## 1 Games beyond Games

Games can be approached analytically from a variety of perspectives. Broadly speaking, however, research tends to emphasize one of three key areas: the formal aspects of games as media objects, experiential and subjective aspects of gameplay, and sociocultural aspects of gaming communities. These are not insulated categories, but rather will necessarily draw on insights from one another while privileging a primary viewpoint, usually as a consequence of the researcher's academic background. This book focuses chiefly on the experiential aspects of games, but the other two perspectives will necessarily inform our exploration of player involvement—it is often the case that the formal and higher-level social issues surrounding games will shed light on the experiential.

Before we can consider the challenges posed by analyzing the player experience of involvement and immersion, we must first address some more fundamental questions about the domain itself. In this chapter I will delineate those members of the broad and varied family of games that will primarily be discussed in this work and provide a description of their constituent elements. Such a description will clarify what is being referred to in the rest of the book when central terms such as *players*, *rules*, and *environmental properties* are used.

# The Complexity of Games

Games are a complex social phenomenon that eludes holistic categorization. Attempts to formulate stable, universal definitions of games inevitably fall short of the mark, leaving important aspects of particular games unaccounted for. Yet these omissions can often be as instructive as the ground covered by attempts at definition, reminding us of the multiple

perspectives that are relevant to understanding the role of games in social reality. Games reflect aspects of the society and culture that made them while contributing to that society in the process; as a result, understanding them is a recursive process of exploration into collective knowledge and social practices.

To further complicate this process of understanding, the performance of a game occurs in two, often simultaneous, domains: the player's subjective experience, and the visible practice of playing. Gameplay includes actions ranging from moving a piece on a game board, pressing a sequence of buttons on a controller, or sprinting, ball in hand, toward a distant white line. Most importantly, a game becomes a game when it is played; until then it is only a set of rules and game props awaiting human engagement.

The centrality of human subjectivity in the game process lies at the very heart of the challenges game theorists face in the process of their analysis. These difficulties are not aided by the fact that the term *game* includes a wide variety of disparate activities. Although poker, fencing, and *Grand Theft Auto IV* (Rockstar North, 2008) all fall under the general heading of games, each entails a very different form of engagement. Digital games, especially, create an added level of complexity.

Although for ease of reference we call *Grand Theft Auto IV* a game, it may be more accurate to consider it as a virtual environment with a number of games embedded in it and a linear storyline that players can progress through by completing a sequence of gamelike activities. When a player or players enter *Grand Theft Auto IV*'s Liberty City, they can engage in prepackaged games that have been coded into the system or they can decide to create their own games within the virtual playground. The rules of the games they play are thus either upheld by the software or agreed upon socially (as is the case with nondigital games). Further, players may choose to interact in ways that are not gamelike at all, perhaps going for a scenic drive or walk with their friends. In short, not all interactions with the objects we call games result in gamelike activities.

#### **Games as Families**

Wittgenstein (1997) suggests viewing games not as a rigidly defined set but as a family whose members share some "family resemblances." The strength of this conception is that it does not require a single list of characteristics

to run through all the objects and activities we call games, but instead generates a collective concept based on the overlaps between various members of the family. Although boundaries can be drawn for the sake of analysis, we must be aware that such boundaries are artificial. When we outline the characteristics particular to a set of games, these characteristics need not identify games as a whole, but should identify a subset of the larger family called games.

This analytical specificity is needed within game studies to avoid situations where a disagreement occurs based not on the actual claims being made, but on the exemplars to which those claims are being applied by different parties in the discussion—what Arne Næss (2005, 64) calls a "verbal disagreement." While well-founded and courteously argued disagreements are healthy for the growth of a new field, those based on verbal disagreements fail to make a productive contribution because there is no consensus as to what is being discussed. A close reading of the central debates that have arisen within game studies gives ample indication that such a problem already exists. In the next chapter, we will discuss one such disagreement about the concepts of presence and immersion. When one analyst is building a critique of such terms using Tetris (Pajitnov, 1985) as his or her main exemplar, and others are commenting with games like Half-Life 2 (Valve Software, 2004) in mind, the conversation cannot really move forward because the forms of engagement afforded by the latter are radically different from those afforded by the former.

There have been a number of debates within game studies that have been complicated unnecessarily by a lack of agreement upon the exact subject of discussion. The involved parties might be discussing *games* without making it clear which members of the family of games, virtual environments, or hybrids thereof they are actually considering in their analysis. The rest of this chapter will outline a descriptive framework that identifies the matrix of components that combine to form games and virtual environments. The types of games addressed by the player involvement model outlined in this book are found at the intersection of these two families of objects.

## **Process versus Object**

One important distinction that can be made when discussing games is between game as object and game as process. A board game like Settlers of

Catan (Teuber, 1995) is both a set of material objects and rules as well as an activity afforded by those objects and rules. These rules are intended for interpretation and deployment by a group of players in their associated sociocultural context. We can discuss various aspects of the game as object in isolation from the actual situated playing of that game. In relation to Settlers of Catan, one can comment on the visual qualities of the hexagonal board pieces or the color scheme used in its deck of cards. One may be critical of the value of the robber in the game, which blocks players from drawing resources from the tile on which it is placed. A genealogy of board games may consider the influence of Settlers of Catan on subsequent board game design, and so on.

This division of object and process can also be applied to digital games. The rules are coded into the game instead of being upheld by players, and the material objects involved in its enactment are the software and hardware machines that run them instead of actual game pieces, but the consideration of the game as a tangible object separate from its actualization through interaction with the player remains the same. In the case of digital games, the object is described by the code and the material medium that contains the code. Although considerations of the game as object tend to have important implications on the actual gameplay, we need to acknowledge that they represent only a partial or incomplete view. The dormant code, board pieces, or rule set present a potential that is actualized during gameplay.

This brings us to the second perspective: games as processes. Theorists such as T. L. Taylor (2006) and Thomas Malaby (2007) have recently made strong arguments in favor of a processual approach, possibly as a reaction to a number of prominent texts that focused more on the game as object than as process. Malaby argues: "One of the first things we must recognize is that games are processual. Each game is an ongoing process. As it is played it always contains the potential for generating new practices and new meanings, possibly refiguring the game itself" (8).

The term *processual* refers to the potential for variation in a game's enactment at every engagement and favors a dynamic and recursive view of games. A processual perspective suggests that the identification of persistent features of games is continuous with other domains of experience. This means that games need not be conceptualized as somehow experientially separate, as is implied by the notion of the "lusory attitude" (Suits,

1978, 55) taken up by some theorists in game studies (Salen and Zimmerman, 2003; Juul, 2005) and discussed in chapter 3. Malaby (2007) formulates games as processes that create carefully designed, unpredictable circumstances that have meaningful, culturally shared, yet open-ended, interpretations. Therefore, both the game practice and the meaning it generates are subject to change.

### **Digital Game Elements**

Rather than adhering to an essentialist definition of games, such as those forwarded by theorists like Jesper Juul (2005) or Katie Salen and Eric Zimmerman (2003), this book follows Wittgenstein in viewing games as members of an extended family that share resemblances. We will focus on a subset, or group of subsets, of the game family that occur within virtual environments. Virtual environments and digital games share some common elements that interact to express different configurations of games. These elements are the human player, the representational sign, the structural properties of game and environment, and the material medium which instantiates the combination of these elements. A description of each of these elements follows.

### The Player

Here, as in the rest of the book, I will be using the term *player* to refer to the human agent, or agents, that engage with the game system. The use of the term *player* should not, however, be limited to the characteristics commonly associated with play. I am not here subscribing to a notion of play that prescribes a particular experiential disposition, such as *playfulness* (however that is conceptualized), to the human agent engaging with the game. I am using the term *player* instead of *human agent* to conform with the convention within game studies. From the game-as-object perspective, the player is conceived as an ideal, or implied, player. Turning to the game as process, the player is conceived as the actual, active player and the set of practices she deploys in interacting with the game world and game system. These practices are always considered in relation to the social and cultural contexts of the player and have an important formative role in the individual's disposition prior to and during engagement with the game.

In the enactment of the game as process, it is often the case that different players interacting with the same structure, signs, and medium actually experience a different game. I might be playing a multiplayer death-match round in *Call of Duty IV* (Infinity Ward, 2007) following conventional rules—that is, trying to help my team score as many kills as possible while not giving away kills to the enemy. Meanwhile, somebody else on my team might be playing a different game: striving to kill an opponent while jumping off the highest building on the map. Although we are both interacting with the same game object, the resultant game process is different enough to be called a different game. The goals of the suicidal player are not only different but are contradictory to mine.

### The Representational Sign

The second element of the framework, the representational sign, refers to the more general sense of a signifying entity, whether this is alphanumeric text, imagery, or sound. The *representational sign* therefore refers to the interpretable, representational elements that players read in order to be able to interact with the game. In the case of digital games, the representational sign might be made of the same code that dictates the behavior of AI agents or the material density of a wooden fence, but for the sake of analysis it makes sense to separate these two configurations of code since they perform very different functions in the game object and process.

#### **Coded Rules**

In *Cybertext* (1997), Espen Aarseth argues that in ergodic media the function of the "surface sign" (40) has a strong relation to the mechanical operations of the internal code that generates it. Aarseth distinguishes the forms of processual production of cybernetic signs in ergodic media by referring to the relationship between code and its interpretative surface as "nontrivial" (1): they are mutually intrinsic. In contrast, there are a number of texts that are actualized as the result of more than one level of textuality. A literary text read out loud, for example, is an audible derivative of the printed book. Aarseth calls such examples "trivial" (1), meaning that one level of manifestation is a derivative of the other. The nontrivial relationship between the code and the interpretable sign is what makes the cybernetic sign of a different order from its print predecessors.

Rules are, in one form or another, a common denominator in all members of the game family and thus are always found in games. The shape of rules, however, varies from game to game and is often modified by a player's or a community of players' perspective on the game. In analog games, rules are stipulated by the game, but it is up to the players to follow them, making rules dependent on social convention. This often creates situations in which rules are negotiated by the players and altered to suit their whims.

In the case of digital games, rules are coded into the software and thus are harder to modify. Players would need to amend the actual code of the game in order to change the rules. In multiplayer games, however, we often see a coexistence of coded and socially negotiated rules. A particular clan in *Counter-Strike: Source* (Valve Software, 2004) might use the standard coded rules written into the game but not allow sniper rifles on the servers used to host its matches. The player would still be able to purchase the banned rifles but would receive a warning, and would usually be banned from the server if they did so again. Negotiation still occurs in environments with coded game rules, but often these will still have an element of conventional rules that have been developed by the community.

### (Simulated) Environmental Properties

Simulated environmental properties are found whenever a game takes place in a constructed environment that models physical properties. This is not limited to computer-generated environments, as pen and paper ones can also be simulated through game systems. For instance, the fact that the game system of a tabletop RPG indicates that a three-meter fall onto solid ground will yield 3D6 points of damage to the sufferer gives the world a physical structure that grants additional body to the shared mental image, turning it into a simulated model. Computer-generated environments have their physical properties hard-coded into them. Bricks in *Call of Duty IV* (Infinity Ward, 2007) have a certain density that will resist 9mm pistol rounds, but they are penetrated by the larger 5.56mm rounds of an M4A1. Similarly, player avatars can run, walk, and crawl at defined speeds. All these environmental details influence the rules of the game and are crucial in creating a balanced and enjoyable game experience. But again, the difference between a computer-generated environment and an analog

one is that in the former the environmental mechanics are upheld by the computer, while in the latter they are maintained by the players in accordance with a prescribed, and often modified, system.

The complexity of simulated environmental properties varies from one virtual environment to another, ranging from simple abstractions of a handful of physical parameters, as in *Pong* (Atari, 1972), to a more complete (although always partial) simulation of aspects of the physical world, as in games like *Crysis* (Crytek Frankfurt, 2007) and *Call of Duty: Modern Warfare 2* (Infinity Ward, 2009).

#### Material Medium

The specificity of the material instantiation of the game must be taken into consideration. Even if the same game is being discussed, its incarnation on the Playstation 3 rather than on a PC will influence its form and experience to varying degrees. Playing a real-time strategy game using a Playstation 3 controller makes for a very different game than playing the same title on a PC using a mouse, for example. Different types of hardware also support different social contexts for play. Nintendo DS systems, for instance, are handheld devices small enough to fit into a jacket pocket and easily connected via infrared ports, permitting a wider variety of contexts and thus different experiences, than, for example, a home PC enables.

This range is even more marked when we consider the rules of board games expressed in code. Although the rules remain the same whether I am playing *Settlers of Catan* (Teuber, 1995) on the computer or with the board game itself, the practice and experience of playing the game will be different. The lack of a tangible board on a table, resource cards held by players, and game pieces creates a markedly different incarnation of *Settlers*. Whether this can or should be called a different game altogether is less important than having an adequate analytical tool to account for the differences.

### Digital Games as Hybrids

The complexity brought about by the advent of digital gaming is continuing to grow. The most significant source of this complexity arises from the fact that a considerable proportion of what are called games nowadays are in fact extended virtual environments which contain a game or multiple games within them. If we had to apply the framework to a game like *Grand Theft Auto IV* (Rockstar North, 2008), for example, we would see a number of different clusters of game rules all simultaneously present in the same overall environment, rather than a single game that would adequately explain them all. The material medium, signs, and environmental properties that form the virtual environment remain the same for all the embedded games, but the conventional (socially agreed upon) rules, coded rules, and player aspects could change in each case. Each game embedded in the environment has its own coded rules and, in the case of multiplayer games, also has its own conventional rules.

In Wittgenstein's (1997) terms, contemporary digital games like *Grand Theft Auto IV* (Rockstar North, 2008), *World of Warcraft* (Blizzard Entertainment, 2004), and *Half-Life 2* (Valve Software, 2004) are members of two families that mingle resemblances. They contain the features of both virtual environments and games, and thus form a subfamily derived from both. It is no surprise that game definitions that have tried to account for both digital games and board games have struggled to cater to both forms. As Ryan (2006) argues, digital games (and tabletop role-playing games before them) have enabled the combination of traditional games' rule systems with the fictional and narrative aspects of the media that preceded them.

To account for the hybrid nature of games in virtual environments, the rest of this book will refer to those members of the game family that are set in virtual environments as *virtual game environments*, or *game environments* for short. Virtual game environments, although a somewhat cumbersome term, accounts for the intersection of the two broad families of virtual environments and games, distinguishing those games that occur within virtual environments from those that do not. Digitized versions of card games like hearts or poker, or puzzle games like crosswords, Sudoku, and the like, are not forms of virtual game environments and will thus not be considered at great length in the rest of the book. Instead, I will focus primarily on games that present the player with a virtual world in which to participate in a variety of activities, as do games such as *Half-Life 2* (Valve Software, 2004) and *World of Warcraft* (Blizzard Entertainment, 2004).