• CHAPTER ONE •

Introduction

All play means something.

—Johan Huizinga (1950, p. 1)

We live in strange times.

On the one hand, politicians and pundits like to voice their concern that children and adolescents are spending too much time watching television or playing videogames, and are falling behind in their reading and critical thinking skills. On the other hand, literacy scholars argue that traditional schooling is fast becoming irrelevant because it fails to teach much needed "21st century skills" for the new economy (Lankshear & Knobel, 2006).

Part of the confusion might be that researchers are always playing catch-up. By the time it takes us to understand a new media phenomenon, write a grant, conduct the study, interpret the data, publish the report, and spread the word, the social experience might have already evolved to another phase. Many of the new media phenomena that are shaping our social experience today—*Wikipedia* (2001), *Second Life* (2003), *Myspace* (2003), *Facebook* (2004), *Youtube* (2005), *Twitter* (2006), *Groupon* (2008), *Foursquare* (2009), *Farmville* (2009)—are barely ten years old, and may or may not still exist ten years from now. Clearly, the time it takes for us to understand the impact of new media through research is slower than the time it takes for the social experience and the media to evolve. Furthermore, much of our understanding of new media comes from statistical research, such as the ones conducted by *Nielsen*, *Pew Internet and American Life*, *Google Analytics* or other large-scale quantitative studies. These reports provide us with a continuous stream of data on a monthly, weekly, even daily basis, informing us about shifting trends in the media landscape. The speed and relative ease in which these quantitative data can be gathered makes them a popular source of data, but there is still a lot we

do not understand about how these media are used in specific contexts. For example, how are these new spaces used in local contexts and how do these uses connect with broader trends? What do people use these technologies for and how do they adapt the technology to fit their needs, and vice versa? If the history of technology has taught us anything, it is that we are innovative creatures who constantly find new ways of using things in ways they were not designed for. This is what makes new media so interesting yet so challenging to study and theorize about.

Conventional Wisdoms

> It is the peculiar and perpetual error of the human understanding to be more moved and excited by affirmatives than by negatives.
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> —Francis Bacon

In the age of "kinderpolitics," children and adolescents have increasingly become the foci of ideological debates. This extends not only to what they do in school but also what they do in their leisure. Attempts to blend the two areas often leads to outcry and aggravation. Emerging media—film, comic books, rock and roll, television, videogames, the Internet—have always aroused suspicion, particularly from people who do not use or understand them. The very fact that people—usually younger people—gravitate toward emerging media leads many to assume that there has to be something inherently decadent and corrupting in their conception and use, the reasoning being that, anything *that* entertaining cannot possibly be good for you.

Not surprisingly, entertainment has been the driving force for technological advancement, particularly in the case of video and computer games. As game designers continue to push for more complex designs, better graphics and sound, console and computer makers have to increasingly add storage and processing power to their systems. The notion of game-based learning has been around for decades and is enjoying resurgence among educators, thanks in part to a series of innovations that have swept through media technologies in recent years. These include: expansion of high-speed Internet and wireless networks, switch from analog to digital signals in television, adoption of high-definition displays, increase in capacity of storage media, widespread use of touch interface and motion control, falling costs of

microprocessors, evolution of videogame consoles into media hubs, improved portability and power of mobile devices, growing trend towards ubiquitous computing, increasing participation and collaboration in online communities, development of open source software, evolving attitudes towards proprietary rights, copyright and privacy, and improvement in graphic cards and processors. A result of these and other developments is that people are able to interact with media in ways that have not been possible in the recent past.

The full impact of these developments is still not fully known because these developments are still ongoing. But now, traditional schooling practices are looking increasingly archaic in comparison to the social experience that goes on outside the classroom. New technologies have always been an ill fit with schools. Those that do make it through the school gates tend to be slight variations preexisting of technologies that educators are already comfortable with: photocopiers instead of mimeographs, computers instead of typewriters, PowerPoint instead of overhead projectors, SMARTBoards instead of blackboards; technologies that are more disruptive of traditional practices, such as individual laptops and mobile devices, have a harder time getting through because they require a whole new set of practices and a whole new definition of education (Collins & Halverson, 2009; Kleifgen & Kinzer, 2009).

Among game researchers, the conventional wisdom is that videogames are good for you—either because they represent the new forms of skills valued by a new economy or because they inherently embody good learning principles. These beliefs are at the forefront of the push to use videogames or game-based learning in traditional school. However, not all of these conventional beliefs hold up well to in-depth criticism. Here are a few examples of that come to mind:

- *Schools (in America in particular) should embrace game-based learning in order to compete with students around the world.* According to a recent report from the Program for International Student Assessment, students in America have been falling behind in international rankings in areas such as reading, science and math. Reports like this have often been cited as a reason to use new forms of learning—such as game-based learning—in schools (Duke, 1974; Shaffer, 2007). The argument that this unfavorable ranking is why

schools need to embrace game-based learning is specious at best, as it overlooks the fact that the top-ranked countries—China, Hong Kong, Singapore, South Korea—tend to have very traditional forms of learning that build on rote memorization and repetition. The reason why students in these countries do better has less to do with how they teach and more to do with their societal attitudes toward teachers and schooling in general.

- *Players continue to play videogames because they have good design and learning principles*. It's clear that game designers know a lot about learning and it's clear that videogames have been immensely popular. What is less clear is the extent to which this success is the result of self-selection. Players choose to play videogames because the medium works for them, but that does not tell us how much the success is due to the players' intrinsic interest and how much is due to well-designed learning principles. Not everyone enjoys videogames and not every player successfully learns how to play. Every system—including traditional schooling—has its success stories, but no one is likely to point to the most extreme cases of success and use that as evidence of why a system works. To find out whether videogames are *more* successful, researchers need to compare not just avid players but players of all kinds, including non-players. Would these good learning principles still work as well if we ask a non-player to try out a game, or will the non-player feel disoriented and confused?
- *Players have a positive experience learning from videogames*. Pleasure is sometimes mentioned as the reason why videogames are successful. The thinking is that, not only do players learn but they also enjoy themselves while learning. But again, it is unclear how much of the positive experience is due to a self-selection bias. If we study only those who continue to play and not those who fail to enjoy videogames, then we would always get a biased result. Furthermore, not all videogames are successful, and even the most well-designed games are likely to turn off some players. The notion that learning, in general, works better in a positive environment is also not fully supported by research. Gundaker (2007), for example, has documented learning among African Americans during slavery, and found out that "hidden education" was not uncommon even in

those oppressive and violent environments. As educational theorist Jacques Rancière (1991) points out, people learn if they have the *will* to learn, and pleasure has little to do with the outcome. Newly-coined terms such as "rage quit" (when a player, usually in an online game, exits the game in anger) demonstrate that frustration is a common part of gaming, but this frustration seldom keeps players away permanently. Perhaps we need more complicated notions than "pleasure" or "positive experience" to describe the complex mix that players derive from videogames.

- *Players support one another through collaboration in online communities of practice*. One oft-cited benefit of videogames is that it encourages collaboration, distributed knowledge and other forms of supportive learning. One example is that certain players go out of their way to collaborate on walkthroughs, which are detailed documentations of games that are shared with the rest of the Internet. This is certainly true. It is also comparatively rare as most players do not participate in this type of collaboration. Furthermore, any activity that generates interest is likely to encourage collaborative work, and it is not clear whether videogames encourage online support any more than any other situation when people have an interest in a shared activity. In other words, online collaboration exists because of the popularity and accessibility of the Internet, and videogames are only one of *many* activities that generates these types of online communities.
- *Players (selectively) internalize the content of the videogame*. Players are often portrayed as unique sponges who soak up either the pro-social or violent content but seldom both, and conveniently, what players soak up depends on what the researcher's position is. There is ample evidence to suggest that violent games *do not cause* players to become violent, but we have no reason to believe that they become more pro-social either. Presumably, players are aware of whether the game they are playing is violent or not—we wouldn't expect anyone who plays *Grand Theft Auto IV* to argue that it is a peaceful game—but what is unclear is whether this awareness leads to a change in behavior. As Squire's (2002) argues, there is insufficient evidence to suggest that players transfer their learning across contexts.

These criticisms don't mean that these beliefs are wrong, but that they are based on incomplete and/or selective evidence. It shouldn't be surprising that, if all we ever studied were players who enjoy videogames and focus only on success stories, we would get a distorted view of how effective videogames really are as educational tools. As game researchers, we can do better than that. Our expectations for the potential of videogames or game-based learning should not be distorted by our personal expectations of games in general. To the extent that we believe videogames are *useful*, we need to move beyond simply asserting this belief and supply the empirical evidence and detailed observations that support this belief.

Plan of the Book

The title of the book—*The Work of Play*—builds on the notion that all social interaction requires organizational work of some sort. This work is what constitutes the interaction as meaningful and orderly to other social actors. Even something as mundane and simple as everyday conversation requires its participants to have a set of shared understandings and orientations in order for interaction to unfold smoothly. Play—an activity commonly associated with leisure and triviality—cannot occur without this organization work. Ethnomethodologists and conversation analysts have focused on this work in their studies, and this present book builds on these studies and applies it to the case of videogame play.

We know relatively little about what players do when they play videogames. Most studies have depended on post hoc analyses (e.g.,, interviews, questionnaires, surveys) on gaming behavior. As many anthropologists and sociologists would argue, a post hoc recollection is a reconstructed event that is different from the original event itself. In other words, we cannot rely on the participant's recollection as a reliable portrait of the activity. This book attempts to describe gameplay—including learning, organizing, instructing, turn-taking, arguing, cheating, accusing, training—as an *in situ* event, thus capturing the action closer to its original form.

Chapter Two provides a broad overview of research on videogames and learning. In addition to studies by literacy scholars and educators such as Gee (2003, 2004), Prensky (2006), Shaffer (2006), Squire (2003,

2006), and Steinkuehler (2004, 2007), I draw on game studies from the 1960s and 1970s, in particular those of Abt (1970) and Duke (1974). Many present-day game researchers seem to be unaware of this earlier period of game studies, since they rarely refer to them in literature reviews. Yet, despite technological advances that videogames have made over the past few decades, the arguments that scholars make today about the potential of games for furthering learning remain largely the same as those made in the 1970s. The trajectory of this earlier movement may provide insights into some of the current problems of using games for learning, such as the lack of empirical studies and the practical difficulties of using games in the classroom.

Chapter Three gives an introduction to ethnomethodology and conversation analysis. It starts by pointing out that ethnomethodology and game studies both emerged during a period when game theory and models were gaining influence in the social sciences. Recent publications by Garfinkel (2008), who founded the ethnomethodology approach, has revealed that he was both influenced by and critical of game theory. In particular, he was interested in how information is communicated as a system, and how people react to their perception of the system. The iterative nature of game theory models led him to consider how people perceive the system at any given moment. Conversation analysis came out of ethnomethodology, and is used as a way to articulate the moment-by-moment unfolding of interaction. Researchers such as Mehan (1979), Suchman (1984, 2006) and Goodwin (2006) have applied conversation analysis to longer stretches of interaction that occur in contexts as diverse as classrooms, photocopiers, and playgrounds. Their studies have been important in showing the contextual and contingent properties of interactions.

Chapter Four introduces the genre of fighting games in general, comparing them to other videogame genres. Most videogames involve combat, but fighting games are unique in that they tend not to contain any narrative and are designed solely for competition. I also describe videogames as embodied experiences (Dourish, 2001) that require players to perform their actions through controllers. These controllers are complicated devices, often containing nearly two dozen buttons that represent a variety of actions. In order to become competent, players

need to first master the controller and understand its relationship to the actions in the game.

Chapter Five describes an instructional episode that unfolds between a novice and three expert players. This episode is particularly interesting because it reveals the novice's meaning-making practice as she makes sense of the game, one that happens to be "mistaken" in relation to the official rules of the game. I argue that, when players have different competencies, they might encounter misunderstanding between the differing interpretations of the event. It also shows that players can continue to make sense within the context of their interaction even when their interpretations of the game diverge from the game designers' intentions. This is because social actors have to share a common interpretation of their activity system in order to render it meaningful to one another. The finding suggests that "situated learning" or "just-in-time" instruction alone is not enough for instruction to be understood. Although the experts in the game provided instructions when they noticed her make a mistake, they did not create the proper context for her to understand what their instructions meant. Thus, giving proper instructions requires having an understanding of how the learner is interpreting the game and when he/she needs extra support to navigate the complex game environments and controllers.

Chapter Six looks at the different forms of play that players engage in. Surprisingly, players are not always "playing" when they are in fighting games. Sometimes, they are "training," and sometimes they are "dueling." Each of these different frames implies a different set of rules and expectations, many of which are independent of the game's rules. For example, during training, the objective is to try out new moves or new characters, and players are not allowed to attack one another without permission. During dueling, the objective is to win, but in a way that all parties (usually two players) deem "fair," where fairness refers to a criterion that has to be negotiated over time. These frames of play are analogous to the way everyday talk is modified with varying degrees of formality to render them into new kinds of social interaction, such as debates, interviews, and so on (Sacks, Schegloff & Jefferson, 1974). I argue that, like everyday conversation, "regular play" is the least formal version of play (at least in fighting games), whereupon all the other variations of play are built. These

forms of play, however, need to be negotiated between the players, and are often not determined by the game design alone. This expanded understanding of framing may provide insights for educators and game designers on how to structure and design different frames of play (e.g., instruction, training, and play) within educational games.

Chapter Seven looks at how players positions themselves in relation to the other players, particularly how they distinguish their status by including some players and excluding others (Goodwin, 2006). It compares two groups of players in two similar games: in the first group, the players consistently put down one another while boasting of their own expertise; in the second group, the players consistently put down themselves while complimenting one another. This comparison provides an interesting insight into how social relationships are often more salient in organizing videogame play than the game design, thus suggesting that the role of videogames in influencing either pro-social or anti-social behavior might be overplayed. The chapter also describes how players talk about their own behavior in the game, particularly in relation to the type of player they are. These constructions of identity influence how they perceive and project themselves as players and social actors.

Chapter Eight uses the discussion from previous chapters to show how the micro-level analysis can shed light on broader themes and trends in videogames and education. The focus on context, time, and space allows studies such as this to reveal how new literacies are developed and advanced in a transnational context. It looks at how players identify themselves as different types of players, and how they (re)construct the game (and genre) according to the activity. It emphasizes the importance of studying videogames in context, as it reveals that players shift and reposition themselves in a fluid manner, where much of their behavior is improvised according to the flow of the interaction around them.