: one is concerned with the relationship between the ethics of the game as agent and the ethics of that agent when not being a player; the other is concerned with the relations between the player as moral agent and the game as moral object. It is in these relations where the ethics of computer games is to be found, and it is by means of these relations that ethical issues related to computer games must be solved.

These two issues will be explained using an adapted version of the hermeneutic circle as applied by Gadamer. I shall call this adaptation the ludic hermeneutic circle. Gadamer's hermeneutics, due to the influence of Heidegger, go beyond classic hermeneutics and become an ontological tool for the understanding of the being and the being in history. His use of the hermeneutic circle as a conceptual exercise is based on his dialogic understanding of perception and experience: the circle stands for a codetermination of the experience and the subject who experiences, or in the case of texts, of the text and the reader, or the work of art and the observer. This codetermination, the fusion of horizons,[9] makes the being of the work of art and the observer into a whole. The circle is the process of understanding beyond methods, as an almost intuitive practice.

Ludic phronesis is an ethical resource in the process of interpreting the game experience. Ludic phronesis can be defined as the ethical interpretation of a game experience in light of the player-subject and the cultural being outside the game; it is a crucial element for understanding the applicability of the ludic hermeneutic circle. The circle I will propose here as a tool for understanding the role of the player is a game-centered close interpretation of the principles of practical knowledge and dialogue that permeate Gadamer's work, inspired by Aristotle and adapted to computer games as ludic experiences.

The ludic hermeneutic circle, then, is a model for describing the process that takes place when an embodied, cultural human being becomes a player, and how that player relates to her subjectivity, the game experience, and the subject external to the game. By embodied and cultural human being I refer to a person that actually has a body, bringing forth embodiment and gender issues, and who lives in one or more cultures. The player is not only the subject that is within the game; it is also the body-subject that makes the game come into being as an actual experience by interpreting the game system and the game situation. This process of

interpretation is a dialogic instance between the game system and the player. By constraining choices and affording practices, the game encourages behaviors that the player has to evaluate in order to successfully experience the game.

Playing any game can be understood as an act of interpreting the game system and choosing the appropriate strategies, which need not be the optimal strategies. The missing step in game research has been to link this process of interpretation with the ethical nature of players. Ethics play a role in that interpretation process: the analysis of the game system and the possible strategies that can be chosen are also evaluated from a moral point of view. It is precisely those players who participate actively in creating the values of the community who should be taken into consideration when analyzing it. And, incidentally, all players should aspire to participate in the game community and create those values.

The ludic hermeneutic circle operates as a layered interpretational moral process, which starts with the becoming of the player and goes through a series of interpretative stages that conclude in the development of the ludic phronesis. The interpretation process begins with a cultural subject external to the game that becomes an agent by experiencing a game system. In the first step of the ludic hermeneutic circle, the game system conditions the player-subject. The player interprets the affordances and constraints of the game as necessary boundaries that have to be accepted in order to become a player, and so she does. This initial player-subject, the zero state of the player as ethical being, is uncritically engaged in the game's ethical values and discourses.

By referring to a zero state, I am not referring to the concept of "blank slate" in behaviorist theory. The player-subject is created anew in the game experience, but that subject comes from a cultural self and from a previous tradition of playing games. The initial subject is open to the specificities of the game experience she is engaging in, but she is not isolated from her past as player, nor from her self outside of the game. In other words, the imprint of the game system determines the zero-subject of the player, the zero-subject being the initial condition of the player as subject for that game experience. That choice is not necessarily ethically informed, but it creates a subject that is conditioned by the game system's ethical affordances.

Once that zero-subject comes into being, the moral interpretation process of the ludic hermeneutic circle starts. If players were reduced to mere zero-players, mindlessly and amorally determined by the game as object, we wouldn't find reactions in response to reflection on the design and the fictional world of the game, like complaints about the content or imbalance of a game, or elaborate community-driven policies. The second step of the ludic hermeneutic circle is a moral reflection of the player as player-subject; that is, as a subject that takes place and interacts with a game world designed for her ludic enjoyment. Players reflect on the act of being committed to the power structure of the game. The experience of the game is not unidirectionally system to player, it is a dialogue between the system that imposes restrictions and affords behaviors, and a player who reflects upon those.

This player-subject is not only that who can win the game, or achieve more of the goals in the case of games without a clear winning condition, it is also a virtuous player 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 becoming victorious, 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.

This is the first level of the ludic hermeneutic circle—one in which the player uses her own ludic phronesis in order to interpret her presence in the game world and the actions she should take, starting to develop her own subjectivity for that game experience, the individual layer. But, as I have stated before, being a player is also being a part of a synchronic and diachronic community of players. This community plays a crucial role in the process of experiencing a game, and thus it has to be included in the ludic hermeneutic circle.

We have all played, and we can always share game experiences with other players, even if those experiences are of different games, precisely because we share a common culture as players. Our player-subject, who starts as a zero-subject but is modified by a dialogic reflection upon that subjectivity, is also in a dialogue with the game community, even in the case of single-player games.[10] The relation between the individual and the community of players can be used to address topics such as cheating in single-player games, or hardcore gaming.

It could be argued that players do not cheat in single-player games because a part of being a good player in a player community is surpassing the challenges posed by the game, garnering a skill-based achievement.

One can righteously claim victory over a game in front of other players only if that victory is legal, so other players can see it as done within the boundaries of the game rules. Likewise, hardcore players—for example, those who strive to achieve the 100 percent completion rate in a game like *Grand Theft Auto: San Andreas*, which may involve more than 100 hours of playing—do it not only for personal satisfaction, but also to become recognized in their communities. Even in single-player games, then, we are a part of a community. Community is an ever-larger part of multiplayer games because of the presence of institutionalized, systemically embedded representations of the community, such as guilds.

What this second stage of interpretation does is to situate the player in the larger context of the player cultural community—cultural because different communities of players create different traditions in games that affect the interpretation of the individual virtuous player. For example, Italian soccer coaches and fans seem to be very keen on extremely defensive tactics, the so-called *catenaccio*,[11] thus making the virtuous player one who is both disciplined and relevant to the game's overall defense. On the other hand, Brazilian soccer fans enjoy the beautiful game, the *jogo bonito*, which demands great individual skill and not necessarily a lot of tactical or collective sacrifices. This is a crucial difference for the understanding of football cultures. While catennacio makes order, sacrifice, and teamwork the basis for the appreciation of a game, jogo bonito insists on individualism and imagination, catering to thoroughly different expectations from the observers and the players. For these two communities, virtuous soccer players require different values and interpretations of the game. It is within this culture that the player enters an interpretational dialogue, participating as one among many who create the ethics of a game. The individual player and her reflection upon her own subjectivity under the rules of a game can be modified by thinking as a part of a community, thus the importance of the community in the configuration of the individual player's ethics and the game as experience.

There is a final element in the ludic hermeneutic circle, an element that broadens the perspective and possible application of this concept of the understanding of computer game ethics: players and player communities are cultural and embodied outside the game experience, where other values that are not those of the game as object, the player, or the player community are dominant. Ultimately, our actions within the game, as members of a player community, are to be interpreted under the light of our own existence as moral beings in the world outside the game. That world and our physical presence in it are an important factor in the configuration of the ethics of a computer game. There are cultural taboos, and there are firm beliefs that cannot be overruled by the commitment to the game world. Being a player is maintaining a part of what makes us moral beings in the real world as a reference.

This is not to say that there is an easily distinguishable boundary between the player as subject and the self from which the subject originates. It is not possible to place an arrow pointing at the limits between the two ways of experiencing reality. I have argued that a player comes into being only when immersed in a game experience, be that playing the game or participating as a member of a game community. When not in any of those situations, there is no active player-subjectivity; we are not looking at the world with the eyes of a player. This distinction, as with many operational tools in philosophy, is hard to prove empirically, and yet it is logically sound and analytically productive. There is a player-subject who is evaluated by a cultural, embodied, moral being who has accepted the rules of a game, thus becoming a subject but never losing its presence. Being a player is also being evaluated by who we are as moral, embodied, cultural beings.

This whole process of interpretation, starting with the zero-subject faithful to the game and ending in the dialogue between the player-subject and the moral being, constitutes the ludic hermeneutic circle. It can be argued that I have only depicted the harmonious side of the ludic hermeneutic circle, and that there are players who actually engage in deviant gameplay and enjoy doing so, harassing other players, cheating, and griefing. That is where the importance of the player community manifests itself: an individual player may develop a judgment of her self in the game in which griefing and cheating are acceptable. On the other hand, the player community, historically speaking, tends to treat cheaters and griefers as elements of disruption who need to be avoided or punished for the well-being of the community. This does not mean that the community of players consists of zealous defenders of the gaming orthodoxy—the player community consists of players who collectively and historically have developed a sense of sportsmanship and values that good players, both in skill and in morals, should sport. The game community is effectively powerless—

they can cast away players, but they cannot influence, punish, or reward them, unless the game designers include the game community as an institution inside the game structure.

This dialogic procedure of interpretation of the game, along with the actions of the player within the game and the community and her relation to real life is what creates the ludic phronesis that informs the virtuous player. This includes the capacity of experiencing the game within the dialogic interpretational procedures of the ludic hermeneutic circle. Ludic phronesis is the ethical interpretation that takes place in the described stages of the ludic hermeneutic circle. It is a character trait and a knowledge that we develop. Learning to play games as an interpretational process of who we are and how we behave is the process of developing this moral reasoning. Because games operate in this circle of interpretation, we can have political and ideological games—the player develops a moral reflection of her actions that is somehow processed and evaluated by her real-life values, an evaluation process intrinsic to games, and a proof of the moral nature of computer games. This is a model of the ludic hermeneutic circle:

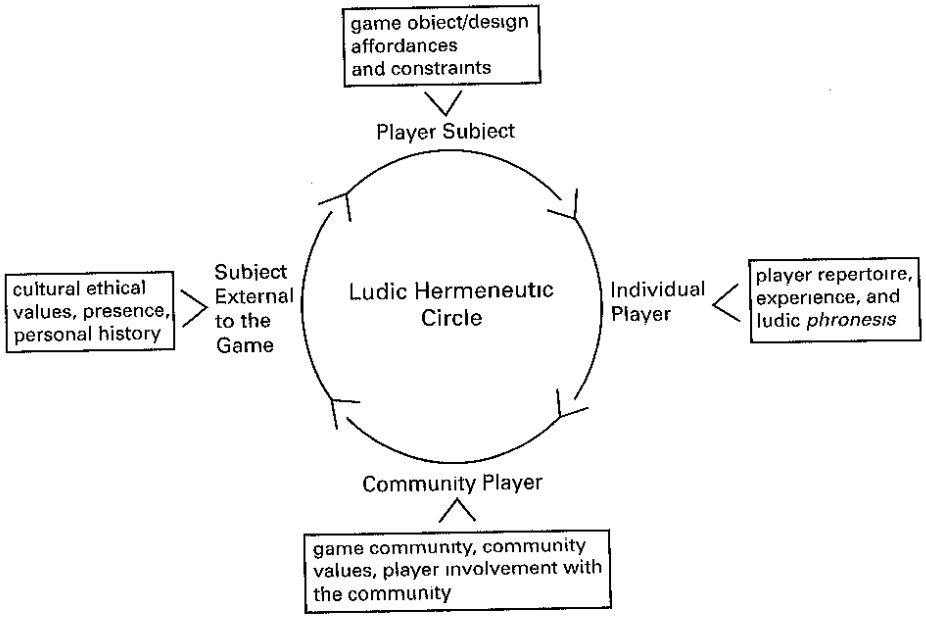

Figure 4.1
The Ludic Hermeneutic Circle

The ethics of a computer game are the result of the ludic hermeneutic circle, the outcome of a game experienced by moral agents who reflect upon their actions and upon the design of the game using their ludic phronesis.

4.1.4 The Ethics of Computer Games According to Virtue Ethics

Understanding the ethics of computer games from a virtue ethics perspective gives players a great amount of responsibility when it comes to dealing with moral issues in computer games. A common mistake when analyzing the ethical dilemmas that computer games pose is to consider the player as a passive element, abandoned by her moral intuitions in a labyrinth demiurgically created by the game developers. Virtue ethics challenges this perspective, situating morally aware players in active dialogue with the game—a process made possible by the player who is responsible for the ethical nature of the game experience in which she willingly engages. Players are the bearers of computer game ethics, the act of playing computer games being a matter of interpretation within virtue.

Individually, players are affected by the game design. To play a game means to initially accept the affordances and constraints that a game presents; in this process, players come into being—they become an ethical subject capable of reflecting on the in-game choices and strategies. A player experiences a game in a ludic hermeneutic circle, a process of procedural moral interpretation of the game experience. This process is also a dialogue between the player as a moral being and the game. In this dialogue the player has not only to interpret the game, but also to provide ethical behaviors of her own to the experience. Therefore, an ethical game by design is that game in which the designed system does not constrain the possibility for the player to afford ethical values into the gameplay experience. Those affordances have to be meaningful for the gameplay, relevant and agreed upon by other players. An ethical game is that which acknowledges, respects, and encourages the ethical being of computer game players.

This does not mean that a game has to be molded according to the values of its players, or that players ought to be free to choose whatever ethics should rule in the game. The ethical dimension of the game as object, according to virtue ethics, relies on the openness of the system—a game

by design ought not to interfere with the ethical affordances that players may want to provide to the game, both on an interpretational level and on a more practical level. Nevertheless, it could be argued that there are examples of games in which this openness does not happen, and yet they can be considered good games from an ethical point of view. In the case of *Manhunt*, for example, the game designers performed a rhetoric design of subtle mastery: by being aware that the player is a moral being, the game design reflects the game world, translating it into the game experience. More clearly: in *Manhunt* the experience of the horrible actions the player has to commit is unavoidable, and the player is forced to go through that experience. *Manhunt* seems aware of the procedures of the ludic hermeneutic circle: because the player cannot behave in any other way than committing those actions, her experience matches that of the game fiction, thus creating a moral experience.

This implies an open path for political and satirical games, as well as for games used for social and political commentary: a game design may not want to let the player introduce ethical values into her gameplay—but that has to be done with a clear design plan in mind, being conscious that it will provoke a strong moral reaction in the player, an ethical awareness that may bring games the possibility for new forms of expression. The possibility for political games lies here: acknowledging that there is a player with ethical capacities and interests who is willing to engage in a ludic experience that will make her reflect on the actions she is taking within the game. Players would not be given information—they would experience the political dilemmas, because they are active agents engaged in the production of meaning in the game.

This virtuous player engages in gameplay conscious of the process of ethical interpretation. A virtuous player is defined as a moral being with the capacity to interpret and reflect on the game as object, on her behavior, and on her presence in the game world and in the game community. A virtuous player develops and uses the player virtues and ludic practical wisdom when playing computer games, a kind of moral reasoning that takes into account its specific being and meaning within the game experience, and acts upon those values. This is also a process of maturing, a process of developing the necessary ethical skills to ensure that the experience of the game is ethical. A player is responsible for her moral well-being in a game experience, as well as for the values she enacts. A player has to behave virtuously and develop the moral knowledge to do so.

The virtuous behavior of a game player is that behavior which shows an understanding not of the best strategies and actions to win the game, but of the gameplay processes that ensure a satisfactory game experience. The ethical goal is to win by respecting the game and other players, by doing what is best to preserve the ludic engagement in the game. A player who decides not to engage in player-versus-player gameplay against weaker characters in *World of Warcraft*, for example, is showing moral reflection on the structure of the game—her behavior is ethical by nature, sporting in her gameplay those virtues she believes the game must have.

But players are seldom alone. The role of the community in the development of the ethics of computer games is as important as the role of the individual player. Player communities have the responsibility of creating the implicit and afforded codes of interpretation and conduct that define what a good game is, thus placing those who disrupt the well-being of the game experience outside the moral goodness of the community. A game community has importance in the ethical configuration of a game, how it is understood, and how ethical behaviors are enforced and respected by all the players. When an ethical issue arises, the player community should be able to provide answers and create open discussions, empowering their opinions and actions in their experience of the game.

The player and the community, then, are partially responsible for a game's ethical values, together with the ethical affordances and constraints that the game may have in its design. A player is responsible for her acts in a game, for the way she behaves, and for what she makes of a game in her experience of it. The ethical issues that a game can 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. This is not to take away the importance of the design affordances, because the player as subject is to some extent conditioned by those affordances. In other words, the design is relevant from this perspective because the game should foster the development of the player's virtues. If it doesn't, from a virtue ethics perspective we would be talking about an unethical game.

The moral maturity of players, and the way they relate as such to the game, plays an important role as well. Players have to develop virtues in order to become good players, and make the games good. By being part of a historical game community, and by playing games, players develop this moral sense of playing, creating the ludic phronesis that determines the ethics of games. This phronesis is created through time, which is one of the reasons why not every game is suitable for every player. Players have to develop the moral maturity to understand the specifics of a game and how to interpret them. Given that a game's ethics are partially dependent on the players' ethically interpreted actions, it is of utmost importance that these players present moral maturity, so that the game becomes an actually good, ethical computer game.

The ethics of computer games is dependent on the ethics of the players because the players are the ethical centers of the ludic hermeneutic circle. A good computer game is that which fosters virtuous players, a game designed to create player-subjects who can understand and develop their ethical values, and where those values can be reflected. The player is responsible for becoming the virtuous player that the game is designed to encourage. The virtue ethics perspective on the ethics of computer games puts players in the center of the picture by expanding the presence and importance of ethical norms and experience with the ludic phronesis, the capacity to morally interpret the act of playing from a perspective derived from previous experiences and belonging to a game community.

4.1.5 Limitations of the Virtue Ethics Approach

While virtue ethics seems quite fit for explaining the ethics of computer games from a player perspective, it presents some limitations that have to be taken into consideration. The strongest problem has to do with the importance given to the community. Games are a voluntary activity, and digital games are a voluntary activity that depends on access to a computer and, in some cases, to Internet connections. The material conditions for playing computer games are subject to social and economic constraints: not everybody has access to the best computers or the fastest Internet connections. Furthermore, not everybody has time to spare participating in game forums because of the limitations of their connections. Therefore, putting so much responsibility on the community may give rise to some problems. I believe the most relevant among these is related to the constitution of the community. If the community is comprised exclusively of those who can afford to log onto the Internet regularly and/or spend vast amounts of time participating in the common creation of the game culture, then there may be silent web-less majorities that do not follow the values of the community, therefore distorting the values of the game as they can be perceived. That is, the values of a game as deduced from its community may only be the values of an elite group with time and technical knowledge and capacities.

This is perhaps the most important ethical dilemma computer games can face from a virtue ethics perspective. These are participative systems because players actually have a large degree of effect on how the game must be played. But the fact that the design and mechanics of the game are out of reach, and that developers ultimately have control over the game, leads to the discarding of coparticipation in creation of the actual game design, or game object. Game communities solve this problem by being creative and productive, adjusting with their imagination and their values to the closed framework in which they were created. But if a minority of users creates these communities, then that elite dictates the values of the game, forcing other players to accept values they may not endorse, but which they have to accept due to material constraints.

This limitation needed to be mentioned here as evidence that I am not arguing for an exclusive virtue ethics explanation of the ethics of computer games. Virtue ethics provides answers to those ethical issues in digital games related to players, player behavior, and the role and importance of ethical practice alone or with other players, in the context of a game. But its scope is limited, and it can only explain to a certain extent the ethics of computer games. As ethicists and players, it is our task to point out the limitations, and formulate what may be developed as solutions. Such formulations are beyond the scope of this book, but they must be mentioned for the sake of completeness in this virtue ethics approach to the ethics of computer games.

4.2 Information Ethics and Computer Games

So far the computer games-centric analysis presented in this book could still be applied, with few changes, to any type of game. Nevertheless,

I have stated that my main interest is the ethics of computer games, especially in the perspective of computer ethics. Virtue ethics has been successfully applied in that field, and I have argued that it is also a useful framework when analyzing computer games. Still, it is of interest to apply a philosophical ethical theory that is related to the ethical problems created or changed by the use of computers and digital systems of information.

This theory is information ethics, which provides an alternative reference framework that both places computer games in the tradition of computer ethics and can be applied to the analysis of the ethics of computer games both as objects and as experiences of an ethical agent. Information ethics has the potential to cover the analysis of most of the elements that make computer games ethically relevant, from the design of the game system and game world to the implications of community creation and individual behaviors of players in the information-rich environments of computer games. As such, it is a core component of the ethical framework I will present in later stages of this book.

4.2.1 Key Concepts and Method of Information Ethics

The ethical theory I have chosen to represent a closer computer ethics perspective is information ethics as defined by Luciano Floridi, Jeff Sanders, and others.[12] Information ethics is a radical perspective on computer ethics that takes into account the nature of computing as well as the presence of human and software agents in digital environments. Furthermore, it shares with virtue ethics a certain constructivist approach. It is my goal to provide an answer to computer game ethics that draws on the common grounds of those theories, but also to use and exploit their specific conceptual strengths.

In Floridi and Sanders's words, information ethics "is an Environmental Macroethics based on the concept of data entity rather than life."[13] Information ethics defines itself as a macroethical approach, a framework that expands the responsibility of moral agents by defining existence as informational existence: we are all data entities. Every biological life is a data entity, but there are more data entities than life-forms: there are artificial data entities that need to be respected and that can be harmed. For instance, databases containing our credit card data and records are data beings that need to be preserved from harm. These data entities share an environment that needs to be ethically protected. Information ethics expands our moral universe to include everything informational, and the relations that we establish and that are established with us. Furthermore, information ethics is an "architectural ethics," an ethics addressing not only the users but also the creators and designers of the "infosphere."[14] The infosphere is an ecological environment of informational agents, patients, and their mutual relations. All elements of the infosphere are in one way or another mutually connected, precisely like in an ecosystem, and the balance of this system can be affected, leading to harm and thus defining what unethical actions or relations are. The infosphere is defined as "a context constituted by the whole system of information objects, including all agents and patients, messages, their attributes and mutual relations."[15] The infosphere is a key concept in information ethics, since it makes clear where we can find data beings, how their relations constitute their ontologies, and what can harm them.

Computer games are infospheres. In a specific level of analysis, or level of abstraction, a game like *World of Warcraft* (which I will analyze in more detail in chapter 5) is an infosphere: the product, the developers, the servers and their technology, the players, and the online resources. But a specific server is also an infosphere, depending on the level of abstraction necessary for the analysis. The infosphere could include the player-versus-player server where I played, as well as the Internet forums hosted on the official web page, for example. Other analyses may need to define different operational infospheres, always depending on what is relevant for the research question to be explained.

Information ethics takes into account the necessity of operating within different informational perspectives by using the concepts of level of abstraction and gradient of abstraction.[16] The use of these concepts is closely linked with the ontological nature of information ethics. According to this theory, data beings are capable of agenthood. The problem is that if there is no threshold of agenthood, everything can become an agent. Thus, a formal approach is needed to specify what beings present agenthood under which circumstances. The method of abstraction, from which the concepts of level of abstraction and gradient of abstraction are taken, provides a serious logical framework that allows a clear specification of what reality is being observed, and how it is being observed.

A level of abstraction "is a finite but nonempty set of observables, which are expected to be the building blocks in a theory characterized by their very choice."[17] A level of abstraction determines the features of the observed object we are focusing on. The whole set of different observables used in the research yields the gradient of abstraction, "a way of varying the level of abstraction in order to make observations at differing levels of abstraction."[18]

Information ethics has an object-oriented approach to ontology: an object is informationally, and thus ontologically, defined by the objects with which it constitutes the infosphere—their relations, capacities, and possibilities.[19] By using the phenomenological concept of system and relating this to the procedures of information constitution and exchange of computer systems,[20] information ethics describes a moral universe in which not only is no being alone, but every being is indeed related, *morally* related to other beings, because in their well-being is connected the welfare of the whole system. Agents are systems that affect larger systems with their actions, affecting themselves as well, since other systems are procedurally and informationally related to them.

Information ethics considers moral actions an information process. It is worth pointing out that the agent and the patient are, in this level of abstraction, not necessarily human. Information ethics allows an operative level of abstraction without human agency. In fact, information ethics suggests artificial agency as a key element for the understanding of morality in the infosphere.

Also of interest for this ethical framework is Floridi and Sanders's concept of *homo poieticus*, central to information ethics' anthropology.[21] Both information ethics and virtue ethics are constructivist approaches, but while the latter could be accused of promoting an anthropocentric approach, the former takes into account a much wider system. Information ethics expands the ethical universe, increasing the degree to which we are morally responsible for the world we live in. According to information ethics, the moral scope has to be expanded to take into consideration any informational being that is present and has importance for the well-being of the infosphere. Furthermore, as human agents we have the task, the ethical duty, of using *and* producing virtuous environments. For the environment to be ethically sound, we need to be ethically responsible as users and producers.

The strong object-oriented background of information ethics implies that every agent in the infosphere, to some extent, is a producer as well as a consumer. In a system such as the one suggested by information ethics, interconnectivity is not enough to explain the degree of interdependence that every element of the infosphere presents to the other beings of that infosphere. As informational beings we are coparticipated by every other being in the infosphere, both in a material and in an informational way. Thus, the responsibility of producing and sustaining the infosphere's well-being is extended to each and every one of its participants, be they human or not. The concept of subject that is present in this approach is, beyond the *egopoietic* approach of virtue ethics, *ecopoietic*; that is, it assumes that the agent creates the environment and participates in its generation and sustainability, and thus is ethically responsible for the preservation of its balance as well as for its adequate use and development. We are all developers and consumers in the infosphere, and in this regard we must behave ethically and preserve the well-being of the system.

Information ethics expands our moral universe so we are responsible for the act of participation and co-creation of the informational worlds with which we are engaged. This may seem a highly theoretical, complex understanding of computer ethics. Nevertheless, I will argue that information ethics fits computer games especially well, and its application provides insights on the morality of computer games and ludic experiences that place their analysis in the field of computer ethics.

4.2.2 Information and Games

To understand the ethics of computer games from an information ethics perspective, the first condition that has to be met is that the computer game, both as an experience and as an object, has to be considered an infosphere, the informationally rich environment where moral agents and patients engage in informational relations that affect and change their states. It is an environment where all beings are informational objects, and their relations are determined by the system and implemented by the creative agents.

Let's use a popular example: *World of Warcraft* as an infosphere can be described as a computer-coded state machine[22] that hosts a number of

agents who can interact with the world in an exchange of information aimed at modifying the informational values of agents, patients, and environments in predesigned but not predetermined ways. In other words, *World of Warcraft* is a system programmed to react to informational exchanges from a number of agents simultaneously accessing and inhabiting that environment. The changes in the state machine are available to everybody in that environment, and may also be suffered by everybody. Within this perspective, the subjectivization process of becoming a player is nothing other than reprocessing our being into informational values that are relevant only for that infosphere.

If we see *World of Warcraft* as a whole, we can describe it as an environment in which we interact with other agents by exchanging meaningful information aimed at influencing the state of the game, and we can do so only because as players we have become informationally relevant for the system in which we are immersed. The game world, without the presence of the player community, is a construct of data, some of which is passive and noninteractive, but most of which presents interactive functionalities—something that could be defined within the information ethics perspective as data beings. These data beings are informationally relevant, and thus perceived as beings by those agents that are immersed in the game in order to play it. To play a game, then, is to exchange information in an infosphere specifically designed for such exchanges. The informational space of *World of Warcraft* is a place designed for play, an environment where these agents and patients exchange information in order to experience the system in a ludic way.

When entering these systems, a player accepts a limitation in her information being in order to be able to exist and participate in the infosphere. This infosphere is a designed environment that demands certain informational capacities from its players, imposing restrictive rules as to what is and is not possible for the agent in the world. The infosphere design can have an impact on the informational being of the agents that voluntarily come into being in it. This shaping of the agent's informational being implies an ethical participation of the game system in the configuration of being, and thus it becomes a source of ethical dilemmas. In other words, the way the informational system is designed to create and allow informational beings to exist and participate in the informational world has to be analyzed from an ethical perspective, because the design affects the well-being of relevant informational beings, and it may therefore influence the overall ethical informational balance of the game, hence the relevance of games as designed ethical objects.

It is import to here remember the ontological nature of players as informational beings. Information ethics is an ecological ethics—it defines the well-being of a network of interconnected elements, in this case informational beings, and how it should be protected. Informational beings are related and determined by the other informational beings in the infosphere. For example, in a role-playing game the level of a player is both an internal characteristic, as it is forged through gameplay, and an external characteristic that reveals relevant data about that player. In player-versus-player situations, level is used for assessing the chances of a victory in a duel, or for calibrating other gameplay options. It is also the cue that determines when an action is potentially unethical, like corpse camping a lower-level player.

This implies that players are actually dependent on and affected by not only other players' informational natures, but also by the way the infosphere articulates and facilitates those interrelations. Understanding this ethical balance of the game, and how the informational relations between the agents and patients of the infosphere shape the ethics of the game, requires using the concepts of levels of abstraction and gradient of abstraction, since they show relevant aspects of the informational complexity of computer games as infospheres. This method is similar in concept to the ludic hermeneutic circle, but it pertains to the informational being of the game and the relational capacities of the system instead of placing the importance exclusively on the interpretational capacities of the human agent. In this sense, the use of the method of abstraction for the informational analysis of computer game ethics provides a more thorough framework than that proposed by virtue ethics.

There are some levels of abstraction present in all computer games. These are not the only levels of abstraction that can be used to analyze games, but they are dominant when analyzing their ethics as infospheres:

1. The game system as informational environment: the game as a designed infosphere, and how it shapes interactions and behaves as a state machine.

2. The player as informational being: how the player becomes relevant to the infosphere by becoming an informationally relevant being, capable of exchanging information within that infosphere.

3. The player as an informational being related to and determined by other informational beings in the infosphere: that is, how the player behaves in relation to other players and the possible artificial agents in the game, and how those informational relations shape the environment of the infosphere.

4. The player as a *homo poieticus*: how the player creates the values of the infosphere not only by behaving ethically, but also by constructing those values that should make the infosphere of the game an informationally ethical place, a place where information exchanges take place in a moral way.

Within any of these levels of abstraction, an unethical action would be that which modifies the infosphere's informational structure, creating an imbalance in the experience of the system—any unwanted informational asymmetries. An informational asymmetry, in the context of computer games, is a situation in which one or more agents have an influence on the infosphere that is seen as illegal by the rules of the game. The case of cheating, for example, implies a modification of the infosphere that introduces informational asymmetries into the system, corrupting the well-being of the game.

In computer games, informational well-being can actually be clearly defined: a game infosphere is healthy when its informational structure, its game design, allows players to undergo a ludic experience in which they can participate. This experience is designed and limited by the system. In other words, the game infosphere is in balance when all players can experience the game's designed system successfully. This implies that a healthy game infosphere is one in which the player can actually create and enforce her values within the game system, and in which the implementation of those values does not alter the informational structure of the game.

Also, in a healthy game infosphere, players exert their creative stewardship. Creative stewardship means, in the case of computer games, to act responsibly and ethically, preserving the game experience and the game system as an infosphere (for example, not cheating), while exerting a level of creativity within the game—creating new strategies, improving as a player, cooperating with others, and exploring the world. Let's take the example of emergent gameplay in *Deus Ex*. In this game, players are placed in open-ended levels that they can navigate in almost any way they want, making use of their knowledge of the game and the tools and mechanics provided by the designers. One of those tools was a mine that could be stuck to the walls. Cleverly enough, some players discovered that, with the right amount of skill, these mines could be used as ad hoc ladders, which allowed players to avoid potentially fatal enemies.

Did the players cheat? No—as a matter of fact, this is a great example of creative stewardship in a computer game: players understood the infosphere, how it functioned, and how they related to it as players within the game world so well that they could devise an unforeseen strategy that, while preserving the logic of the game, was also a symbol of their own capacities as players in the world. In other words, players appropriated this world and made it theirs, preserving its original structure and functions, but extending it by means of reflecting on their agency. Creative stewardship in games takes place in all instances in which players contribute to the game beyond the mere manipulation of the basic input procedures required for the game to be played: building communities, helping other players, or devising strategies and gameplay patterns are all examples of this type of ludic creative stewardship.

In summary, a game is an infosphere designed to create an experience by a number of players who are interrelated in their informational being. Information ethics provides a way of understanding why these design choices, which at some levels (the system as such; the player devoid of other agents) may be considered harmless, are actually a source of harm and thus unethical. For any informational system to be ethical, it has to be open to the creative actions of its agents. Otherwise, the system is prone to imbalance, and thus has a tendency toward becoming an unethical system.

4.2.3 Information Ethics and the Ethics of Computer Games

A computer game is a ludic infosphere, created with the intention of making possible a limited and combinational number of informational exchanges between agents, patients, and informational objects. The game is then not only the game world, but every world in which the informational being of the system and its agents, the players, is both possible and meaningful. Information ethics takes into consideration this game world, the game situation, (e.g., the living room), and the game community (e.g., *World of Warcraft* forums). All these layers of the infosphere are determined by the initial informational value of the infosphere, as it is this value that determines if the informational exchange is relevant. In other words, the conditions that create the infosphere also determine its boundaries and thus the applicability of the information ethics method.

A player is an informational being relevant in the infosphere; an informational being that has constructivist values, not only participating in the infosphere as an agent, but also acting as a creative steward who has to be responsible for the informational well-being of the system. Information ethics has a strong object-oriented approach, meaning that players, or by extension any agent in the ludic infosphere, are never atomized units of information: their being is dependent and modified by the being of other informational beings in the system. What a player can be is determined by what the system allows her to be, and how she can relate to the system. Like in classic text-based adventure games, in which there was only one keyword that could trigger the game's progression, players can relate to the infosphere in only a limited number of ways, some of them allowed by the game, some a consequence of the constructive capacities of the player in her interpretation of the game's informational values.

Information ethics' object-oriented approach supposes a radical change of perspective. Every being in the game is related, interconnected, and relevant for some other being, or for all those beings. And this not only accounts for what is actually programmed or coded: the game community, the individual player, and even the media or elements traditionally considered to be external to the game play a significant role in the ethical configuration of the game, because every being in the infosphere can and will eventually be related to and determined by another being of that same infosphere. This explains the players' repertoire and their community culture, but also those discourses of the media and of institutions that affect the informational status of the game. When the United States military praises the capacities of computer games as virtual web-based environments for training, they are effectively adding value to the *America's Army*[23] infosphere: it becomes a propaganda tool and a recruitment device. And they add this propagandistic or political meaning because the nature of their discourses is informationally relevant within the game infosphere, and thus becomes a part of the game experience.

This leads to the concept of distributed responsibility, which is the great contribution of information ethics to the understanding of digital games.[24] In a computer game, every informational being that plays a role in the infosphere has a shared role in the ethical values of that infosphere. The responsibility is not univocal; there is not one single element of the infosphere that can be held responsible for the ethics of a computer game—not the designers, not the players, not the player community, not the media. Every informational being, including computer-controlled agents, has a role in the infosphere and thus has responsibility for the well-being and ethical soundness of the system. Distributed responsibility implies that ethicists have to look at which informational stakeholder is relevant for any ethical issue that arises within the infosphere of a game; it also implies that we have to look for the distributional and relational structure of those responsibilities: who is responsible for what, when, and to what degree. There is no single bearer of responsibility in a game because a game is an object-oriented informational structure where many elements can be interconnected in their ontological existence in that infosphere. To describe the ethics of computer games, then, it is necessary to identify the distributed network of responsibilities relevant to a specific ethical issue, determine the structural relations in terms of responsibility of that structure, and suggest solutions for the ethical problems found.

Distributed responsibility is of crucial importance when we think about the importance of players and nonplayers[25] in the ethical configuration of the ludic infosphere. The responsibility that the agents and participants in the infosphere have relates to the previously introduced concept of creative stewardship, by which the agents of the infosphere are entitled to exert

their creative capacities within the infosphere, while they must at the same time preserve its integrity (in the case of games, the successful experience of the game).

It could be possible to relate to virtue ethics using the concepts from the object-oriented approach of information ethics, which also relates to the notion of distributed responsibility. Agents can be defined as informational objects with a number of data structures and methods.[26] Those methods determine how objects relate to others. For instance, the capacity of players to create their own codes of behavior that adapt to the virtual environment in *World of Warcraft* may be considered a "positive" method, one that allows players to directly intervene on behalf of the infosphere's well-being.

It can be assumed, then, that there is a relation between those methods that contribute to the infosphere's well-being and the virtues of players as described previously in this book. The interesting aspect of information ethics, though, is that while the virtue ethics approach tends to limit the development of these virtues to the player,[27] in the distributed responsibility perspective all stakeholders should contribute to fostering these virtues, these methods that contribute to the well-being of the ludic infosphere. Information ethics expands the moral universe to take into account all the beings that can affect or suffer harm within the infosphere.

The gradient of abstraction of any research on the ethics of computer games from an information ethics perspective defines the network of distributed responsibility by the method of abstraction: harm to the informational balance of a particular game has to be defined in a number of levels of abstraction, creating the gradient of abstraction in which the ethicist should place the network of responsibilities. Once these elements are identified, the ethics of a particular situation in an infosphere are ready to be analyzed.

The ethics of computer games from an information ethics perspective has two crucial elements: first, distributed responsibility implies that the consumers of the game are equally responsible as the game designers, or sometimes even more responsible. Thus, its concordance with the *homo poieticus* approach, by which active agents in a game ought to be creative and responsible for the well-being of the game and the game community, players are creatively responsible for their experience in the infosphere. Furthermore, distributed responsibility expands the moral orbit of the ethics of games, including those stakeholders whose discourses are informationally relevant for a game, even though they are not agents in the game. The media discourse, and other discourses and agents, are also part of the informational nature of the game and ought to play a role in the game's ethical soundness.

Second, by defining informational balance as morally good, this adaptation of information ethics places a great deal of responsibility on the design of the system, and indirectly on the designers. A bad game design is unbalanced, making the game experience flawed or negating the constructivist capacities of the players and the players' communities. Bad design is an unethical practice. A game poorly designed is, in principle, an unethical object, because its dysfunctional design interrupts and harms the ludic experience, damaging the infosphere as a network of ecological relations. A game that is impossible to win, or the camera design in *Shadow of the Colossus*, which sometimes does not allow the player to actually see where her target is, are examples of bad design that create a frustrating experience, affecting the well-being of the agents in the game.

There are degrees, though, of unethical design. A game that is poorly balanced, extraordinarily difficult, or terribly unplayable is unethical, but it is so in an intrinsic way; that is, it is unethical in its design but not toward the players. On the other hand, a game that constrains the constructivist ethical capacities of the players by not allowing them to bring their own values and practices into the game, dismissing or disempowering them, is an extrinsically unethical game: it affects the well-being of the infosphere by affecting the agents and their informational capacities. Most MMORPGs that follow the *Ultima Online* tradition, from *EverQuest* to *Dark Age of Camelot*,[28] tend to present instances of unethical design in the way their players are occasionally unable to play by the values they create, as I will argue in my study of *World of Warcraft*. Not every game, though, needs the presence of players' values—but every game can present intrinsically unethical design, as they are all designed objects.

From an information ethics perspective, to understand computer games it is necessary to take into account the game design and the game object, players, and other elements that can be considered, at some relevant level,

informationally relevant for the game as infosphere. Furthermore, the relevance of the concept of information and informational being also opens up the possibility of understanding the moral responsibility of the fictional layer of the game.

The semiotic layer of the game, what Juul would call the fiction of the game, is a part of the informational structure of the infosphere, and it should be analyzed as such. Thus, it might be possible to say that the game's fiction can also be highly responsible for the game's ethical values. For instance, a game like *Manhunt* could be deemed unethical by its fictional level, because the actions that the game simulates are clearly unethical. Nevertheless, the fictional element of the game is only a part of the informational structure if it is relevant for the designed experience of the game. In *Manhunt*, the violent actions are a part of a design that creates interesting ethical reflections in the confluence of system design and game world simulation, as I have argued before.

Games are processes, and we have to understand their ethics as such. This is also true when it comes to their fictional layer. Everything that is not a part of the informational exchange between agents, patients, and the system, but which is fictional, is of no interest for the ethics of computer games; but if a fictional element is relevant to the way the game design configures the informational exchange, then that fictional element can be a part of the distributed network of responsibilities in an ethical analysis of the game. For instance, the impossibility of cross-faction communication in *World of Warcraft* is an element that does play an informational role in the game via design, thus, it should be analyzed from an ethical point of view. On the other hand, the fact that Mario in *Super Mario Bros.*[29] is a small Italian plumber is not ethically relevant, as it plays no role in the game's informational exchange.

Information ethics can provide a comprehensive theoretical framework for the understanding of the ethics of computer games, a framework that expands our capacities of analysis of game ethics by also expanding our moral universe. From this perspective, computer games are ecosystems of information in which users and producers are responsible for the well-being of that given environment. Nevertheless, this perspective presents some limitations.

4.2.4 The Limits of Information Ethics

Information ethics is a bold attempt to provide a theoretical framework by which some problems posed by computer ethics can be solved. It does so by using information theory and logics in a way that can metaphorically resemble the technical nature of hardware and software. The use of an object-oriented approach, and the use of the method of abstraction applied to the infosphere, map the inner core of computing in a way that makes information an ontology. All of this roughly constitutes the core of information ethics as a theory, and it gives it its theoretical strength, which is its assumed capacity for taking computer ethics issues and solving them as particular ethical problems derived from the use of computation. But this strength is also information ethics' main weakness in its application to computer games.

The limits of this approach as a tool for understanding the ethics of computer games are located in its highly theoretical nature. I have attempted to adapt some of the core concepts to the field of computer games. This adaptation seems to be operational, providing new insights into computer game ethics. Nevertheless, it can always be argued that these key notions are not necessarily applicable tools, but more conceptual paradigms by which we can understand research fields related to computer ethics. The problem with a theory that does not necessarily commit itself to application is that, while it can operate in the logic field with doubtless strength, it may be flawed when its concepts are taken into practice. Information ethics has just recently begun to find applications in the study of privacy-related ethical issues,[30] but there is work to be done before information ethics can effectively be regarded not only as a strong theory, but also as a tool for understanding and solving computer ethics issues.

The main conceptual problem in applying information ethics to computer games is the use of the concept of infosphere: understanding a game as an infosphere and giving to any element in the game the category of being because it is informational might seem a far-fetched application of the concept. Perhaps the biggest problem comes with the expansion of the moral responsibility that the use of this concept brings. By determining that the game is an infosphere, every element of the game, from design to artificial agents, is responsible for the moral

fabric of the game. The problem is what an infosphere is, and how we can determine it. By defining an infosphere as the place where information exchanges are meaningful and by determining the ontological being of the agents and patients in that infosphere, we run the risk of opening the paradigm so wide that everything may be considered as a part of the infosphere, and thus we potentially jeopardize our results.

Nevertheless, the relatively closed nature of games provides a good environment for testing this theory. It is possible to outline some clear boundaries as to where information is relevant for the game experience, thus giving us the ability to define the infosphere quite clearly. Whenever the information exchanges are meaningful within the game experience—that is, if they are logical within the world of the game—then the infosphere is an appropriate tool for understanding the ontological and ethical status of the game, the players, and the software.

The limits of information ethics are determined by the fact that its concepts have so far seen little application outside theory. Information ethics intends to redefine the scope of computer ethics with a new understanding of the ethical processes that configure computing systems. To do so, it has provided a strong theoretical framework in which this radical approach is based. Applying this framework to a specific object may always bring forth issues of applicability and scope of the concepts. Those are the limits of this theory. Nevertheless, I have applied it to computer games and it has been proven to be of use. It is then simply a task of pushing the boundaries of these limitations so that information ethics can be defended as a successful and resourceful approach for the understanding of ethics in computer games.

This act of pushing the boundaries, of combining the insights of virtue and information ethics, informs my own theoretical approach to the question of computer games and ethics. In the next section I present the framework that can be used to effectively analyze the ethics of computer games, as I will illustrate with case studies in the following chapter. This introduction will be highly abstract and rather formalistic, with the intention of creating not an infallible theory, but a vocabulary and a framework for the understanding of the ethical issues of computer games.

4.3 The Ethics of Computer Games

The framework I am now going to present has to be understood as a practical application of the theory, derived from virtue ethics and information ethics. It is an applied ethics framework that goes beyond the dependence on one theory and toward its possible implementation in actual ethical concerns related to computer games, some of which will be presented and analyzed in the next chapter.

Most of the work that has been done on ethics and computer games has focused on the content of computer games as the factor by which their moral value has to be determined. The fundamental flaw of this approach is precisely its focus on the content. It is not the game world or the fiction that makes a game ethical or unethical. Or, more precisely, it is not only, not even primarily, the fiction of the game that determines the ethics of the computer game.

I am not trying here to downplay the importance of the fictional level in computer games when it comes to their ethical nature. The fiction of the game—the way the game world is presented to the player—does play a role in the ethical construction of the game. If we take, for example, *Counter-Strike* and *Under Ash*,[31] two games of similar gameplay and design, it is possible to argue that *Counter-Strike* is a highly de-ideologized game (which, in itself, is highly interesting from an ethical point of view, as terrorists and counterterrorists are identically defined for the game). The representational layer of *Under Ash*, by contrast, calls for an ethical reading of the world it depicts, since it is a first-person shooter that simulated the Palestinian-Israeli conflict from the perspective of a Palestinian combatant.

Fiction plays a role in the ethics of computer games. The content of a game, its story, backstory, character description and visualization, and game world have significant relevance for the game's ethics. But they are not central to the ethical construction of meaning in a computer game, because computer games are objects and experiences beyond their fictional nature. The limits of content analysis applied to the ethics of games come from the initial colonization of the field of game studies by disciplines like narratology or film and media studies,[32] which had tools for understanding other kinds of objects and experiences significantly different from computer games. The uncritical use of the same methods,

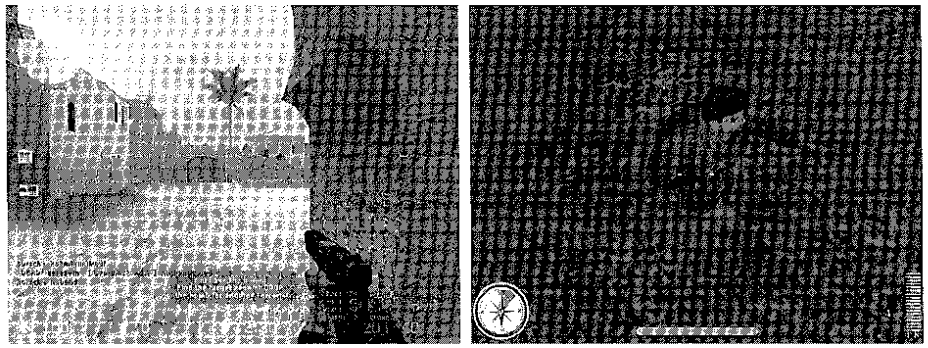

Figure 4.2
Counter Strike versus. Under Ash: Meaning and (Political) Games

concepts, and approaches for films and computer games is a methodological mistake that can only provide limited understanding of the ethics of games.

While the content of the game plays a role in the ethics of games, it is not enough to accurately describe them. Only if we take into account that games are designed objects that create experiences for players will we have a starting point for analyzing the ethics of games. Understanding the ethics of any computer game involves researching the interplay between a designed moral object, a moral experience derived from that object, and the moral agent that experiences the game. The relations between these three elements determine the ethics of computer games.

Because the computer game is a designed object in which the player usually cannot directly exercise moral reasoning over the game system, modifying it accordingly to her own values, the design of the game is morally responsible for the ethical experiences it might create. Poor design, unbalanced features, or a biased balance of the game system, in which some agents have unfair advantages, are elements of unethical design, even in the case of unintentional flaws. It is so because games as objects create ludic experiences that may be harmful for the player as a moral being. Bad design,[33] then, is to be considered unethical.

An example of bad design that harms the player's experience of the game is the ethical affordance in *XIII*, an example of unethical design because it is inconsistent with the game world and the experience of the game up to that point, and it imposes on the player a contradicting rule: until the first game sequence where there are policemen, everything on screen was shootable. But, once the policemen are on stage, they are not to be made targets. If what the designers wanted to do, with good intentions, was to avoid having the player shoot policemen, then both the fiction and the game design should have alerted the player and guided her toward making that choice as a moral agent in the game world, by implementing, for instance, a level design in which shooting policemen would actually be either impossible or too demanding and impractical.

Not only bad design is ethically relevant; the design of a game as object is also the ergodic structure by which players access and experience the fiction. The representational level, the simulated game world, is important, but only if we consider it linked to the design of the game. It is in the informational structure of the game as state machine that we can find the ethics of computer games. Those computer games that try to convey political or social commentary values, such as *September 12th* or *Disaffected!*,[34] do so not only by creating a fictional world in which the political or social commentary has a role, but also by creating a world in which the designed interaction will create ethical meaning. In the case of *September 12th*, it is the manipulation of the game rhetoric, from the impossibility of a victory condition to the ironic reflection on game interface convention, which makes the ethical and political dimension of the game relevant. These serious games are actually so because it is in the interplay between the design of the game and the content of the game that their political and ethical values arise.

Computer games are also experiences, the phenomenological creation of the gameplay by means of interaction with the state machine of the game. The ethics of the game as experience are closely related to the ethics of the player, as well as connected to the game system that is designed to create that experience. An ethical game experience is one in which the player, a body-subject that exists and experiences the game system, can interact with that system as a moral agent; an experience that allows for the player's ethical behavior, interpretation, and, in the best possible case, contribution to the value system of the game experience. Gameplay ought to reflect, affect, and motivate the ethics of the player

as a creative agent whose values are represented in the game, and who is partially determined and affected by the values that the game system has.

Traditionally, players go through this ethical experience by modifying the rules or the gameplay of a given game depending on the adversary, the situation, or other variables. The example already mentioned is the master who is playing against a neophyte: modifying some of the rules may imply a shared successful experience. Nevertheless, in the case of computer games these modifications of the game system or rules are either not possible, difficult due to the technical requirements, or predetermined by the game designers, like choosing a difficulty level. Thus it is important that the game as an experience can include the ethical presence of players as agents; it is of importance for the ethics of computer games to allow players to create a moral experience, or, in the case of games developed with the intention of creating a particularly ethical experience, the game as experience has to reflect clearly the values and the reasons why players' choices are constrained. An ethical game is that in which it is possible to apply ethical reasoning to the game experience in order to achieve a successful ludic experience.

In this perspective on the ethics of computer games, it is the player who has a new ethical dimension and role. The figure of the player tends to be seen as that of the victim, or the guilty victim to be more precise: the player engages in an unethical experience in which she passively suffers conditioned training and manipulation, and she does so by actively engaging in that experience. The ethical understanding of computer games I argue for gives a different role to players, a role that is significantly more demanding, but which also reflects the complexity of the ludic experience of a designed system. In this perspective, the ethics of computer games are highly dependent on the ethics of the players as creative and proactive value-bearers; on an ontology of players that has values and a culture which they look forward to expanding, protecting, and experiencing. The player of a computer game is a moral agent who plays according to a set of values partially created by the ethical nature of the design and the game experience, but also by the individual, communitarian, and cultural values that inform her ethical being. A player uses ethical reflection, phronesis, and her creative stewardship to evaluate her actions in the game, an ethical reflection that is part of her own previous experience as a player, as an individual, and as part of a larger cultural community of players.

The player is an ethical subject who develops moral training in the playing of games precisely by playing games. The more games we play, the more we understand their ethical implications and how to behave and interact ethically with them, not only because we learn to understand games as systems and experience, but also because we become a part of a player community that is rooted in our culture. Players know how to relate to other players, they know what the essential values that a good player must represent are, and they know what players should avoid in order to create balanced game experiences. This means that not every game is for every player. Playing games is also a process of moral maturation in which we learn how to play the game and how to understand these ethical systems. In other words, we learn to behave ethically in games by playing them, developing our moral understanding of games and our ludic phronesis in the same process.

Summarizing, the ethics of computer games has to be approached from three different but interconnected elements: the ethics of the game design, which comprises the game as object from its systemic to its fictional elements; the game as experience, or how the ethical values of the game as object are projected into an experience in which the agent(s) have moral presence, relevance, and influence in the ethical landscape of the experience; and the player as a moral body-subject who can interact with the game using moral reason, and who creates the values of the game as a cultural object by means of her interpretation and subsequent behavior in the sphere of the game, considered as both the game system and the game culture.

This multidimensional description of the ethics of computer games requires a conceptual tool that can represent the interwoven relations of system, experience, and agent in the creation of computer game ethics. To do so, I will again bring forth the concept of distributed responsibility as a functional theoretical tool for the analysis of computer game ethics.

Distributed responsibility refers to the fact that in the game experience there are a number of elements which share in nonproportional ways the

responsibility for the game's ethical content. It is a tool for analyzing what the ethics of a game are, and what the roles of the different elements in the game situation are, from the players to the designers, including the game as designed system. All these elements of a computer game have a weight in the moral configuration of the game. Distributed responsibility is a concept that should be used as the initial step in the method for understanding and solving the ethical issues raised by a game. Distributed responsibility is informed by the ecological approach of information ethics, as well as the communitarian values of virtue ethics; it also takes into account the phenomenological ontology of the player as a relational body-subject that comes into being in the experience of a game, as a part of a community of players.

Because there are different relevant actors in the ethical construction of a computer game, and thus in the possible ethical problems it may raise, the first step is to plot the ethical interrelations of these actors. But these actors' responsibility should not be considered individually, or isolated from the presence of others. The ethics of computer games is networked by nature. Any ethical issue concerning computer games may have the design of the game as the source, but it is not independent from the other agents and their presence in the system. An ethical problem created by a design issue affects the game experience and all the agents in that game experience. Furthermore, because players are ethical agents capable of moral reasoning and action within the game experience, it is also, to some extent, a matter of their behavior and interpretation of that ethical issue in the game. Therefore, there are no clear boundaries, no isolated layers in the description and analysis of ethical issues of computer games.

The concept of distributed responsibility acknowledges this. In fact, it is at its very core: a game is a system where ethical issues are distributed over a network of ludic systems and game agents. The goal of the research on the ethics of games is to identify an issue, establish the network of game elements involved, and map the different degrees of affectedness and responsibility. That overview of the weighted network of ethical responsibilities in a computer game is what constitutes the distributed responsibility of that game.

Distributed responsibility intends to be a practical tool for the analysis of which elements are relevant in the ethical configuration of a certain computer game, or relevant to one of its aspects. By recognizing that a computer game is a complex experience in which there are many interrelated elements of importance that share the possibility of affecting each other, this concept can be of practical utility both in the analysis and in the development of computer games. Understanding the network of responsibilities in a computer game is taking one step toward systematizing the design of computer games with ethical gameplay, and it is also a tool for understanding the ethical issues that digital games raise.

In the following chapter I will apply this ethical framework to different relevant ethical issues concerning specific computer games.