3 Being a Game

This chapter begins with a simple request: describe a toy car. Most people might say that a toy car is a small-scale reproduction of a car. It has wheels, doors, and maybe a little driver. It can be made of metal, plastic, or wood. It can be either a replica of an actual car or a base with wheels, a body, and maybe features like headlamps or windscreens.

Now here is another request. How would you describe how to play with a toy car? Your answer probably will reflect the type of toy car that you are envisioning. If you envision a toy car that is a piece of wood with wheels, then playing with the toy involves propelling it so that the wheels move forward and backward. You might even make engine or horn sounds as you play with it. If you envision a toy car is made for display purposes and replicates the looks of a car that you find aesthetically pleasing, then you could play with it, but most likely you will display it and celebrate the craft of the miniature.

Now look at the toy car that is shown in figure 3.1. How would you play with this toy car? The idea of playing with it is unsettling but also is a key to understanding how games can be designed to create ethical gameplay experiences.

This chapter offers a pragmatic, design-centric analysis the structure of games[1] and reflects on how and why games are capable of creating ethical gameplay experiences. Understanding ethical gameplay first requires taking a look at the games that are being played, so the chapter focuses on designing games and not on developing a comprehensive ontology of the nature of games.

A game is a device for creating experiences, and I want to understand how the design elements in a game can suggest particular activities and

Figure 3.1
How would you play with this car?

result in certain emotions in players. This experience of the game occurs between emotion and system and between processes and play.

Processes

At one point in my life, I owed my sanity to a system. Putting a baby to sleep is usually not easy, especially for a first-time parent. My first son liked to sleep, but only if someone stayed in the room with him until he fell asleep. The time before he finally fell asleep was tender, meaningful, and yet boring for me. The game *Drop7* (Area/Code Entertainment 2009) was my companion in the hours that I spent waiting for this baby to fall asleep. The clockwork mechanics and logical beauty of the game system abstracted me from the world and allowed me to experience a certain degree of wholeness.[2]

Drop7 is an aesthetically pleasing game with a beautiful art style and soundtrack. But the type of aesthetic beauty that I experience when playing *Drop7* does not have to do with its audiovisual component. What I

love about *Drop7* is the beautiful experience of playing the system. This beauty lies in the player's interaction with the game system—in playing with, within, and by the game system.

This way of thinking about games reflects the recent intellectual tradition of procedurality.[3] Even so, the aesthetic qualities of games cannot be reduced to or justified exclusively by their formal systems. *Drop7* is beautiful because it invites people to play through its audiovisual design. It is also aesthetically pleasant because of the precision of its systems. In fact,

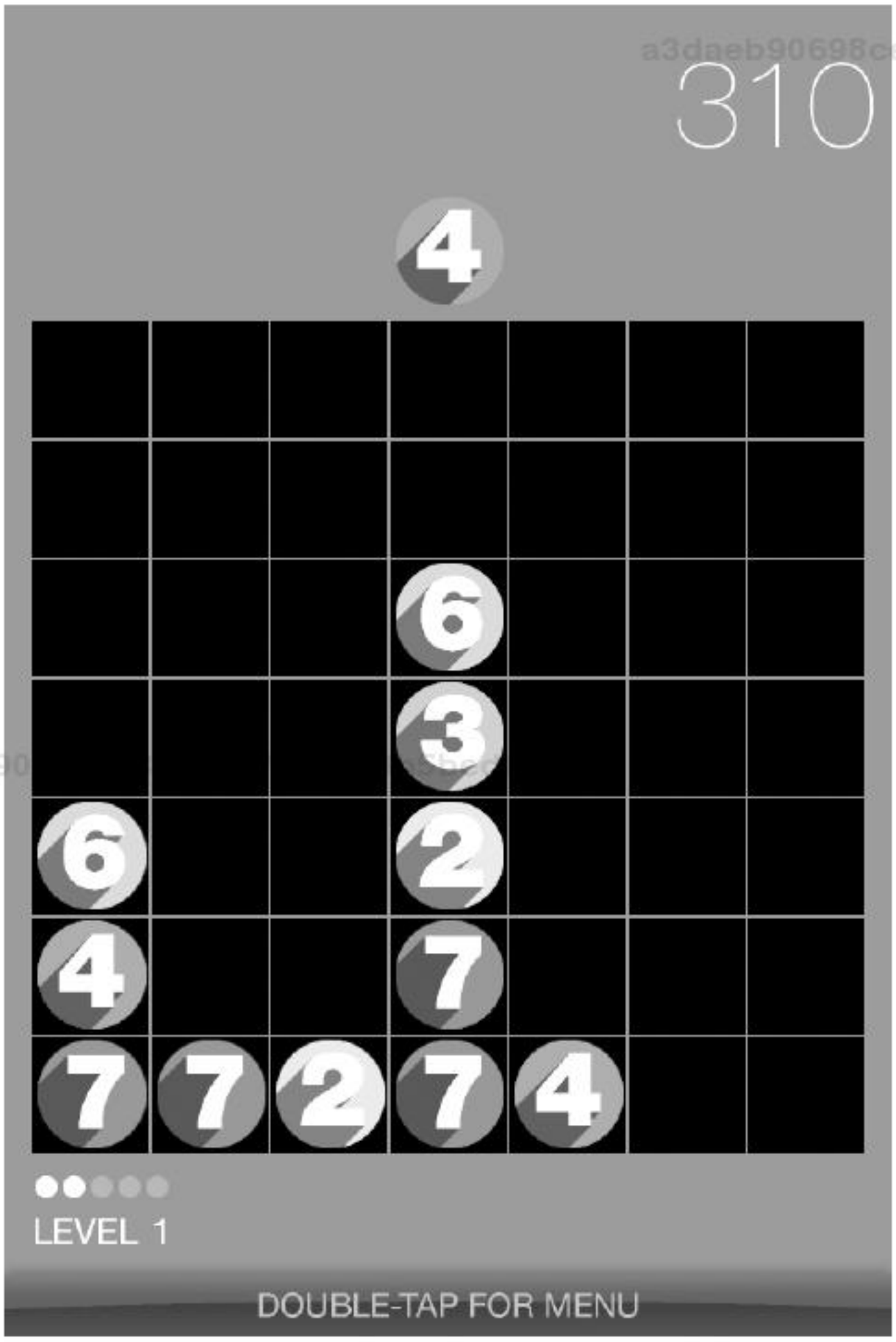

Figure 3.2
The formal beauty of *Drop7* (Area/Code Entertainment 2009)

the aesthetic and ethical aspects of games should focus on games as they are played. Understanding the designed object is only a first step for which procedurality provides insights into why certain systems lead to aesthetic experiences and how that experience takes place.

The rules of *Drop7* are fairly simple but cannot describe the procedural pleasures hidden in this game:

> Drop discs into the grid.
> A disc disappears whenever its number matches the amount of discs in its current row or column (only counting contiguous discs).
> Gray discs are actually number discs beneath the surface.
> Whenever a disc touching a gray disc is broken, the gray disc will grind down until it is uncovered.
> There is a drop counter under the grid which counts your progress towards the next level. When you reach a new level, a row of gray discs will be pushed up from the bottom, so watch out!
> Sometimes a drop will set off a chain of breaks. Set up chains for huge bonus points.
> You will lose the game when any disc is pushed out the top of the grid or there is nowhere to drop a disc, so keep breaking discs to stay alive. . . . [The instructions continue by explaining the different game modes.] (Area/Code Entertainment 2009)

Although game and play theorists have historically examined the formal elements of games (Avedon 1971; Sutton-Smith 1997), the rise of computer games as a dominant form of entertainment has generated interest in understanding what makes games "so different, so appealing" (Juul 2003). The answer, likely derived from the fact that computers excel at enforcing rules and simulating processes, is that the formal elements of games—their rules and systems—make games unique.[4]

When players try to explain how to play a game to a novice, they spend some time explaining what the game is about but more time explaining the rules of the game. Even with games that are closer to improvisational theater, like Jeepform role playing,[5] there needs to be some explanation of what the boundaries of the gameplay activity are, how the game ends, and how the activity of play is framed.

All games have a formal system of rules. This is one of their ontological marks. Unlike novels, films, and music, the rules of a game define it and make it what it is. Therefore, to understand any game, we should start by looking at its rule system, and this academic approach is championed by procedurality.[6]

Jason Rohrer's *Passage* (2007a), for example, is self-defined as a memento-mori game—a reflection on life, death, and the short time that living things

have to enjoy this earth's pleasures. The meaning that the designer wanted to communicate is seemingly embedded in the game rules: gameplay is limited to five minutes, which is communicated by limiting and expanding the field of vision of the player toward the right (youth) or the left (old age) (Rohrer 2007b).

Procedurality is important because ignoring that games are formal systems that can embed and communicate meaning will lead us to only a partial examination of the design of ethical gameplay. To understand how games can address the complicated domain of ethics, we need proceduralist arguments.

Proceduralist thinking states that computer games are cultural products that need to be analyzed based on their "procedural nature." Janet H. Murray (1998) claims that procedurality distinguishes games and other computational aesthetic devices from traditional means of expression because they are processes that operate in way that is similar to how computers operate. Other researchers have extended the argument by claiming that procedurality is how computer games build discourses of ethical, political, social, and aesthetic value.

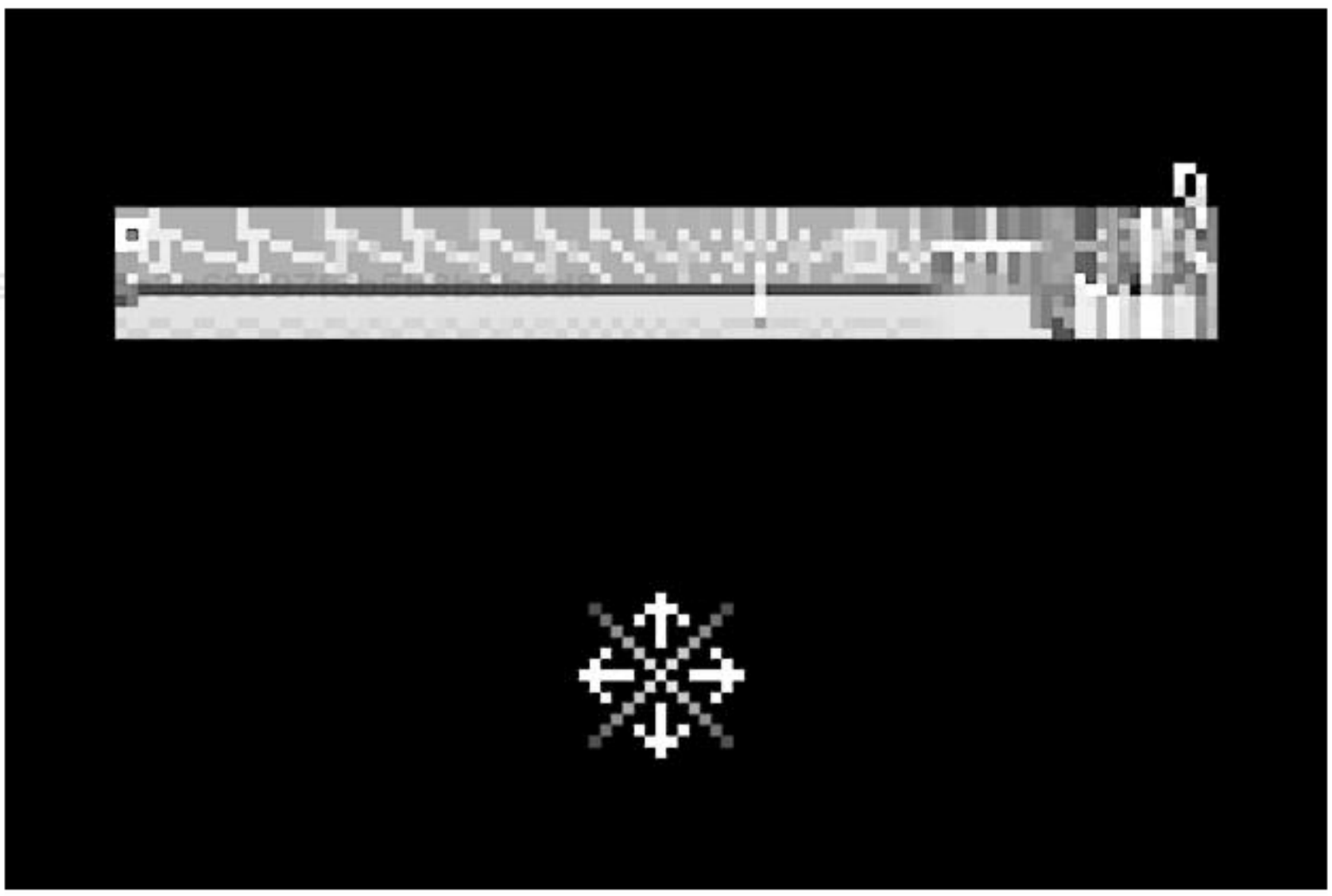

Figure 3.3
Time passing in *Passage* (Rohrer 2007a)

Philosopher and game scholar Ian Bogost has provided a comprehensive theory of procedurality in *Unit Operations: An Approach to Videogame Criticism* (2006, 106), where he states that "games create complex relations between the player, the work, and the world via unit operations that simultaneously embed material, functional, and discursive modes of representation." Procedural rhetorics is concerned with how arguments are embedded in the rules of a game and how these rules are expressed, communicated to, and understood by a player. The central idea is that through their simulation rules, games create arguments, and the players' understanding of that model makes a game have meaning: "A simulation is the gap between the rule-based representation of a source system and a user's subjectivity" (107), and "the unit operations of a simulation embody themselves in a player's understanding. This is the place where rules can be grasped, where instantiated code enters the material world via human players' faculty of reason" (99).

Players then reconstruct the meaning embedded in the rules and are thus persuaded by the arguments they have interacted with. The argument that objects can embody values in their design is not new (Winner 1986; Latour and Akricht 1992; Latour 1992) and has even fostered a school of design thinking and a philosophy of technology (Verbeek 2006). However, procedural rhetorics has focused on systems and input/output procedures without paying much attention to play as the mode of interpretation of these rhetorical devices.

There is a player, a system, and a gap between the player and system where interpretation takes place. Bogost's (2006, 109) concept of "simulation fever" explains how the gap is bridged: "Working through simulation fever means learning how to express what simulations choose to embed and to exclude." Simulation fever inserts the player into the process that is initiated by the game. This allows for different interpretive strategies that justify the players' understanding of the games' procedural message: "One method [for interpretive strategies] would encourage player critics to work though the simulation anxiety a simulation generates. Part of this process takes place within the gameplay, as the player goes through cycles of configuring the game by engaging its unit operations. Another process of configuration has to do with working through the player's subjective response to the game, the internalizations of its cybernetic feedback loops" (108–109). "Simulation fever" brings together the system as a container of meaning

and the player as the generator of meaning. Games, procedurally understood, convey messages and create aesthetic and cultural experiences by making players think and reflect about the system that they interact with.[7]

Procedural rhetorics is a unique way of thinking about games because it claims that games can convey complex messages precisely because of their procedural nature.[8] In procedural rhetorics, players are activators of a process that sets in motion the meanings that are contained in the game. The rules constitute the procedural argumentation of the game, and play is an actualization of that process.

Although there are limits to this approach (which I explore later in this book), procedurality forces us to deal with the being of games—the fact that games exist as things in the world that are constructed and interacted with.[9] How do games exist? All games have rules and systems that create processes. Games are also meaningful technologies and aesthetic objects. They can tell stories, create fictional worlds, and engage players in complex, rewarding, or frustrating behaviors, and they do so by taking as a starting point a core that is constituted by systems. In words of Colleen Macklin (personal communication, 2012),

> Games are the popular cultural form of systems. They aren't informational pamphlets or documentary films. They are best at expressing systemic things through their mechanics, and at the heart of it, the core mechanic has to be something compelling. When you base your design on the system underlying an issue, you are creating a model that people can play with and come to their own conclusions.

Drop7 is engaging because of the logical coherence of the system and because of the ways that it rewards understanding and trying to master a system by means of strategies and rituals. The tedium of those long hours waiting for my infant son to fall asleep was greatly relieved by figuring out how the one and two discs can be used to get out of complicated situations, learning to think within the system, and letting myself go within that system. That let-go or drift is part of the beautiful experience of *Drop7*. When players let go, they encounter the being of the game and meet somewhere with the beautiful, arcane, alien thing that compels them to play. I am interested in how encounters with these things happen through play and how these encounters might result in moral experiences. Letting go in *Drop7* is opening up for the aesthetics of that encounter. But ethical gameplay is another type of encounter with another type of game. In words of designer Frank Lantz (personal communication, 2011),

I believe that most of the "meaning" of a game, ethical or otherwise, emerges as the result of play but in a complicated way. I don't think you can locate the meaning in some formal or structural qualities of the game rules or materials, nor can you locate it solely in the performance of the players. The meanings emerge out of a complex network of interactions between the formal qualities of the game system, the explicitly representational aspects of the game's materials (theme, images, language, narrative), the experience of an individual player, the way the game is used within a player community, the way the game evolves over time as players explore it, etc.

In this sense, procedurality is necessary but not sufficient to explain how games can create ethical experiences. We need to acknowledge the existence of rules, the systemic nature of the object that players interact with, and the ways that rules' procedural rhetoric shapes players' behavior. But we still need to know why players care about games, why they play them, why they grow attached to them, and why they let these objects affect them.

Metaphors We Play By

Not everyone is an engineer, but I encourage those interested in video games to write a computer program to learn the basics of writing games with code. Understanding how software works can illuminate, inspire, and challenge some of our assumptions about games and culture.[10]

When I was learning to program, I realized that it is not enough to know about systems when thinking about games. Like many novice programmers who are interested in games, I tried to write a *Super Mario Bros.* (Nintendo 1985) clone, and while writing it, I realized the obvious: Mario does not have three lives.[11]

Many games manage players' progression by giving them "lives" that, if depleted, require them to restart the game. In these games, players fight for their lives. But "lives" are simply attempts to overcome challenges, like the three strikes that a baseball player has to hit the ball. In computer games, these tries are variable chunks of memory (something like "int lives = 3;").

But when they play, however, players think that Mario has three lives. They do not think that Mario has been assigned an integer as "number of tries left before restarting a particular section." They certainly do not think about the particular physical size that the integer has in the computer's memory or the ways that physical size might lead to glitches or unfairness in the game. What is the difference? It depends on what feels worse—dying

or having a variable decrease by 1 each time players do not overcome a challenge.

Games are not cold machines. If anything, games are emotion-making devices—props for play. They appropriate players' need for leisure and ability to recognize patterns and turn them into experiences that players want to traverse again and again because they find joy in repetition and learning. Games systematize the pleasures of play and make them repeatable. There is pleasure in the mastery of systems, but systems are not always the easiest thing to become emotionally attached to.

Understanding the mastery of systems does not totally explain why games matter. Many of the emotions that players experience come from winning, losing, playing well or poorly, or being part of the social context of play. How are these emotions cued? How do players translate variables into experiences that they care about?

Games communicate their systems through metaphors, and therefore games can be seen as complex interrelations between a system, the metaphors used to communicate with players, and the way that players interpret these metaphors as cultural and embodied beings who are socially situated in the activity of play. Football fans are heartbroken when the opposing team manages to pass the ball over their favorite team's goal, yet the pass is a physical action that is given importance only by a rule. The action has meaning through the combination of the rule and the fans' broken hearts, whether the fans are in the stadium or at home.

The idea of explaining systems through metaphors is not new. In fact, almost any kind of interaction that people have with computers is mediated by what can be interpreted as a metaphor—from the folders that structure our desktops to the arrows that we use to point at documents. Failing to interact with systems is often failing to decipher the metaphors used to communicate about them.[12] Even so, the idea of metaphor-based interfaces has not been widely accepted, and there are strong critiques to be made about this approach (Cooper, Reimann, and Cronin 2007, 269–270). However, for the purpose of this book, I propose that games are systems that are communicated to the player through metaphors.

A classic definition for *metaphor* is using one term to explain another term. Even though there is a tradition in design to write about metaphors as design tools,[13] here I am more interested in the way that George Lakoff and Mark Johnson (2003, 255) defined *metaphor*: "metaphor is not merely

a matter of language. It is a matter of conceptual structure. And conceptual structure is not merely a matter of the intellect—it involves all the natural dimensions of our experience, including aspects of our sense experiences. . . . artworks provide new ways of structuring our experience in terms of these natural dimensions. Works of art provide new experiential gestalts and, therefore, new coherences." This theory includes the mere linguistic or iconic approach as well as an approach that uses metaphors as embodied resources to think about the world and account for experiences.

Playful appropriation takes place when players engage with the game through metaphors that are determined both by cognitive or intellectual capacities and also by physical and cultural interpretations. Metaphors are ways of understanding the world and are used in particular experiential settings. I am interested in the way in which metaphors operate by translating systems in the experience of ethical gameplay.[14]

Anna Anthropy's (2012a) independent game *Dys4ia*, for example, is an intimate reflection on deciding to undergo a sex change and taking steps to do so. The game consists of a collection of small vignettes that have limited interactivity and appropriate some well-known tropes in game design. Her gameworld translates those tropes into actions that communicate a certain experience. In the stealth section, players experience the complicated emotions of being ashamed of their own physicality by having to hide before reaching a mirror. A stealth game becomes an insightful experience by using metaphor to contextualize actions.

Before explaining the role of game metaphors in detail, I address an obvious counterexample—abstract games like the board game Go, *Tetris* (Pajitnov 1984), and *Dwarf Fortress* (Adams 2006).[15] Abstract games use metaphors, too. The bricks in *Tetris* are the visualization of variables (for width, height, acceleration, and so on) that are stored in the computer. They are both bricks and variables. The stones in Go are metaphors for a position in the two-dimensional grid of the game: the stone, placed in the board, represents the ownership of a two-dimensional coordinate in the game space. People can play Go without stones, much as they can play chess without pieces. This is a creative interpretation of metaphor theory and game structures (in *Tetris*, the tetramines, each of the individual pieces we control in the game, are objects with Cartesian location properties, for example), but it explains how nonrepresentational game elements can still be metaphoric.

Another interpretation of metaphor in abstract games involves the players themselves. In Go, the pieces and the board are metaphors for the relationship that is established between two players. The game of Go can be thought of not as the successive movement of pieces in a board but as the mapping of the battle of wits between two players. I return to this interpretation in the closing section of this chapter.

Much has been written on metaphor as it is used in human-computer interaction, literary theory, and semiotics, both as a self-standing discipline and applied to design (Eco 1969; Lakoff and Johnson 2003; De Souza 2004; Lawson 2007; Casakin 2007). In games, players interact with and through a formal system. In computer games, that systemic core is written in computer code; analog games have written rules and occasionally vast economies or mathematical calculations that are available for the user to read, like the manuals for *Dungeons & Dragons* (Gygax and Arneson 1974). All these numbers allow the game to exist as a system. However, systems themselves are not directly engaging for a number of players.[16] Many players of *Diplomacy* (Calhamer 1959) would probably say that they enjoy playing it for reasons other than its extraordinarily well-crafted system core.

When designers talk about their creative process, many mention themes and not mechanics as their starting point. In the words of Andy Sheerin (personal communication, 2012), the designer of *War on Terror: The Board Game* (Sheerin and Tompkins 2006),

> We work backwards. We identify a theme and see what mechanics we can tease out of that theme in order to explore that theme through those mechanics. When looking for themes, I do one of two things: I either look at subjects that interest me personally. Those do tend to be larger and more complex subjects that don't necessarily have a clear answer, where there's lots to explore. Or I interrogate themes, again important and during themes, and see if there's a natural gaminess there that I can exploit. . . .
>
> Again, when designing the game, let's call it a meaningful game or a critical game, you have to work backwards and think before the mechanics. At the top of the pyramid, if you like, is, What's the theme? Then you have, What ideas do you want to come out of that theme? Then you want an ideal goal for the players to experience or "learn." Then at the bottom of that pyramid there's, What mechanics or what mechanics might aid that goal? With *Crunch*, the main feeling was that we wanted to create this mechanism that couldn't be fought against that would drive people down this blind alley of increasing greed and brokenness and would result in everyone losing. This machine of capitalism was part of the game, but also not part of the game.

However, Paolo Pedercini (personal communication, 2012) thinks that his approach to design is rather unconventional:

> For me the theme/subject always dictates the gameplay, which is not a very common way to design. Most developers start from an established gameplay, from an abstract "toy" such as a physics engine or a territorial control system, for example, from a visual inspiration, or from the type of player experience.

To address this issue in design research theory, Donald A. Norman's (2002) mental models approach provides a valuable starting point. This theory suggests the existence of a designer model of the object, a user model of how it works, and a coupling together by the system image, which explains how the object itself communicates its inner workings to the user. Designers translate their internal model into a valid system image that users can interact with. Through the system image, users learn how the object operates and how to perform the necessary interactions. System images communicate possible functions, goals, and interactions. The better designed the object is, the closer these images are (Norman 2002; Cooper, Reimann, and Cronin 2007).

In computer games, the system image might be linked to the user interface. Health bars, minimaps, scores, and even avatars all communicate relevant information that the player needs to have to play the game. In board and card games, the material objects can act as the interface. A great component of game design is the design of how the interactions with the different game systems are clearly and meaningfully communicated.

The board in *War on Terror*, for example, provides a relatively accurate image of the status of the game at any moment. Furthermore, through its visual representation, it provides cues to how players can interpret and play the game. Similarly, the user interface in *Fallout 3* (Bethesda Game Studios 2008) provides information about players' status in the world, including how much energy, ammunition, and even ethical "points" they have. In both games, the interfaces help players make choices by letting them know the status of the games' systems.

These interfaces matter because they translate the designer's mental model of the game into a system image through metaphoric design (Pirhonen 2005; Blackwell 2006). Think again about the example of life in a *Super Mario Bros.* game. The variable itself is just a number—a location in memory that contains an integer. But because it is labeled as "lives," within the general allegory of life and death, players care about that variable. Metaphors

in user-interface design traditionally have been used to translate the inner workings of a system to users in a way that maximizes the learning and development of the right skills by means of the already existing connections made between the user, metaphor, and cultural context.[17] Because players belong to a culture that uses metaphors to communicate, they are accustomed to learning about the functioning of these complex systems through well-known metaphors.

Metaphors communicate complexity by appealing to the cultural background and knowledge that humans bring to the experience of a particular object. Metaphors do not translate how things work but instead communicate how things work. In this process, they provide enough information to users so that they know what is happening and why they should care.[18]

Far Cry 2 (Ubisoft Montreal 2008) provides a good example of metaphors that are used in game design. In the opening sequences of the game, the players' character contracts malaria. During gameplay, if players do not properly treat the disease, they will suffer bouts of it. Their vision will be blurry, sound will be muffled, and their ability to interact with the game-world will be severely limited. Are players sick? Yes and no. Players play disease outbreaks in *Far Cry 2* as an experience that engages and challenges them by manipulating the loop of perception, experience, and interpretation that is called gameplay (Leino 2010).

In these *Far Cry 2* sequences, the avatar in the fiction of the game is sick. What the game communicates to players and what players experience is this fiction. Sickness becomes a metaphor. Game designers use malaria symptoms to communicate a particular state of the game to the player. This convention immediately explains the threat and informs the player about potential courses of action.

In board games, metaphors play a similar role. The board game *Monopoly* (Magie 1903) is not played with real money, and in the party game *Mafia* (also called *Werewolf*) no participants are lynched by an angry mob. The diseases in *Pandemic* (Leacock 2008) are metaphorical skins that help players understand why they should care about stopping them. In fact, the abstract wooden bricks that represent the diseases serve two purposes[19]—to inform players about the state of the game and to abstract the specifics of a disease. This second purpose is important: players in *Pandemic* eradicate a generic disease, which is an abstract one into which players can pour their fears. It is an open metaphor that players can complete.[20]

Figure 3.4
Malaria in *Far Cry 2* (Ubisoft Montreal 2008), a mediated experience

Similarly, *War on Terror: The Board Game* is presented as an allegory—a collection of related metaphors on the infamous war on terror. But given the humorous tone of the writing and the illustrations, it cannot be considered a serious game about the state of the world. The game is a satire that is presented through a network of metaphors that communicate how the game is played and how it should be interpreted in the cultural context of its development, production, and consumption. *War on Terror* is a good example of metaphors at play. Without being a serious, persuasive game, its metaphors allow players to invoke an interpretation of the experience that might lead to a serious reflection on the state of world politics.

As important as metaphors are, however, they are only one of the rhetorical elements that are used by games to convey meaning and engage players emotionally. The videogame *Limbo* (Playdead 2010) does not have a user interface of any kind. There are no lives and no other indicators of progress or failure. The game is presented in black, white, and the red of the boy's blood. By not using metaphors conventionally, *Limbo* creates an intense emotional experience because its minimalism requires players to interpret, think, and invest themselves in the game.

To gain a better understanding of games as communicated systems, we need a different framework in which theories of metaphor can be applied together. A likely place to start might be the concepts of immersion and

incorporation (Calleja 2011). Games offer a space in which players are thrown into play in a space of possibility. This physical and mental space is inhabited by players whose actions are relevant and whose engagement derives from playing with rules and from being in that space with others.

I always abandon the games that truly matter to me so that I can miss them. I do not miss their gameplay, narratives, or characters, but I miss being there. I miss the wasteland and the demolished Congress of *Fallout 3*. I miss Liberty City, Arkham and its secrets, and Chicago by night as it appears in *World of Darkness,* I miss the Computer from *Paranoia*. I miss the competitive intimacy of the trading-card game *Magic* (Garfield 1993), the ephemeral societies of *Mafia,* and the negotiated corners of the many traditional card games that I played with friends while growing up in Spain.

Games have meaning to us because of the spaces that players make out of audiovisual materials, social relations, fragile alliances, and hidden loves. Games engage players by constructing a world into which they pour their being. The meaning of games is found in the way that players live by the rules, playfully and emotionally, within a space of play. This space consists of metaphors, players, the context in which the game is played, and the context created by the game. The space of play is a space of interpretation—of the game system and of the activity, by players, when playing. The being of games happens in this space.

For a design-analysis focus, however, I propose the term *semiotic domain* to unite all the metaphors, contexts, and cultural practices that wrap around a game's procedural core.[21] The semiotic domain engages us by means of metaphors, audiovisual elements, and the design and incorporation of interpersonal dynamics into the activity of play. The audiovisual, the contextual, and the human all form part of the semiotic domain of games.

With *Limbo,* players first are aware of the game's visual style and its expressionistic black and white world. Attention is focused on the boy's eyes, and the rest of the world is a black-and-white blur. Instead of an extended musical soundtrack, there are incidental sounds from a devastated world and some occasional melodies. This economy of expression is counterbalanced by an extraordinary attention to detail, especially in the boy's animations and in the particle effects that give dynamism to the players' actions in the world.

Limbo is aesthetically engaging in a minimalist way. Players' attention is focused on conventional signs (the helpless boy, the blood) that help

them engage with the fictional setting. *Limbo* matters to players because they want to protect the child. But they also want to go further in this world, and they want to know more. *Limbo* stands out because of its artistic approach to conveying emotions through a world that contextualizes play.

This happens thanks to the semiotic level. The model of semiosis that I adopt here is directly applicable to design. It was first proposed by Clarisse Sieckenius De Souza in *The Semiotic Engineering of Human-Computer Interaction* (2004).[22] This model provides an academically solid semiotic theory applied to the domain of human-computer interaction, which in turn can be used for game design. De Souza provides a framework from which we can explain why and how the semiotic domain works in games.

In De Souza's words (2004, 101), semiotic engineering allows us to focus on four things: "(a) the complete grammatical and semantic specification of the system's interface language . . . ; (b) the complete specification of how the system functions as the designer's deputy . . . ; (c) to what culturally determined signs and meanings the system's signifying and communicating competences are related; and (d) the role that this relation plays in contingent use situations." A semiotic engineering approach should allow for a comprehensive understanding of the technical underpinnings of a system (software studies), the meaning of processes and other formal aspects of the system (procedurality), the audiovisual layer of the game (semiotic domain), and the context in which a system is used (context of play or play activity). Semiotic engineering provides a framework for understanding how games are things in play.

Semiotic engineering focuses on communication:[23] "Meaning is always a mediator between a representation and what it refers to. In other words, there is actually no representation unless there is a meaning binding it to what it refers to, which is another way of saying that there is no sign unless some interpreter takes a representation to mean something else" (De Souza 2004, 41). In games, the meaning of the experience happens in play when the user appropriates the space of play and interprets it in a personal way. I remember playing the classic *Star Wars: TIE Fighter* (Totally Games 1994) before I could really understand the game narrative, and I was convinced that I was not playing for the evil empire. I wrote fan fictions that justified blowing up X-Wings. I played the game but reappropriated the space that it gave me so I could feel better about myself.

Designers of ethical gameplay should aspire to make the user's interpretation experientially close to the type of ethical challenge that they have envisioned. As the designer Jonathan Blow (personal communication, 2011) described to me:

> It's like architecture. You can live in a house and believe it is your house and feel like you have total freedom there. But architects know that the way they designed the house has a very strong influence on what kinds of things people do there, when they do them, what they feel like when they do them, etc.

When creating segments of games that might foster ethical gameplay experiences, designers need to be certain that players understand that they can experience them morally, too. In this sense, semiotic engineering can be of help because it highlights ways in which the system can act as a designer's deputy:[24] "The system is thus the designer's deputy—a communicating agent that can tell the designer's message. Because the user communicates with the system, the designer's deputy must of course have elaborate communicative capacities. It must be able to communicate the contents of the one-shot message, which includes communication about what it can do" (De Souza 2004, 90).

In *The Walking Dead* (Telltale Game 2012), for example, designers signaled some relevant branching points in the narrative by making the player flick between characters. On the iPad, this means dragging the finger in one direction or another, a physical metaphor that helps construct the moral and narrative importance of those choices that will lead in either direction depending on player input.

However, the process of communication and interpretation is not simple,[25] and there is nothing such as fixed meaning, even if an "author" insists that there is one.[26] That is, ethical gameplay is designed for but experienced only through actual play.[27] The ethics of a game is experienced when a user navigates the dual domain of the semiotic and the procedural. Ethical gameplay happens in the appropriation of a system of rules as mediated by a semiotic layer.[28] That appropriation is an active configuration of the experience in the context of play by an embodied being. In this sense, even semiotic abstraction can create ethical gameplay. *Pandemic* is a good example: the diseases are more threatening because they are abstract diseases. The actual effects of the disease are up to the players' imaginations.