

A CASUAL REVOLUTION

Reinventing Video Games and Their Players

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1 A Casual Revolution

Spending the winter of 2006–07 in New York City, I was beginning to lose count of the times I had heard the same story: somebody had taken their new Nintendo Wii video game system home to parents, grandparents, partner, none of whom had *ever expressed any interest whatsoever* in video games, and these non-players of video games had been enthralled by the physical activity of the simple sports games, had enjoyed themselves, and had even asked that the video game be brought along for the next gathering. What was going on?

When I dug a little deeper, it turned out that many of the people I thought were not playing video games in fact had a few games stored away on their hard drives. These were not shooting games or big adventure games, but smaller games—matching tile games, games about running restaurants, games about finding hidden objects in pictures, and, of course, Solitaire. These players did not fit any stereotype of the adolescent male video game player. In fact, they often did not think of themselves as playing video games (even though they clearly were).

The office and holiday parties of that year were also dominated by a new musical game with plastic guitars, and it dawned on me that this was not about video games becoming *cool*, but about video games becoming *normal*. Normal because these new games were not asking players to readjust their busy **schedules**. Normal because one did not have to spend hours to get anywhere in a game. Normal because the games fit the **social contexts** in which people were already spending their time, normal because these new games could fulfill the role of a board game, or any **party game**.

This looked like a seismic change, but when I asked people why they had not played video games before, another pattern emerged. Many of

these people I'd thought were playing video games for the first time would on closer questioning happily admit to having played much earlier video games like *Pac-Man* and *Tetris*, and to having enjoyed them immensely. Hence the bigger picture was not just that video games were finding a new audience, but also that video games were reconnecting with an audience that had been lost. Why? The answer: the first video games had been made for a general audience because there was no separate audience of game experts at the time. Between the arcade games of the early 1980s and today, video games have matured as a medium, developed a large set of conventions, grown a specialized audience of fans... and alienated many players.

The casual revolution in the title of this book is a breakthrough moment in the history of video games. This is the moment in which the simplicity of early video games is being rediscovered, while new flexible designs are letting video games fit into the lives of players. Video games are being reinvented, and so is our image of those who play the games. This is the moment when we realize that everybody can be a video game player.

The Pull of Games

As an avid video game player, I have experienced much of the first thirty years of video game history first hand, and it has been disconcerting to see great games ignored by many potential players. Given that video games are as wonderful as they are, why wouldn't you play them? The best way to answer this may be to consider what it feels like to enjoy video games. This experience, of being a gamer, can be described as the simple feeling of a pull, of looking at a game and wanting to play it. Consider the jigsaw puzzle shown in figure 1.1. In all likelihood you know how you would complete it. You can imagine the satisfaction of moving the final piece, of finishing the puzzle. The jigsaw begs you to complete it.

Or look at the video game shown in figure 1.2. If you have ever played *Pac-Man*,¹ you know your mission is to eat the dots and avoid the ghosts, and from a brief glance at the screen, you may already have planned where you want to go next in the game.

This is the pull of video games, and indeed, of nondigital games too. You can see what you need to do in the game, you can see, more or less, how to do it, and you want to do it. In music, or in stories, we experience

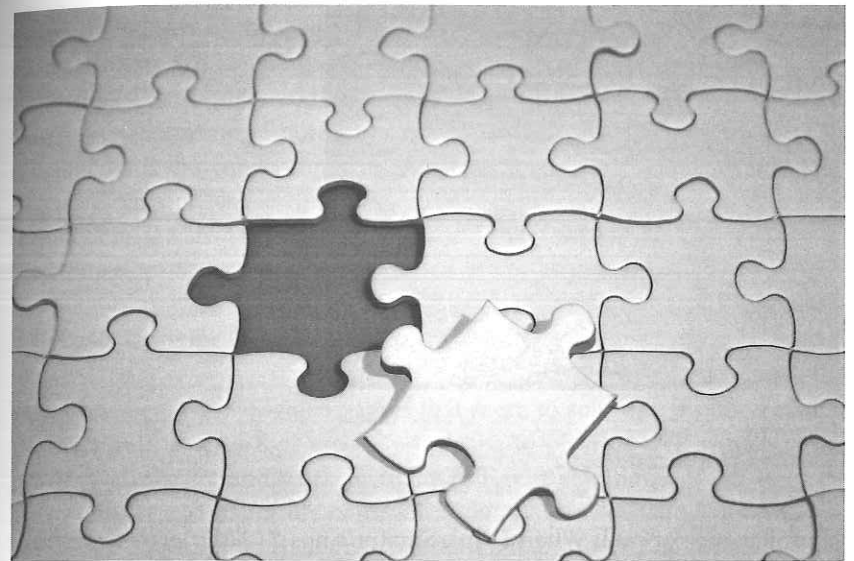


Figure 1.1
Complete the puzzle (image ©kowalanka-Fotolia.com)

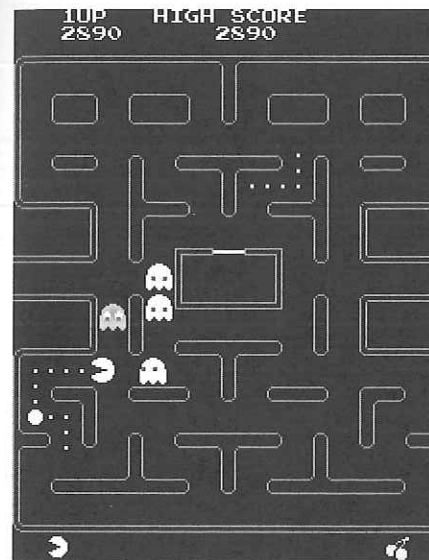


Figure 1.2
Pac-Man (Namco 1980)



Figure 1.3
WarCraft III (Blizzard 2002)

a similar type of pull: When Frank Sinatra sings “*I did it my—*” we want him to end the melody on “*way.*” There is a pull toward the final note of the song, the *tonic* in musical terms. A story’s pull makes us want to know what happens, how the characters deal with the situation, or who committed the crime. These things pull us in. Video games are like stories, like music, like singing a song: you want to finish the song on the final note. You must play this game. You *must*.

Why must you? The video game’s pull is a subjective experience that depends on what games you have played, your personal tastes, and whether you are willing to give the game the time it asks for. For example, who can resist being moved by the invitation of the game shown in figure 1.3? A real-time strategy game is waiting to be played.

Actually, many people do not feel any pull whatsoever toward playing this game. Perhaps *you* do not. The illustrated game, *WarCraft III*,² is not universally loved. While it is fairly certain that you know what a jigsaw puzzle asks of you, and there is a high chance that you know what to do with the game of *Pac-Man*, a modern game like *StarCraft* is divisive. Not everybody feels the pull: not everybody knows what to do, not everybody wants to pick up the game and start playing.

This I have always found perplexing, so this book is the result of my journey toward understanding that mystery of why somebody would choose not to play video games, and why a new audience is *now* starting to play video games. I am going to tell stories of the players and develop-

ers who are part of the casual revolution, and I will show how changing game designs are reaching new players.

By now I do understand why some would not feel that pull. I understand the frustration of not knowing which buttons to push, of being unfamiliar with the conventions on the screen, of being reluctant to invest hours, days, and weeks into playing this game, of being indifferent to the fiction of the game, of having a stupid machine tell you that you have failed, of *being unable to fit a game into your life*.

A Casual Game for Every Occasion

There is a new wave of video games that seem to solve the problem of the missing pull; games that are easy to learn to play, fit well with a large number of players and work in many different situations. I will refer to these new games using the common industry term *casual games*. In this book I am focusing on the two liveliest trends in the casual revolution:

- The first trend is games with *mimetic interfaces*. In such games the physical activity that the player performs mimics the game activity on the screen. Mimetic interface games include those for Nintendo Wii (see figure 1.4), where, for example, playing a tennis video game involves moving your arm as in actual tennis. Other examples include music games such as *Dance Dance Revolution*,³ *Guitar Hero*⁴ (figure 1.5), and *Rock Band*.⁵
- The second trend is known as *downloadable casual games*, which are purchased online, can be played in short time bursts, and generally do not require an intimate knowledge of video game history in order to play. Figure 1.6 shows the downloadable casual game *Cake Mania 3*.⁶

When I refer to these trends I use the term *video games* to describe all digital games, including arcade games and games played on computers, consoles, and cell phones. Video games reach players through a number of different distribution channels. Whereas mimetic interface games are generally console games sold in stores, downloadable casual games are sold on popular websites. While the increasing reach of video games can also be witnessed in the popularity of small, free, browser-based games like *Desktop Tower Defense*,⁷ the focus here is on the commercially more successful mimetic interface and downloadable casual games.

In the short history of video games, casual games are something of a revolution—a cultural reinvention of what a video game can be, a



Figure 1.4
Nintendo Wii players (Saul Loeb/AFP/Getty Images)



Figure 1.5
Guitar Hero II player (AP/Wide World Photos/D. J. Peters)



Figure 1.6
Cake Mania 3 (Sandlot Games 2008)

reimagining of *who* can be a video game player. A manager from the video game publisher Electronic Arts describes the challenge of creating games for a new audience as a *rewiring* of the company. “I was surprised by how wired we were to a particular target audience of 18–34-year-old guys. It was a challenge to change the rule book of designing games for fraternity brothers.”⁸

The rise of casual games also changes the conditions for creating games targeted at non-casual players. A game designer describes it as “harder and harder to find people willing to fund games that only go after that narrow hardcore audience.”⁹ In other words, the rise of casual games has **industry-wide implications** and changes the conditions for game developers, pushing developers to make games for a broader audience. The rise of casual games influences the development of other video games as well.

Does this go beyond a few high-profile games? Are video games really reaching out to a broad audience? The answer is yes. The Entertainment

Software Association reports that 65 percent of U.S. households play video games today, and that the average age of a game player is 35 years.¹⁰ In the United Kingdom, a BBC report says that 59 percent of 6- to 65-year olds play one form of video game or another.¹¹ These numbers are growing,¹² and are likely to continue to grow: a recent report shows that a staggering 97 percent of the 12–17 age group in the United States play one form of video games or another.¹³ Not that every single person in the world is playing video games just yet, but we can imagine a future where that would be the case. The simple truth is that in the United States and many Asian and Western countries, there are now more video game players than non-video game players. *To play video games has become the norm; to not play video games has become the exception.*

Games and Players

Simple casual games are more popular than complex hardcore games.¹⁴ Casual games apparently reach new players, and the new players they reach are often called *casual players*. But what is casual? The concepts of casual players and casual games became popular around the year 2000 as contrasts to more traditional video games, now called *hardcore* games, and the hardcore players who play them. Casual players are usually described as entirely different creatures from hardcore players:

There is an identifiable *stereotype of a hardcore player* who has a preference for science fiction, zombies, and fantasy fictions, has played a large number of video games, will invest large amounts of time and resources toward playing video games, and enjoys difficult games.

The *stereotype of a casual player* is the inverted image of the hardcore player: this player has a preference for positive and pleasant fictions, has played few video games, is willing to commit little time and few resources toward playing video games, and dislikes difficult games.

To what extent do these stereotypes map to actual players? Surprisingly, when studies were carried out, they showed that more than a third of the players of downloadable casual games played nine two-hour game sessions a week.¹⁵ Effectively, it seemed that casual players were not playing in casual ways at all. This raised a question: do casual players even exist? Looking at the games commonly described as casual yields a clue in that these games allow us to have a meaningful play experience within a short time frame, but do not prevent us from spending more time on a game.

More traditional hardcore design, on the other hand, requires a large time commitment in order to have a meaningful experience, but does *not* allow a meaningful experience with a shorter commitment. It then follows that the distinction between hardcore and casual should not be treated as an either/or question or even as a sliding scale, but rather as a number of parameters that can change over time because *players change over time*. The stereotypical casual player gradually acquires a larger amount of knowledge of video game conventions, effectively making the player more like a stereotypical hardcore player in terms of game knowledge. The stereotypical hardcore player, conversely, may find that he or she has less time to play video games due to growing responsibilities, jobs, and children, and so that player's willingness to make time commitments diminishes over time, effectively pushing the player toward more casual playing habits.

To discuss casual games and casual players, it therefore becomes important to avoid the temptation to choose *between* them. There are two possible starting points:

1. Start with *games*: to examine the design of casual games.
2. Start with *players*: to examine how and why casual players play video games.

On the one hand, given that some players play casual games in what we could hardcore ways, it could be tempting to conclude that a game can be played in any way players desire, and that game design as such can therefore be ignored. On the other hand, many players tell stories of how casual games are the only video games they will play, so it would be futile to ignore the games. In my opinion, the idea of having to choose between players and games is a dead end. *Instead I take as my starting point the way games and players interact with, define, and presuppose each other.* A player is someone who interacts with a game, and a game is something that interacts with a player; players choose or modify a game because they desire the experience they believe the game can give them. Seeing games and players as mutually defined makes it clearer why some people do, or do not, play video games.

Though they were never quite true, conventional prejudices say that all video game players are boys and young men. A common (and also imprecise) assumption about casual games is that they are only played by women over the age of 35.¹⁶ In early descriptions, the women playing

casual games were assumed to play only occasionally and with little time investment. Seeing that this is often not the case, the usefulness of taking gender or age as a starting point for discussing players becomes uncertain.¹⁷ Furthermore, the interviews with game players conducted for this book show that changing life circumstances are major influences on the interviewees' playing habits: reaching adolescence, having children, getting a job, having the children move away from home, and retiring all led to major changes in game-playing habits. The question of how games fit into people's lives is therefore the primary angle in this book.

Many video games ask for a lot in order to be played, so it is not surprising that some people do not play video games. Video games ask for much more than other art forms. They ask for more time and they more concretely require the player to understand the conventions on which they build. A game may or may not fit into a player's life. A game may require hardware the player does not have or does not wish to own, it may build on conventions that the player does not know, require skills the player does not have; it may be too easy for a player or too hard, it may not be in the *taste* of the player. Different games ask different things from players, and different players are not equally willing to give a game what it asks.

Games as well as players can be flexible or inflexible: where a casual game is flexible toward different types of players and uses, a hardcore game makes inflexible and unconditional demands on the skill and commitment of a player. Conversely, where a casual player is inflexible toward doing what a game requires, a hardcore player is flexible toward making whatever commitment a game may demand. This explains the seeming paradox of the casual players making non-casual time commitments: a casual game is sufficiently flexible to be played with a hardcore time commitment, but a hardcore game is too inflexible to be played with a casual time commitment.

Changing Games, Changing Players

Game audiences and game designs co-evolve. The audience learns a new set of conventions, and the next game design can be based on the assumption that the audience knows those conventions, while risking alienating those who do not know them. Where video game developers have

often been criticized for making games "for themselves," casual game developers are encouraged to make games for an audience they are not necessarily part of. Designing for players with little video game experience places conflicting pressures on game developers between innovating enough to provide an experience the player recognizes as worthwhile, and at the same time building on only well-known conventions in order to reach a broad audience. This does not render innovation impossible, but means that innovation often has to be based on the import of culturally well-known activities—such as tennis or guitar playing.

It would be wrong to say that casual games were inevitable, but in hindsight it is clear that many things paved the way for them. The first decades in the history of video games saw video games mature as a medium and develop an elaborate set of conventions that has made them inaccessible to potential players unwilling to commit the time to learn these conventions. Strategy and action games, for example, use a number of interface conventions to communicate the events in the game, making this information easily accessible to those who know the conventions, but presenting a barrier to players new to them. When video games developed a new expressive and creative language of their own, they also shut out people who did not know that language.¹⁸ That is the big story of the history of video games and the rise of casual games. For casual players, there are many smaller stories to tell.

There is, for example, the story of the person who never played video games, and now with casual games finds video games that he or she enjoys. A casual game player in her fifties told me she had played board games and card games all of her life, but had only started playing casual games, and video games at all, after being introduced to *Zuma* by a friend:

My 75-year-old friend introduced me to *Zuma* and *Collapse*, the predecessor to *Zuma*. It was after I had handed in my thesis, so my brain was completely offline. Then she invited me over for dinner and told me she had something interesting to show me. She also had a computer Mahjong game that was very beautiful and exciting, I really liked that. Later I have begun to buy them myself, because they are not that expensive.¹⁹

Then there is the story of the player who avidly played console and arcade games as child, stopped playing video games as they became more complicated, and returned to them via casual games:

When I was a kid, I played *Pong*. . . Fast-forward about 20 years. Now I'm married and have children. . . They, of course, have video game systems. To me, these systems look like Mission Control for NASA, so I never play with them. I can't. There are too many buttons.

I can play Wii games. The controller is instinctive to use. In fact, the WiiMote is actually easier to operate than the remote control for my television. *WiiBowling* requires two buttons: A and B. That's totally my speed. . . With the advent of a gaming system that doesn't require an advanced degree to operate, I have been able to rediscover the joy I found in those early video games I played as a kid. I've found a way to bond with my own children over something that interests them, and when [my] extended family gets together, we have multigenerational play. It's been a great way for my kids, my spouse and I, and my parents to find common ground.²⁰

There is also the story of the player who grew up with video games and now has a job and children, making it difficult to integrate traditional video games into his or her life, creating a demand for titles that require less time to play. One self-termed "ex-hardcore-now-parent" player describes the situation like this:

That pretty much sums up my situation these days. Snatched moments are far more child friendly than hour-long *Mass Effect* sessions. That doesn't mean I don't like sneaking off upstairs to have a bit of [Xbox] 360 time but I can have a game of *Mario Kart* or *Smash Bros* and it's literally five minutes while my daughter entertains herself. Maybe that is the market that the Wii has tapped into. Not the non-gamer; more the ex-hardcore-now-parent gamer.²¹

My own story intersects the big story of casual games, and is also a story of changing life circumstances: I have a life-long love for video games and I have spent much time trying to convince friends and family to play them. Casual games work so much better for me when I want to introduce new players to the joy of video games than did the complicated games of the 1980s and 1990s. Since I became a full-time academic, my own life circumstances have also been changing. I now have meetings, papers to write, trips to make, and it has become harder to find the long stretches of time required for playing the large, time-intensive video games that I still love. Casual games just fit in better with my life.

One would think that making games that *fit* into people's lives was therefore the single most important problem that the video game industry had been working to solve. But in fact, the industry has spent decades solving an entirely different problem, that of how to create the best *graphics* possible.

The Problem with Graphics

[Microsoft on the Microsoft Xbox 360:] Microsoft Corporate Vice President and Chief XNA (TM) Architect J Allard further outlined the company's vision for the future of entertainment, citing the emergence of an "HD Era" in video games that is fueled by consumer demand for experiences that are always connected, always personalized and always in high-definition.²²

[Sony on the Sony PlayStation 3:] In games, not only will movement of characters and objects be far more refined and realistic, but landscapes and virtual worlds can also be rendered in real-time, thereby elevating the freedom of graphics expression to levels not experienced in the past. Gamers will literally be able to dive into the realistic world seen in large-screen movies and experience the excitement in real-time.²³

Upon entering the lecture hall for the Microsoft keynote at the Game Developers Conference in March 2005, I was handed a blue badge. Other attendees received yellow or black badges, but we did not know what their purpose was. The yearly Game Developers Conference is the place where the platform owners—currently Sony, Microsoft, and Nintendo—court developers and try to convince them to develop for *their* console. This was especially pertinent in 2005 since the then-current consoles (PlayStation 2, Xbox, and GameCube) were approaching the end of their lifetimes and developers were waiting for what would happen next. J Allard of Microsoft gave a conference keynote and proclaimed that the upcoming Xbox 360 would herald the coming of the HD era. The name *HD era* derived from the fact that the Xbox 360 would have graphics in *high definition*; it would show more pixels than earlier consoles. The Xbox 360 would also have other features such as the user's ability to connect to friends via the Internet, but *HD* was chosen as the moniker encompassing all of the experiences the console could give. At the end of the presentation, the audience was treated to a short animation showing a blue car, a yellow car, and a black car racing each other. The yellow car won, and the thousand attendees with correspondingly colored badges each won a high-definition television. This was Microsoft's take on what should define the next generation of video game consoles: higher definition graphics, more pixels. Sony was happy to follow suit, declaring that while HD really *was* the future, only the PlayStation 3 would be *true* high definition.²⁴ But not everybody at the conference was buying it. Game designer Greg Costikyan described his reaction like this: "Who was at the



Figure 1.7
Microsoft Xbox 360



Figure 1.8
Sony PlayStation 3

Microsoft keynote? I don't know about you but it made my flesh crawl. The HD era? Bigger, louder? Big bucks to be made! Well not by you and me of course. **Those budgets and teams ensure the death of innovation.**²⁵ This was a good expression of the undercurrent of worry at the 2005 Game Developers Conference: the worry that developers would have to spend more resources creating game graphics, thereby pushing budgets to new heights at the expense of game design innovation.

In the then-upcoming generation of consoles (figures 1.7, 1.8, 1.9), the Nintendo Wii was the only one *not* promoted specifically on better graphics; in fact it did not even *have* the high-definition graphics that Sony and Microsoft were trumpeting. Figure 1.10 illustrates how the Wii is by far the technically weakest console of the generation,²⁶ but is also, as of February 2009, by far the most popular game console of the generation.²⁷ Technical selling points clearly do not drive sales of game consoles today.²⁸

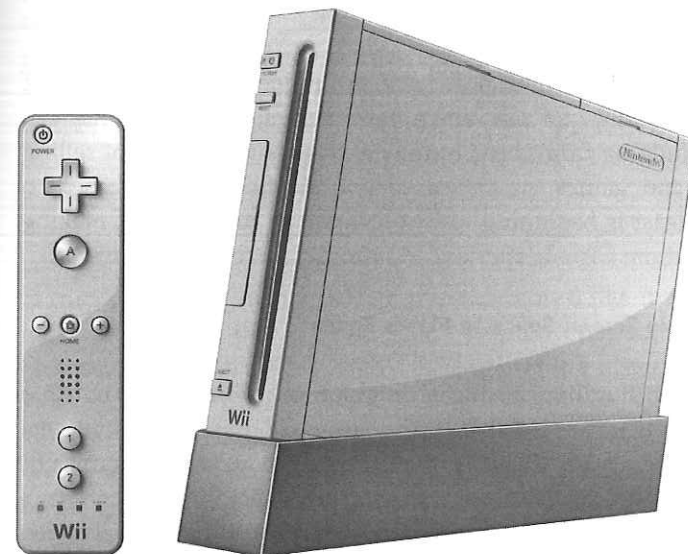


Figure 1.9
Nintendo Wii (image courtesy of Nintendo America)

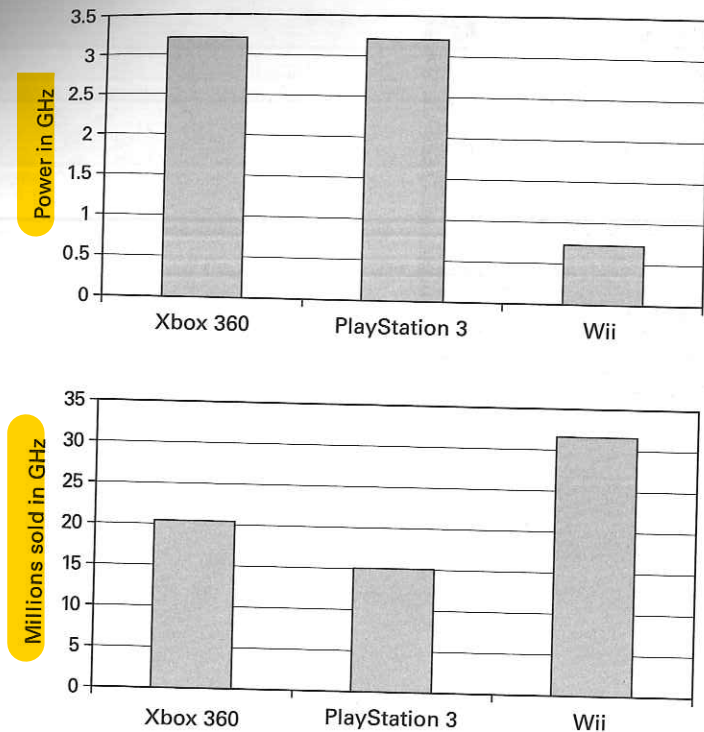


Figure 1.10
Power of game consoles compared to sales by February 2009

If the Wii lags in the graphical department, it does have a new kind of controller and a strategy for reaching a new, market of more casually oriented players. Judging from these numbers, the traditional way of selling new consoles and games via increased graphic fidelity has ceased to work²⁹—or at least is beginning to be outshone by new ways of making games, and by more casual experiences aimed at more casual players.

From 3-D Space to Screen Space to Player Space

The problem with the industry focus on graphics technology is not that graphics are unimportant, but that *three-dimensional* graphics are not necessarily what players want. Casual game design is about making games fit in better with players' available time, but it is also about using space in a different way than one experiences in recent three-dimensional video

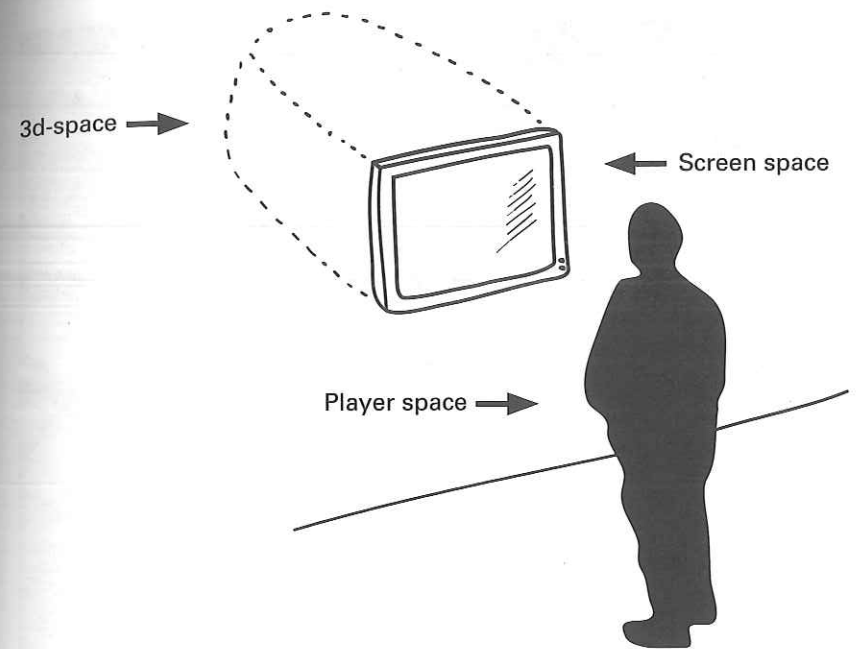


Figure 1.11
3-D space, screen space, player space

games. Figure 1.11 shows how video games can involve three different types of space: whether sitting or standing, the player is situated in the *player space*, the physical space in front of the screen. The screen itself is a flat surface, the *screen space*. Any three-dimensional game presents a world inside the screen, a *3-D space*. (The real world of player space is of course also three-dimensional, but by 3-D space I mean the world projected by the screen.)

Early video games such as *Pac-Man* or *Pong*³⁰ were two-dimensional, but when games like *Wipeout*³¹ (figure 1.12) were published in the early to mid 1990s, the then-amazing graphics looked like the future of video games, heralding that all video games would eventually become three-dimensional. Nevertheless, with casual games the history of video games took a different turn. The 1998 *Dance Dance Revolution* (figure 1.13) shifted the focus from 3-D space to the physical movement of the players on the game's dance pads. The game does feature a display, but most of the game's spectacle is in player space, the real-world area in which

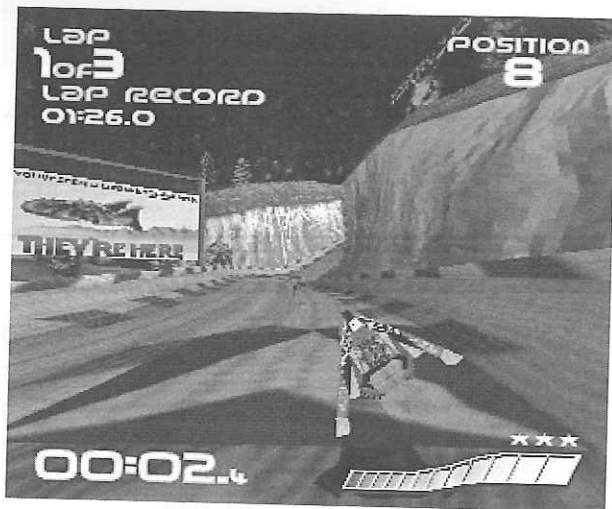


Figure 1.12
Wipeout (Psygnosis 1995)

players move about. Furthermore, the 2004 downloadable casual game *Bejeweled 2 Deluxe*³² (figure 1.14) is two-dimensional just like early arcade games. The movement to screen space and the movement to player space are core aspects of the trends in casual games that I will discuss in this book:

- *Downloadable casual games* are generally two-dimensional games that take place in screen space.
- *Mimetic interface games* are often three-dimensional, but encourage interaction between players in player space, and in such a way that player space and 3-D space appear continuous: when bowling in *Wii Sports*,³³ the game gives the impression that player space continues into the 3-D space of the game.

In short, video games started out as two-dimensional games on screen space, became windows to three-dimensional spaces, and now with casual games we see many games returning to both the two-dimensional screen space and to the concrete, real-world player space of the players. Casual games have a wide appeal because they move away from 3-D spaces, blending more easily with not only the time, but also the space in which we play a game.

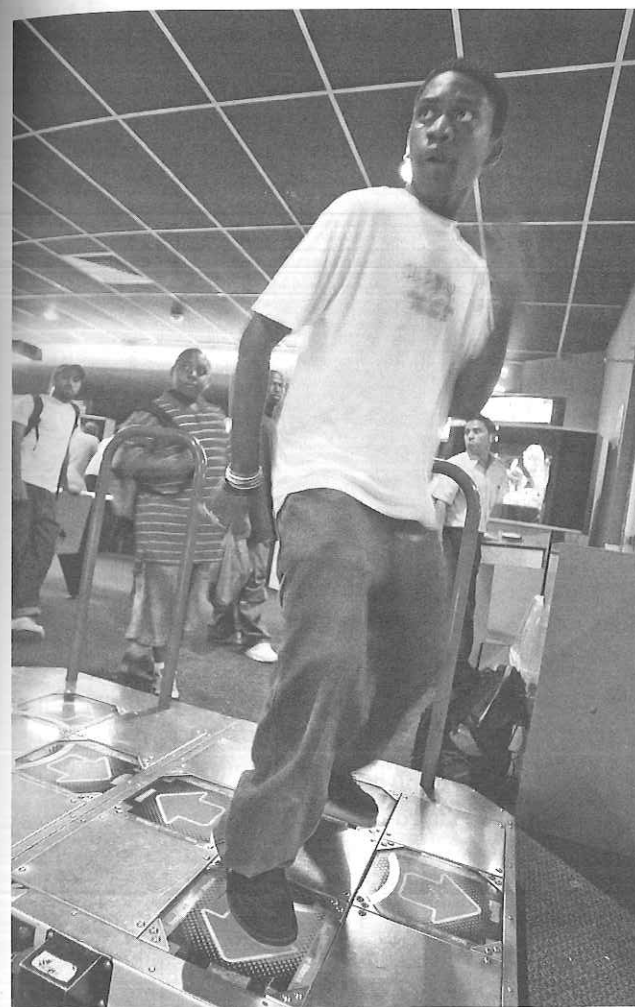


Figure 1.13
Dance Dance Revolution player (Mario Tama/Getty Images)



Figure 1.14
Bejeweled 2 Deluxe (PopCap 2004)

Mimetic games move the action to player space, but many of them also encourage short game sessions played in social contexts. Such games, like all multiplayer games, are *socially embeddable*: games for which much of the interesting experience is not explicitly *in* the game, but is something that players add to the game. For example, if playing a competitive match of *Guitar Hero* or *Wii Tennis*, *the game takes on meaning from the existing relations between the players*. Playing a game against a friend, a significant other, a boss, or a child, adds meaning and special stakes to the game. Furthermore, people playing mimetic interface games are often themselves a spectacle, making these games more interesting even for those who are not playing.

Casual games are new, but new by reaching back in game history and by borrowing liberally from non-video-game activities. Video games are becoming normal; during the history of *all* games, everybody, young and old, has played games of one kind or another. *The rise of casual games is the end of that small historical anomaly of the 1980s and 1990s when video games were played by only a small part of the population.*

About This Book

This book is meant to capture *what is happening* with video games. In order to do that, I look at the games themselves, at players, and at developers. I will examine the designs of popular casual games, showing the common qualities that make them different from traditional hardcore video games. *In order to learn about the habits and opinions of players, I have conducted a survey of two hundred casual game players. I have also made in-depth interviews with a number of game players and game developers.*

This book is also meant to fill a void in the rapidly expanding field of video *game studies*. Most books on video games have tended to be either entirely general (such as Salen and Zimmerman's *Rules of Play*³⁴), or focused on specific games (such as T. L. Taylor's *Play between Worlds*³⁵ on *EverQuest*³⁶), or covering specific aspects of all games (such as Mia Consalvo's *Cheating*³⁷). Here I am exploring a middle level of video game studies by looking at the position of casual games in the history of video games and games as such. My feeling is that video game studies must keep improving its tools—tools that must be more than general claims about all games and players, and more than the mere descriptions of single games or players. *It is paramount that we can acknowledge player culture without treating games as black boxes, and we must be able to discuss game design without ignoring the players.* We must be able to talk about how a single session of a small game is part of the entire history of games. This book constitutes my proposal for how this can be done.

Following this introduction, the rest of the book examines the casual revolution around two questions:

1. How did casual games appear, and how do they relate to the history of video games and nondigital games?
2. How do players and games interact? How do players engage with a given game?

Chapter 2 begins by combining these questions: the terms *casual games* and *casual players* are recent inventions, but they are a response to a time period during which video games became ever more complex and demanded ever more video game knowledge from a player. Casual game design, then, reinvents video games and goes hand in hand with a

reinvention of the video game player. The casual revolution contains a new way for players and games to engage. Casual games share a set of design characteristics that I judge against common conceptions of casual and hardcore players, and show that while actual players are much more varied than can be expressed with the “hardcore” or “casual” categories, casual game design is successful because it is flexible toward different tastes and different usages.

As is often the case, painting a big historical picture makes it easier to perceive the details of what is happening now: chapters 3 and 4 consider casual games in a historical perspective. Chapter 3 shows Solitaire (or Patience) as a proto-casual game that became one of the most popular games played on computers because it was already familiar to players. Solitaire illustrates how a game is always perceived against the background of the games that a player has previously tried, and that the main barrier to playing video games has not been computer technology, but game design.

Chapter 4 focuses on history in a shorter time span: I examine the success of downloadable casual games and review the history of matching tile games. These often simple games evolve only gradually over time, which puts game developers in the treacherous position of having to differentiate themselves from previous games, while still building sufficiently on well-known game conventions that a game is easily accessible to new players. Developers of downloadable casual games borrow generously from earlier games, but they openly try to position themselves as innovative.

Chapter 5, 6, and 7 each tackle the ways in which players and games interact. Chapter 5 examines mimetic interface games, especially *Guitar Hero*, *Rock Band*, and games played on Nintendo Wii, to show that their success is due in part to the fact that they do *not* require players to know video game history, but build on more commonly known activities such as tennis and guitar playing. They are also often social games that move the game action into the space in which players play.

The interstitial chapter 6 explains why games can be social in the first place, by showing how even strategically shallow games like *Parcheesi* are considered social games, and how most of the meaning of such games is brought to the game by the players. Nevertheless, the meaning of a game is facilitated by design: when players can choose among playing to win, playing to keep the game interesting, or playing to manage the social situation, a game quickly become socially meaningful.

Chapter 7 asks why some games, such as *Guitar Hero*, *Sims*, or the *Grand Theft Auto* series are open to many levels of engagement and to being played in many different ways. These games are widely popular because they do not force the player to follow the goal. With this observation, the book returns to the question of history, showing that economical considerations meant that early arcade games *had* to punish players harshly for not reaching the game goal, thereby narrowing the range of available playing styles. Newer large-scale games are meaningful with both small and large time investments because the player is free to not follow the game goals.

Chapter 8 concludes the book by considering the skepticism that many traditional hardcore game players have toward casual games, asking whether game developers have an obligation to make games for people other than themselves, and placing casual games in the history of video games.

Finally, three appendixes document the habits and attitudes of casual game players and developers.

Appendix A contains the results of a survey of players of downloadable casual games.

Appendix B is a collection of player life stories gathered through the survey in appendix A and through additional interviews.

Appendix C contains excerpts from interviews with game developers about their views on the changes in video game design and in video game audiences.

3 All the Games You Played Before

What do you see in the image of *Puzzle Quest*¹ shown in figure 3.1? What do you think you *do* in this game? Do you have strategies for playing this game? Your answers depend on what games you have already played; on your knowledge of game conventions. Looking at the screenshot, you may or may not feel the pull discussed in chapter 1. You may or may not know what to do in the game, and you may or may not *want* to do it.

At the time of release, reviewers described *Puzzle Quest* as a combination of elements from matching tile games (games such as *Bejeweled* shown in figure 1.14), hitherto considered a casual game type, with role-playing game elements and a fantasy setting hitherto considered a staple of hardcore video games. The website *ign.com* specifically warned its hardcore readers not to be “ashamed of” *Puzzle Quest*’s use of casual game elements:

Hardcore gamers: be not ashamed of your love for jewel swapping. Casual gamers have their *Bejeweled*, and hardcore players have their RPGs [role-playing games]. Long have the two groups been content to remain separate and play their respective games. But the folks at D3 Publisher have begun a socialization experiment that may find gamers from both camps playing the same game. *Puzzle Quest: Challenge of the Warlords* attempts to marry characteristics of traditional RPGs with the pick-up-and-play mechanics of a casual puzzle game—and succeeds.²

Conversely, the casual game review site *Gamezebo* encouraged their readers not to be turned off by the fantasy and role-playing elements of *Puzzle Quest*, assuring that it was “a casual game at heart”: “Classical fantasy trappings and detailed role-playing infrastructure aside, *Puzzle Quest: Challenge of the Warlords* proved a surprise hit on consoles like the Nintendo DS and PlayStation Portable for one simple reason—it’s a casual game at heart. So don’t be so quick to dismiss the outing, just because



Figure 3.1
Puzzle Quest (Infinite Interactive 2007)

you're not the sort who usually appreciates the complexity of *Dungeons & Dragons*-style romps or balks at the thought of playing swordsman or spellcaster.”³ Some user reviews show players making similar observations: “If you love RPGs and Puzzle games you will love this game!”⁴

How does this compare to the original intentions of the developers of the game? According to a conference presentation, *Puzzle Quest* was born of the idea of mixing two genres: “The inception of the game concept was a ‘happy accident’ caused by the process of **iterative design**. Steve started his plans with the ideas that he really liked *Bejeweled* and he really liked RPGs. Putting the two together seemed to result in a style of game that landed in that sweet spot the studio was aiming for, and seemed to be something compelling enough to play.”⁵

This is the harmonious picture of innovation in games: a game developer has the **intention of innovating**; reviewers and players understand the intention and enjoy the game. Does it always work this well? If you look a little further, many users voice their frustrations with *Puzzle Quest*, as in these comments from an unhappy buyer:

I bought this game because I was looking for a game resembling *Bejeweled*. I think I would have rather found the real *Bejeweled* game. Wish Nintendo had made it... and *Atlantis* as well.

But, with the highest of hopes, I bought this game. Even with the manual, I'm still trying to figure out what the heck the purpose of this game is?

It sorta has some *Bejeweled* features... and a whisper of a story line, but other than that... I'm confused.

I enjoy the “practice” rounds where I can do a *Bejeweled* puzzle, but when it comes to combat with an opponent, I find myself sitting there while the opponent takes all the turns and completely stomps me. Then the game tells me I'm defeated... well... yeah!!⁶

The player was apparently not familiar with the role-playing conventions in the game and was surprised by the spells and special objects *Puzzle Quest* added to the matching tile game formula. This prevented her from enjoying the game. **Game conventions are double-edged swords: they are shorthands that allows games to build on other games, but they risk alienating users unfamiliar with those conventions.**

Games that copy other games wholesale are derogatorily referred to as **clones**, but developers face a genuine challenge trying to strike a balance between innovation and cloning: on the one hand, players perceive new games on the basis of games they already know, and this puts pressure on developers to create games that are similar to previous games in order to give players an initial experience of competence. On the other hand, the player needs a reason to buy a *new* game, and there is therefore pressure on the developer to provide new, innovative experiences. On top of that, within the game development community, **innovation has higher status than cloning**, as will be documented in chapter 4.

This chapter examines how the proto-casual **Solitaire** card game became one of the most popular digital games in part because it was already well known by players. Solitaire is an example of how all games are created and used in four different time frames: **historical time, design time, player lifetime, and game-playing time.**

Genres, Fictions, and Interfaces

I described *Puzzle Quest* as a combination of two genres: role-playing games and matching tile puzzle games. (The status of matching tile games is discussed in further detail in chapter 4.) The challenge of talking about **genre** is that there are no clear agreements about how to define

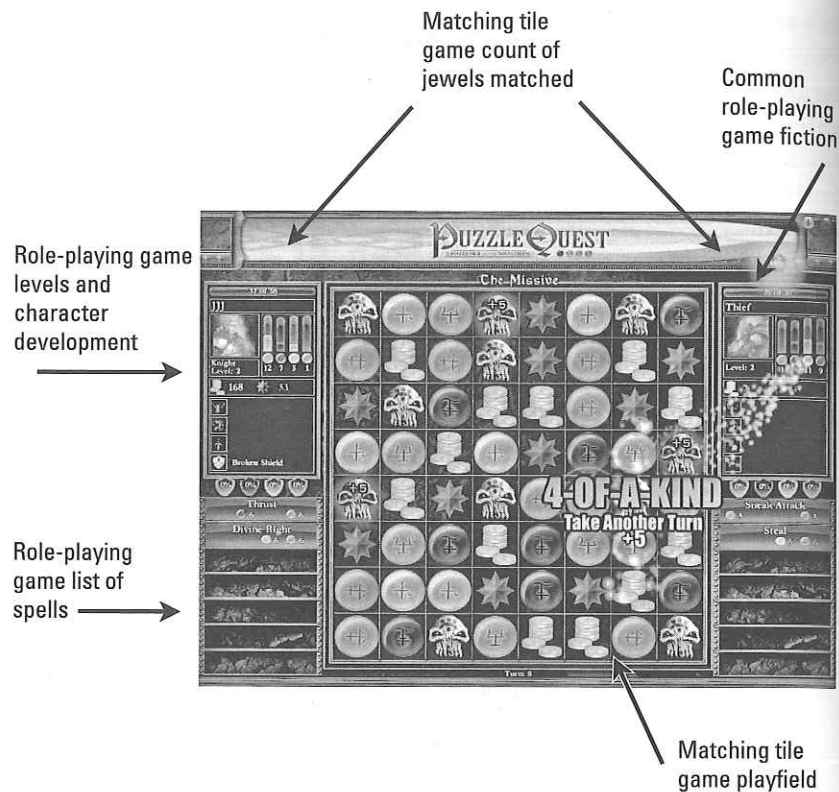
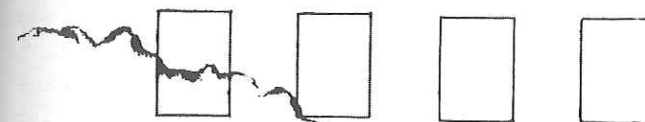
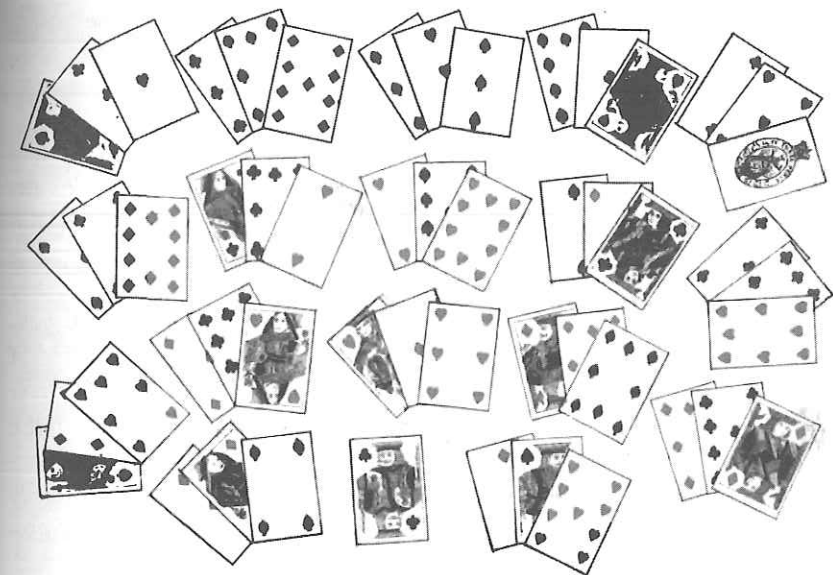


Figure 3.3
Identifiable game conventions and their sources in *Puzzle Quest* (Infinite Interactive 2007)

has developed over considerable time and has crossed technological boundaries. The first known references to Solitaire are from Germany and Scandinavia around the year 1800, with the first collection published in Moscow in 1826, and Solitaire gaining popularity in Europe during the later part of nineteenth century.¹⁴ Solitaire has undergone a significant resurgence in popularity after becoming available on modern computers. The ease by which Solitaire became a computer game demonstrates the importance of player familiarity with game conventions. The history of Solitaire also reveals that, like video games today, Solitaire has been associated with a specific audience.

In English, the 1876 *Lady Cadogan's Illustrated Games of Patience*¹⁵ was the first collection of Solitaire card games. Twenty-two years later,



LA BELLE LUCIE.

Figure 3.4
"La Belle Lucie" Solitaire game (Cadogan 1876)

Miss Whitmore Jones would remark how times had changed and how Solitaire was *previously* considered a game for "idle ladies," but that in modern hectic times, the benefits of playing Solitaire had become widely appreciated:

In days gone by, before the world lived at the railway speed it is doing now, the game of Patience was looked upon with somewhat contemptuous toleration, as a harmless but dull amusement for idle ladies, and was ironically described as "a roundabout method of sorting the cards"; but it has gradually won for itself a higher place. For now, when the work, and still more the worries, of life have so enormously increased and multiplied, the value of a pursuit interesting enough to

absorb the attention without unduly exciting the brain, and so giving the mind a rest, and, as it were, a breathing-space wherein to recruit its faculties, is becoming more and more recognised and appreciated.¹⁶

Solitaire games are generally single player, and generally entail taking a set of shuffled cards and placing them in order within the limitations imposed by the game rules. Solitaire games share a large number of conventions that enable players to transfer knowledge from one Solitaire game to another and for the description of a game to be quite terse. Lady Cadogan's 1876 book is introduced by an "explanation of terms" of Solitaire, illustrating how Solitaire is an open collection of mechanics of which every single game is a *selection*. This also means that once a player has played a few Solitaire games, new ones are easily learned due to the player's familiarity with the game mechanics. The popularity of Solitaire games on computers was furthered by such familiarity—players already know the original version played with cards, and a computer simply provides a convenient opportunity for playing Solitaire.¹⁷

Casual game design lowers the barriers to entry by requiring little knowledge of game conventions and small time investments, but the physical space required to play a game can also be a factor. Surprisingly, such barriers were considered an issue even in the early days of Solitaire games. A 1901 Solitaire collection praises the appearance of physically smaller card decks, hence lowering the barriers to entry to even the card version of the game: "Patience is now very generally played, as the one objection to it that used to exist—that it required so large a space to lay out the cards—has now been removed by the introduction of *miniature packs*, which have been specially made for it, so as to enable the most elaborate game to be displayed in the compass of about a foot square—a great boon to invalids confined to a couch, for they no longer require a table, but can set out these games on a tray, or even on a music-book."¹⁸

Solitaire games were from early on associated with specific audiences, with Whitmore Jones indicating that Solitaire was considered a ladies' game. In the history of games, this compares to the association of hardcore video games with young men and the association of contemporary casual games with a female audience seemingly similar to the perceived Solitaire audience. While the previous quote mentions the invalids benefiting from smaller decks of cards, the cover of the 1914 American edition of Cadogan's book¹⁹ (figure 3.5) shows that a female audience is still associated with these games: a society woman with modern clothes, hair-style and furniture is depicted enjoying a game of Solitaire in the evening.

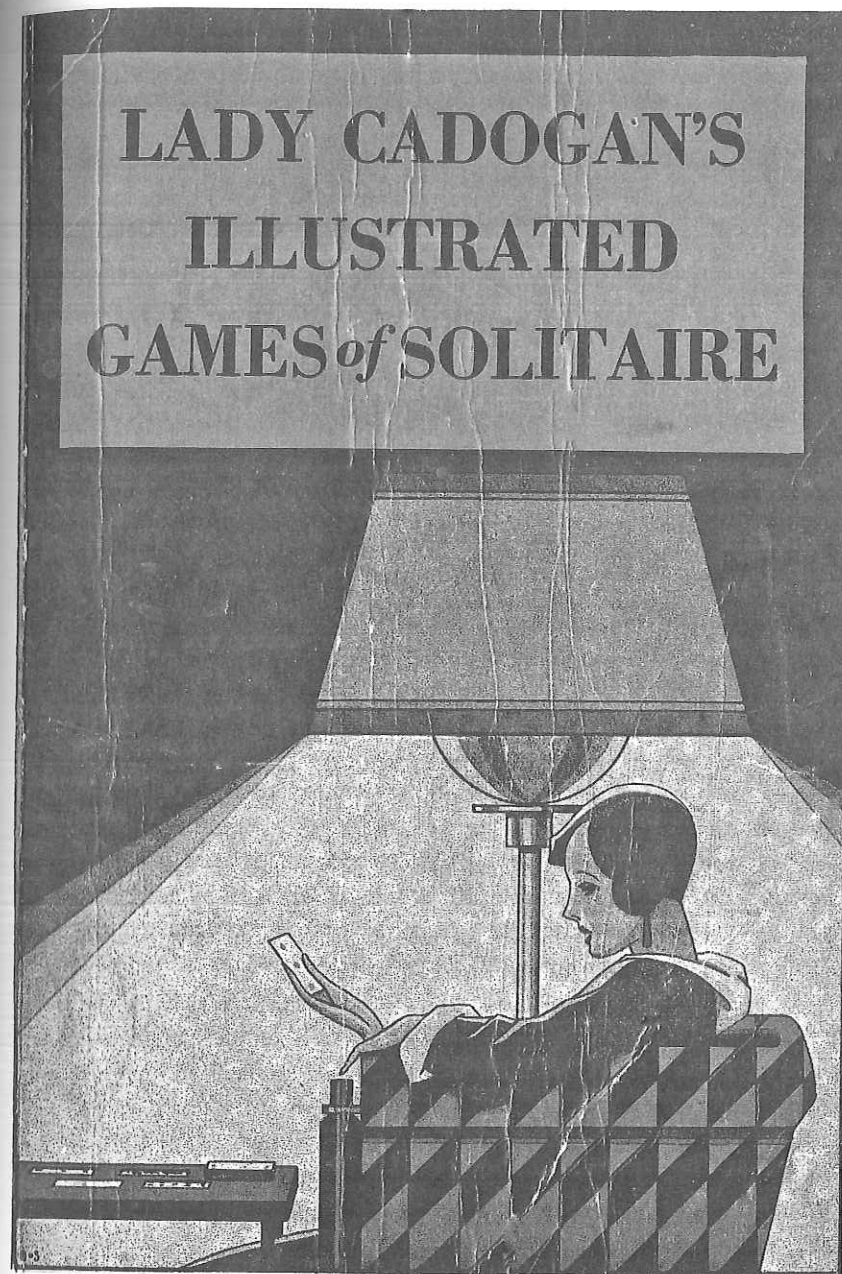


Figure 3.5
The 1914 edition of *Lady Cadogan's Illustrated Games of Solitaire or Patience* (Cadogan 1914)

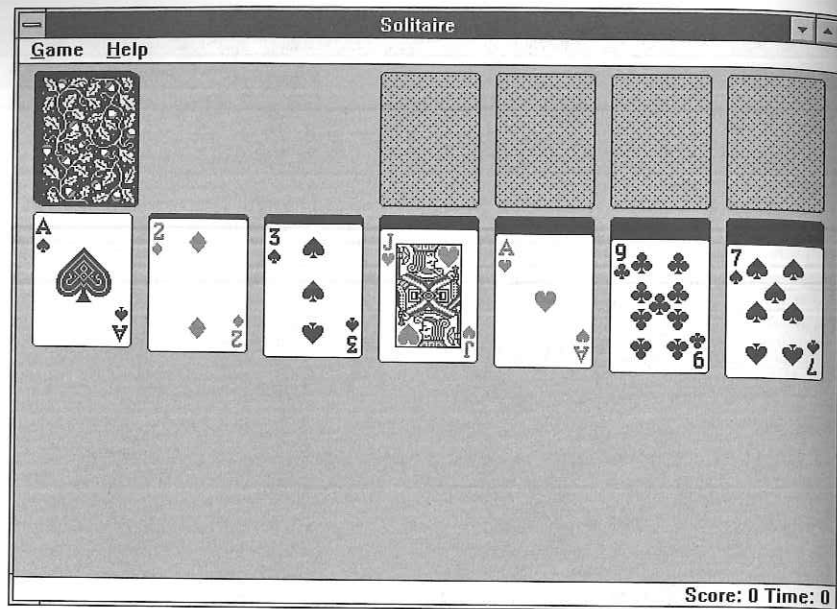


Figure 3.6
Solitaire for Windows 3.0 (Microsoft 1990, image courtesy of Rowan Lipkovits)

Solitaire was included as a standard application with Microsoft Windows 3.0 in 1990,²⁰ and hence made the leap to computers (figure 3.6). How popular is Solitaire played on computers? A Finnish study reports that Solitaire is the most popular *digital* game of both men and women, with 36 percent of women and 13 percent of men reporting it as their favorite.²¹ Steve Meretzky has argued that the inclusion of Solitaire in Windows 3.0 was the beginning of casual games as such.²²

Before discussing Solitaire further, I would like to compare the development of Solitaire to that of modern video games (such as casual games). Folk games like Solitaire were not designed by any one person, but developed slowly over time as players deliberately or by mistake introduced variations that they would then communicate to other players if they found the variation interesting. With the advent of commercial game development in the eighteenth century and later with video games, the design and design time of a game became tied to specific developers. Commercial game development also led to a division between the designers and players of a game. Around 1890, the U.S. game company Parker

Brothers (which would later publish *Monopoly*²³) had experienced disappointing sales of a complicated strategy game called *Chivalry*, designed by George Parker. This led them to describe the following principles for future game development: “A customer—at any store, in any city—must be attracted by the intriguing name and colorful artwork on the cover of every Parker Brothers product. Each game must each have an exciting, relevant theme and be easy enough for most people to understand. Finally, each game should be so sturdy that it could be played time and again, without wearing out.”²⁴

These principles are surprisingly similar to the casual game design principles I have described: the fiction must be attractive; the game must be usable; the game must have a good visceral quality—juiciness. It is also notable how Parker’s design principles introduce a division between the tastes of the developer and the tastes of the player: George Parker had been fond of his complicated strategy game, but realizing that this feeling was not shared by his audience, he decided to develop games for the perceived tastes of the audience *rather* than his own.

In many ways, video game development has spent decades catching up with the principles listed by the Parker Brothers. The history of video game development is partially a history of growing development teams and changing relations to the audience of games. Whereas early video games were often made by a single person, growing development teams led to an increased demand for game development to be properly planned, and for more consistent testing against a game’s target audience. In a 2002 article, developers Mark Cerny and Michael John argue for a prototype-driven method for developing video games.²⁵ In this development method, a game is subjected to frequent *playtesting* with the target audience throughout development, but developers should *not* rely on focus group tests where audience are asked about their tastes, because this can only give information about “What’s popular as of 10 minutes ago.”²⁶ A more specific criticism against focus groups is that they “are poor at providing specific, actionable data that help game designers make their games better.”²⁷ Commercial video game development often relies on observation of players playing the game in development, while some developers also doubt that the explicit opinions of players can be trusted.

The status of the audience in game development is thus much contended. A common complaint against the traditional video game industry is that developers are making games only “for themselves,” with the

casual games industry, like George Parker, proclaiming to make games for “everybody.” A casual game developer describes his own position like this: “Hardcore developers make games for themselves (‘I like that—let’s put it in’), whereas casual developers make games for themselves and everybody else (‘I like that, but let’s make sure it works for my dad/sister/receptionist too’).”²⁸

While this probably is an unfair generalization about the development of traditional hardcore video games, playing such games often requires game convention knowledge from other video games. To build a game on existing conventions is to run the risk of alienating an audience that does not know them. It could be predicted that casual games were therefore unlikely to build on previous games, but this is different in the two game types discussed in this book: while mimetic interface games borrow mostly from activities outside video game history (such as bowling or playing music), chapter 4 shows how downloadable casual games build heavily on the conventions of other downloadable casual games. This is probably due to the way such games are distributed: players have free access to trials of hundreds of similar games and therefore have time to absorb video game conventions. On the contrary, players of mimetic interface games are less likely to try more than a few games, as the games have to be purchased before they can be played.

All developers share a balancing act between making a game that conforms to tradition and making one that breaks new ground, between making a game for personal tastes and making one for an audience that the developer is not part of. Some of the developers interviewed in appendix C consider themselves to be part of their target audience, but one developer reports making games for the tastes of two fictional characters “Sophie and Marie.”²⁹

While developers make games for an audience that they may not be part of, the audience itself is constantly changing. Players learn new conventions and new skills during their lifetimes. Solitaire became a popular game on computers because players had become familiar with Solitaire conventions earlier in their lives (and because it was easily learned for people who were not familiar with the game). *Puzzle Quest* is arguably popular because it has dual entry points depending on a player’s game knowledge. The negative user review of *Puzzle Quest* then illustrated how a player can be alienated from a game if he or she fails to understand the conventions it uses. During your lifetime, you collect knowledge from

the games you play, and you use that knowledge for understanding new games.

All this leads up to the *game-playing time*. The game that successfully manages to get a player to start and keep playing adds to that player’s knowledge of conventions. To play a new game is to learn new skills and conventions. The history of games leads up to your playing of an individual game; your playing of that game paves the way for playing future games.

Solitaire as a Proto-Casual Game

Solitaire only recently has become a game played on computers. Before a player begins a game of computer Solitaire, many things have already transpired. First there are thousands of years of game history, during which general game conventions have taken shape. Video games, as a subset, have emerged only during the last forty years. Then there is the time frame of designers, who develop a game in some weeks, months, or years, using their knowledge of previous games and their assumptions about the game’s audience. And before an individual game of Solitaire is played in the present, the player has experience with other games and other media during his or her lifetime. These are the four time frames of games, which can be described as follows:

- *Historical time* The evolution of games transcends the lifetime of any player or developer. Games and audiences evolve over millennia. Games and game genres are associated with specific audiences, but these associations also change over time. For example, it was once assumed that video games would only be played by young men, but this is changing with the rise of casual games. Furthermore, the introduction of Solitaire on the Windows operating system illustrates how a game can appear, become popular, and move between technological platforms because it is widely known and understood.
- *Design time* Whereas traditional folk games were rarely, or only apocryphally, associated with specific designers, the rise of commercial board games and video games introduced a division between game designers and game players. Contemporary video game developers appear to be gaining a more nuanced view of the audience for their games, and casual game design is often framed as being more sensitive to audience demands than traditional hardcore game design. Casual game design introduces

more distance between players and developers, with developers encouraged to create games for audiences other than themselves.

- *Player lifetime* Players see new games in the light of the previous games they have played. This **game literacy** is not a general game literacy but is tied to the specific genres a player has experienced. We identify new games based on the games and genres we already know.

- *Game-playing time* The preceding time frames lead up to the time of game-playing where, hopefully, the player understands and enjoys the game.

Even before Solitaire became one of the most popular games played on computers, it matched casual game design principles very well: it is a usable game that players can play at their own pace, and supremely interruptible. Solitaire can be replayed indefinitely, so the game does not punish the player for failing by making him or her replay a level—the player is replaying the game anyway. Furthermore, the extended use of randomness relieves the player from some of the responsibility if a game is not solved. Finally, if the amount of space needed to place the cards of Solitaire have historically been a barrier to playing, players who own a computer can now play Solitaire without taking up any additional space. Computers just made Solitaire even more casual.

The successes of *Puzzle Quest* and computer-based Solitaire emphasize that games fail or succeed due to the *interaction* between game design and players. But even this is only a partial truth: in the bigger picture, neither game designers nor players start from scratch, but carry the history of games with them. Being aware of this is a requirement for understanding the casual revolution—and video games at all.

4 Innovations and Clones: The Gradual Evolution of Downloadable Casual Games

It is a feeling similar to playing Solitaire. You are totally relaxed, you cannot concentrate on anything else, but at the same time you can be thinking about other things in the back of your mind. I often play when I face a difficult problem. In my company I face various tasks that are hard to get started with. I already have the knowledge I need, so I play a game rather than go read a lot of books. Then the solutions come. It is like the game brings out a lot of tacit knowledge, as if the problem solving in the game maintains that skill, and that is a skill I need.

—A 55-year-old player of downloadable casual games¹

Downloadable casual games are games in a specific *distribution channel*: while video games have traditionally been sold in stores, players of downloadable casual games go to a website such as RealArcade or Big Fish Games (figure 4.1) and download a free version of a game that can typically be played for sixty minutes (figure 4.2). After sixty minutes, the player has to buy the game in order to continue playing (figure 4.3). Developer Dave Rohrl describes the fact that players can try a game before playing as a way of selling games in an “open box.”² This has some similarities with games like *Guitar Hero* or *Buzz*³ discussed in chapter 5, where the shape of the controller gives players an idea of what the game is about before playing it. For any player unsure about which game to choose, this makes it much **easier to make a purchasing decision.**

As game genres contain specific conventions and mechanics, so does this distribution channel contain specific types of games. Downloadable casual games are almost exclusively two-dimensional games that take place in screen space. As of 2008, the most popular game type in this channel is hidden object games such as *Mystery Case Files: Huntsville*⁴ (figure 4.4), followed by time management games (figure 4.5). In the early years of downloadable casual games, matching tile games was the bestselling

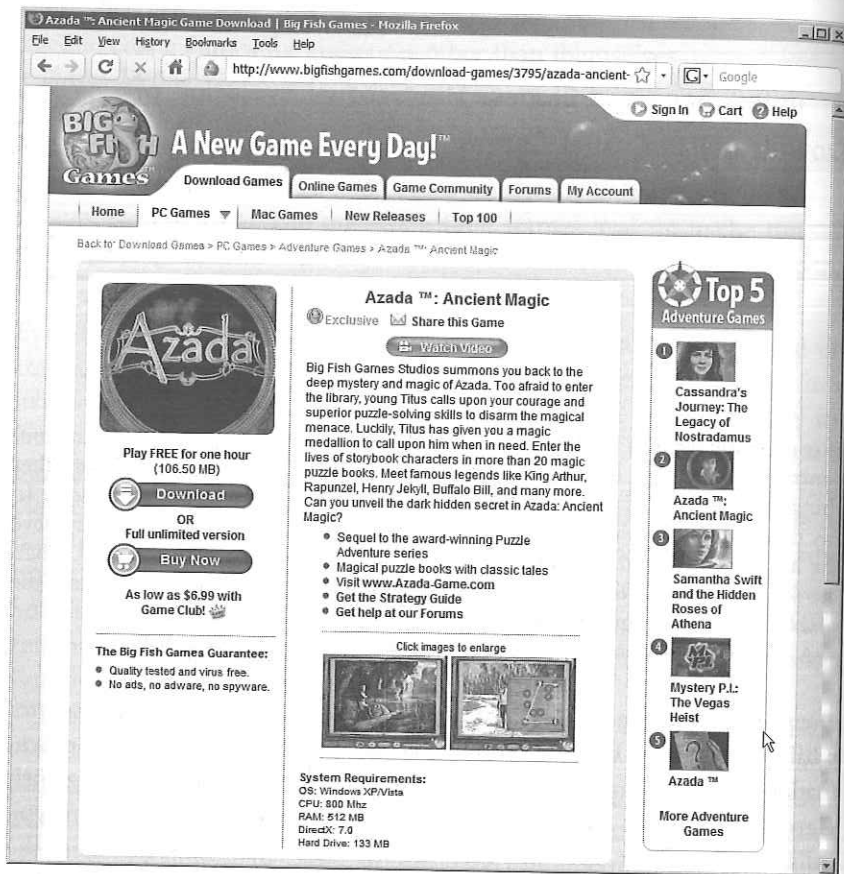


Figure 4.1
The Big Fish Games website

game type. In turn, the best-known matching tile game is the *Bejeweled* series from PopCap games, which has presently sold more than 25 million copies in different formats.⁵ Figure 4.6 shows *Bejeweled 2 Deluxe*.⁶

Downloadable casual games played an important role in bringing industry and popular awareness to the fact that video games could reach outside their assumed audience of young men. A 2006 study of players of downloadable casual games reported that 71 percent of the audience was female,⁷ with the majority being over 35 years of age. The study of casual players in appendix A shows an even greater skew: 93 percent of the respondents are female. This is worth noting as the game industry

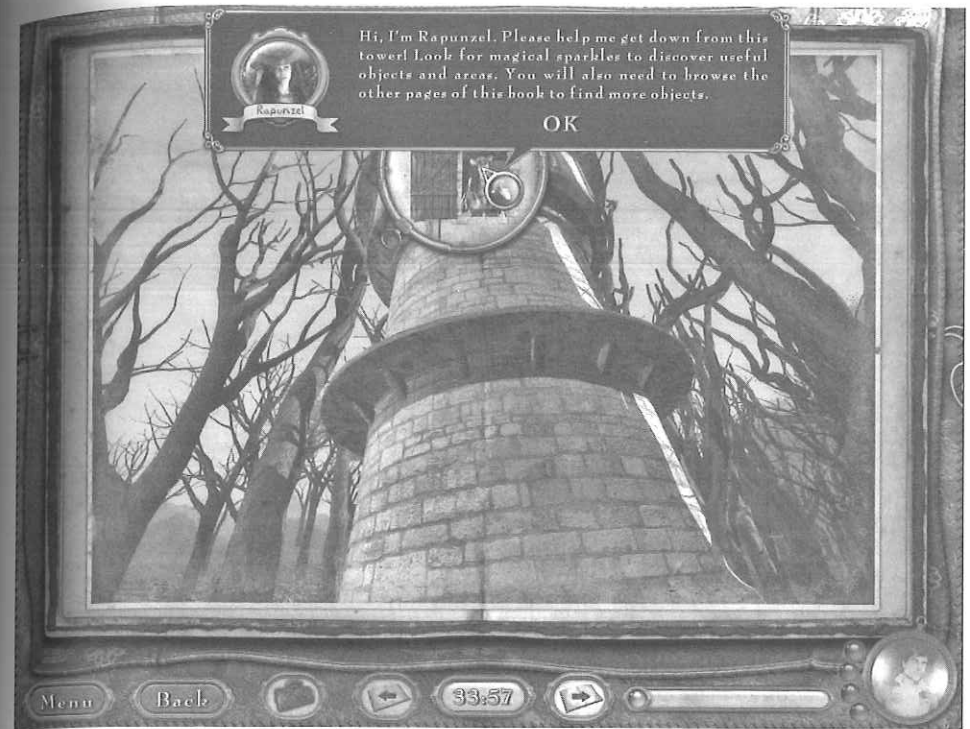


Figure 4.2
Playing the downloaded game *Azada: Ancient Magic* (Big Fish Studios 2008)

has been reluctant to acknowledge the possibility of marketing outside the traditional market of young men. In the mid-1990s game developer Margaret Wallace worked at the company PF Magic making the virtual pet games *Dogz*⁸ and *Catz*.⁹ She told me the story of how difficult it was for the game industry to accept that they were making games that reached outside the traditional video game market:

When the company I was working at, PF Magic, was bought by Mindscape, we were integrated into a traditional console gaming company, including a company called SSI who made games like *Panzer General* and other war games, and Bröderbund who made *Prince of Persia*, and who had *Warhammer* and those titles. People at that company did not get us, they did not like us, they thought we were a joke. The traditional games industry did not know how to handle our games, *Dogz* and *Catz*, virtual pets. The sales people had to place our games in retail along with *Panzer General*. They did not know what to do with us.

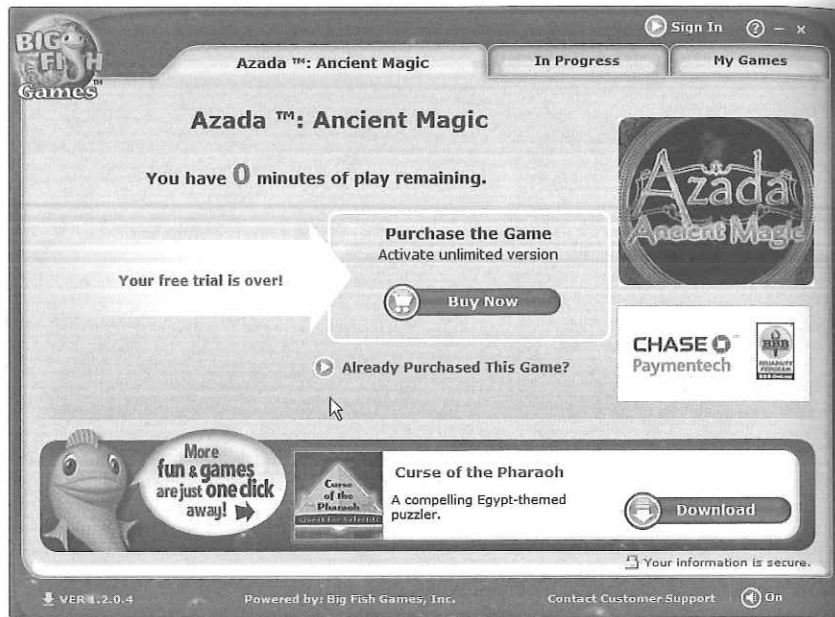


Figure 4.3
Pay to continue playing



Figure 4.5
Diner Dash (Gamelab 2003)



Figure 4.4
Mystery Case Files: Huntsville (Big Fish Studios 2005)

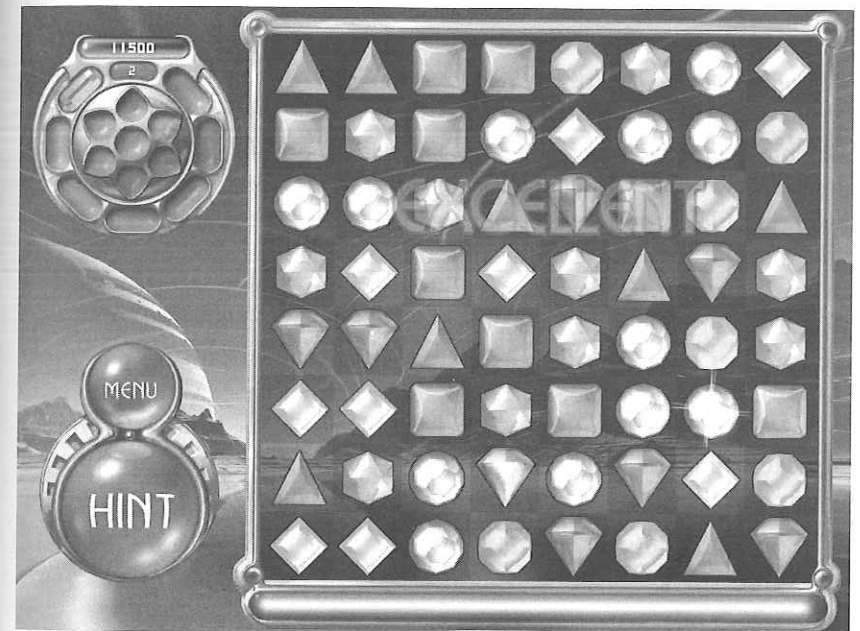


Figure 4.6
Bejeweled 2 Deluxe (PopCap 2004)

We would get data from our customers saying that 14-year-old boys were not the dominant users of our games, it was girls and women. It was like a paradigm shift that people had the hardest time getting over. Even at PF Magic when we looked at the data, and saw that our users were more balanced in terms of the gender breakdown, people had the hardest time accepting that. We finally started talking about it and then we got acquired by Mindscape and then everything went bad. It was like an elitist club. People did not recognize that there was a wider player base out there.¹⁰

In the following section, I will examine the history of the game type that initially dominated the downloadable casual game channel: *matching tile games*. PopCap, developer of *Bejeweled* have claimed that its matching tile game started the phenomenon of casual games as such: “When we founded PopCap Games in 2000 and launched our first title, *Bejeweled*, we had little idea our modest jewel-swapping game would help to pave the way for a whole new genre of ‘casual games.’”¹¹

While this claim is subject to discussion, the history of matching tile games shows that *the balance between innovation and cloning looks different from the perspectives of players and developers: developers tend to present a version of video game history that emphasizes their originality, explaining that their game is the original game that inspired other games (rather than the other way around). Players, on the other hand, have no reason to deny the connection between a new game and the games they have played before.*

A Popular Mechanic with No Vocal Proponents

Matching tile games are quite simple: a large number of games can be described with very few parameters, not unlike Solitaire card games. By matching tile games I mean video games where the player manipulates tiles in order to make them disappear according to a matching criterion. In this chapter I will discuss matching tile games as being a *mechanic*, a typical set of actions for the player, rather than a genre. Matching tile games have been considered different things historically: at one point they were considered derivatives of *Tetris*; at another point a genre onto themselves; more recently, the matching tile mechanic is used as a minor mechanic in larger games. *Additionally, matching tile games are interesting in that they may be one of the only game types with no vocal proponents, only critics.* The *Puzzle Quest* review quoted in the beginning of chapter 3 encouraged players not to be “ashamed” of liking such games.

Where playing an imported Japanese game can be construed as a sign of game competence, matching tile games occupy perhaps the lowest rung on the cultural ladder, one of video game enthusiasts. Critics especially tend to complain of too many games in the subgenre of match-three games (usually referring to derivatives of *Bejeweled*): “On the big portals, at any hour, day or night, tens or hundreds of thousands of players gather to play Hearts, Spades, Canasta, chess, backgammon and a zillion *share-ware match-three games*.”¹²

PopCap, one of the leading developers and publishers of casual games, has this to say about matching tile games:

Q: *What kind of games [are] PopCap interested in publishing?*

A: Not just match-3 puzzle games! We’re interested in pushing the boundaries of the casual games market with a variety of different projects.¹³

Some observers have expressed surprise at how long matching tile games remained popular in the downloadable casual games channel: “I used to preach that the world did not need another *match three bubble popper*, *Mahjong game*, or *card game*, but all of those game types have continued to sell in the Casual game space, and are even beginning to be considered genres.”¹⁴

This low status of matching tile games may be a result of their *low barrier to entry: these games are designed to be usable, and hence playing a matching tile game does not signal special knowledge of video games.*

This does not mean that we can declare matching tile games to be “bad” games, but in several ways they are at odds with a more traditional video game ethic that demand games to be challenging and punishing (this was discussed further in chapter 2).

A History of Matching Tile Games

Immature poets imitate; mature poets steal; bad poets deface what they take, and good poets make it into something better, or at least something different.
T. S. Eliot¹⁵

What would the history of a game or game mechanic look like? Some anthropological work has been done on game history: Stewart Culin’s 1896 article on *Mancala, the National Game of Africa*¹⁶ traces the spread of Mancala games geographically and historically, noting differences in rules and materials used to play. Writing the history of matching tiles

games is slightly different in that the time span is much shorter in comparison to Mancala (twenty years rather than thousands of years). Matching tile games were developed mostly commercially and are generally attributable to individuals, as opposed to a folk game like Mancala that has no specific author. It is also not uncommon to see mostly journalistic histories of video game genres, such as real-time strategy games,¹⁷ but I will give a more detailed account of how matching tile games have developed. It is not possible to include all matching tile games in this space, so I have selected games that have provided some type of innovation.

Figure 4.7 presents a family tree of the history of matching tile games, which I developed by examining as many games as possible, by reading

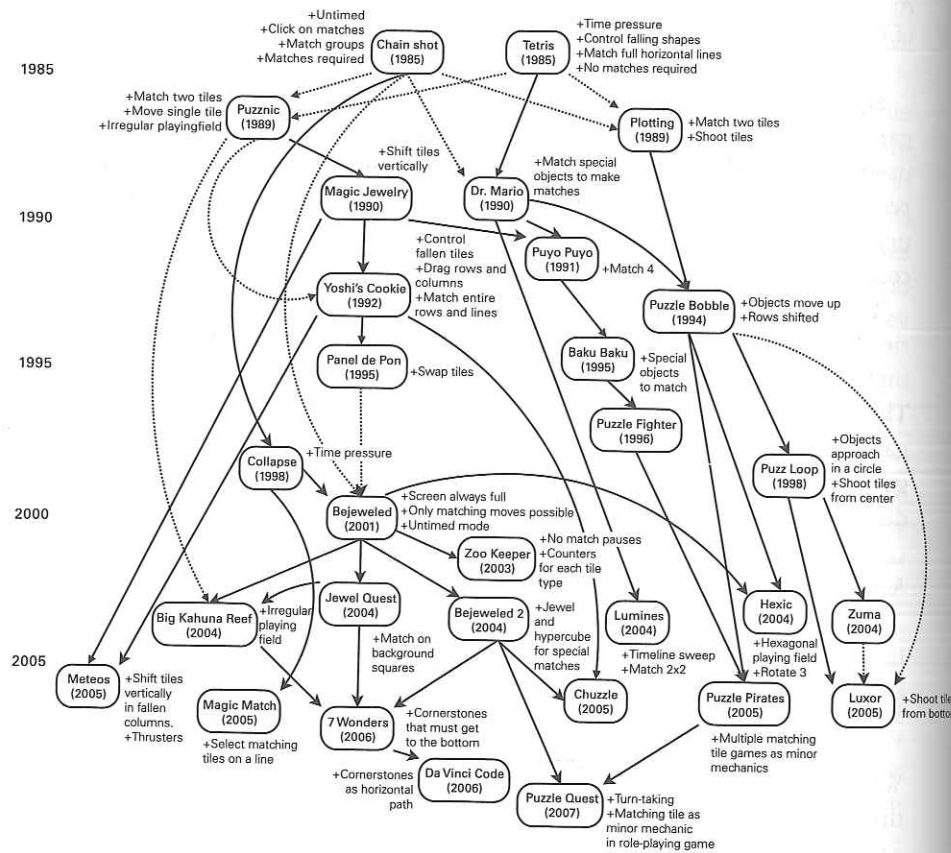


Figure 4.7
A family tree of matching tile games

developer interviews, and by soliciting comments for progressive versions of the history from developers and players. Arrows in the family tree indicate that the topmost game connected by an arrow in hindsight appears to have inspired the game below it. Except for a few cases I have not verified this, but the more speculative connections are indicated with dotted lines. As game players, it rarely matters to us whether actual inspiration took place: we may perceive a game as derived from another game, regardless of whether there is any truth to this. In other words, the family tree is a perception of the history of matching tile games.

From the top of the diagram, there are two progenitors of matching tile games, the 1985 *Chain Shot*,¹⁸ also known as *Same Game* (figure 4.8) and the better known *Tetris*,¹⁹ also from 1985 (figure 4.9). I cannot rule out the existence of earlier, little-known matching tile video games, but *Tetris* was an extremely successful game that spawned a number of imitators, and the influence of *Chain Shot* is visible at various points in the tree. Both games were originally noncommercial.

In retrospect, *Chain Shot* and *Tetris* foreshadow several trends in the following twenty years of matching tile game history. The two games diverge on four important counts:

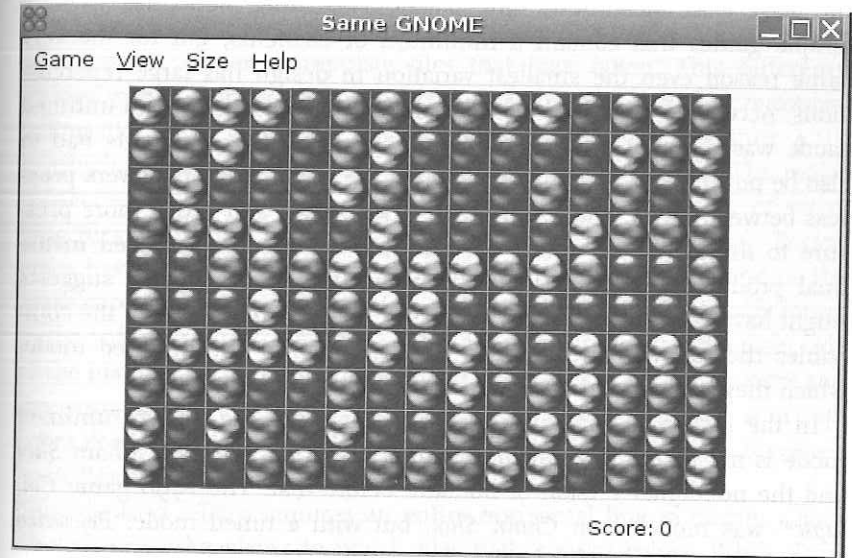


Figure 4.8
Same GNOME (Gnome Project 2006), a recent version of *Chain Shot*!

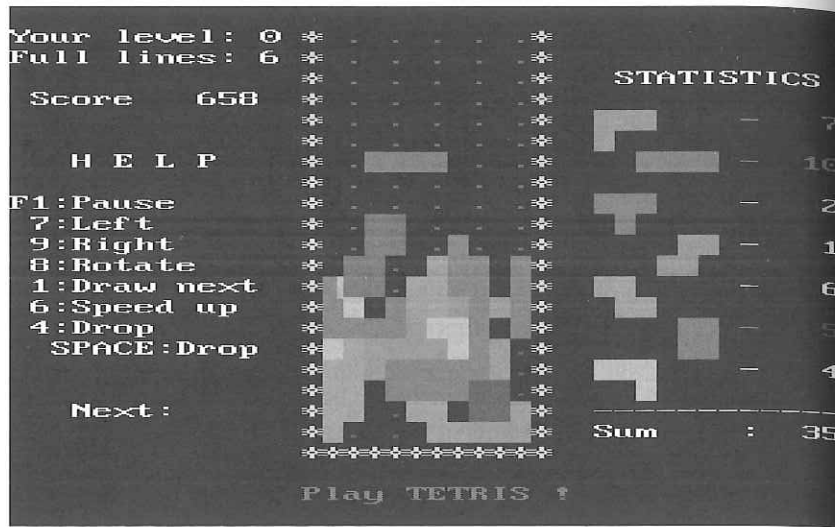


Figure 4.9
Tetris (Pajitnov and Gerasimov 1985)

Time Tetris puts the player under time pressure, but *Chain Shot* affords the players infinite time to find matches. Matching tile games are very simple games that contain a minimum of elements, but for the very same reason even the smallest variation in design has large repercussions. According to the *Bejeweled* developers, the inclusion of an untimed mode was quite controversial: “Numerous other enhancements had to also be put in place, like the inclusion of the meter that lets players progress between levels, and a timer that ticked down and added more pressure to the game. Of course the untimed version was included in the final product; something that [Bejeweled developer] Kapalka suggests might have been integral to its success. . . . He said that many of the companies they showed the game to were alarmed by the untimed mode, which they believed didn’t require any skill to do well at.”²⁰

In the history of matching tile games, we can see that an untimed mode is not an entirely new development, but is a return to *Chain Shot* and the nondigital version of Solitaire before that. The 1998 game *Collapse*²¹ was modeled on *Chain Shot*, but with a timed mode. *Bejeweled* can be seen as a mix of the obligatory matching of *Collapse* and the interaction of tile swapping in *Panel de Pon*²² but with the untimed mode of the much earlier *Chain Shot*.

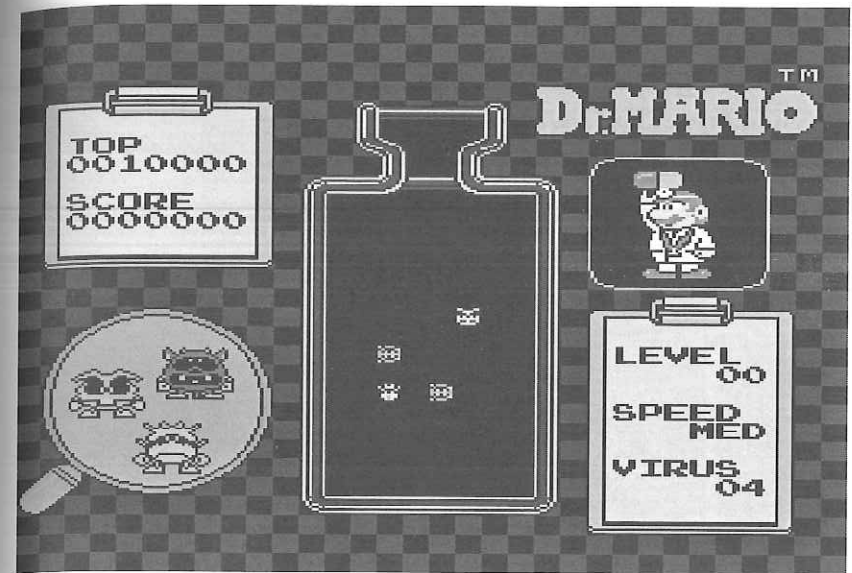


Figure 4.10
Dr. Mario (Nintendo 1990)

Manipulation Tetris lets the player manipulate tiles as they fall, but *Chain Shot* lets the player manipulate tiles that have fallen. This difference divides games such as *Dr. Mario*²³ (figure 4.10), in which players control falling tiles, from games like *Chain Shot* or *Yoshi’s Cookie*²⁴ (figure 4.11), in which the player manipulates tiles that have already fallen. The major subsequent innovation leading up to *Bejeweled* is the mechanic of swapping tiles as introduced in the 1995 *Panel de Pon*²⁵ (figure 4.12). Recent years have seen many variations of tile manipulation, with one of the more successful being the shooting of tiles by the player, originally found in the 1989 *Plotting*²⁶ (figure 4.13), but influencing most of the right side of the history tree up to the more recent games like the 2005 *Luxor*²⁷ and the 2004 *Zuma*.²⁸ Finally, the 2005 *Chuzzle Deluxe*²⁹ (figure 4.14) appears derived from *Yoshi’s Cookie*, but features a constantly full screen—as in *Bejeweled*.

Match criteria Tetris requires an entire horizontal line to match; *Chain Shot* requires the player to match tiles with similar colors. While Tetris has been hugely popular, its matching criteria of filling an entire row surprisingly has not been copied much in later games. Rather, all other

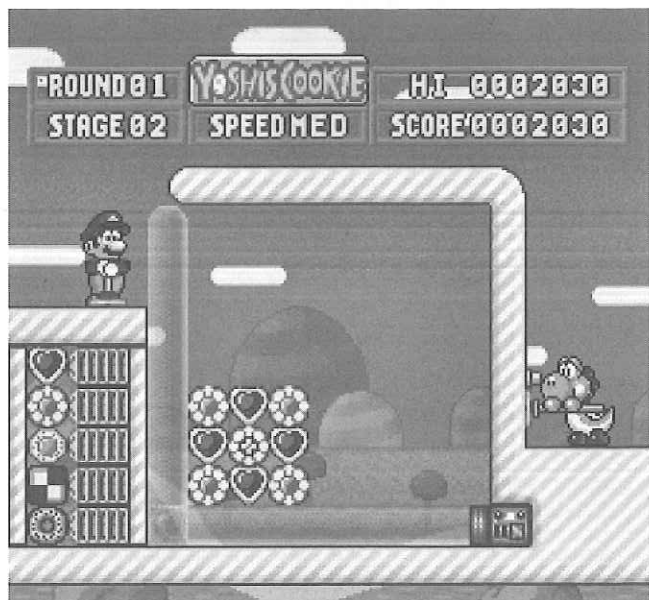


Figure 4.11
Yoshi's Cookie (Bulletproof Software 1992)



Figure 4.12
Panel de Pon (Intelligent Systems 1995)

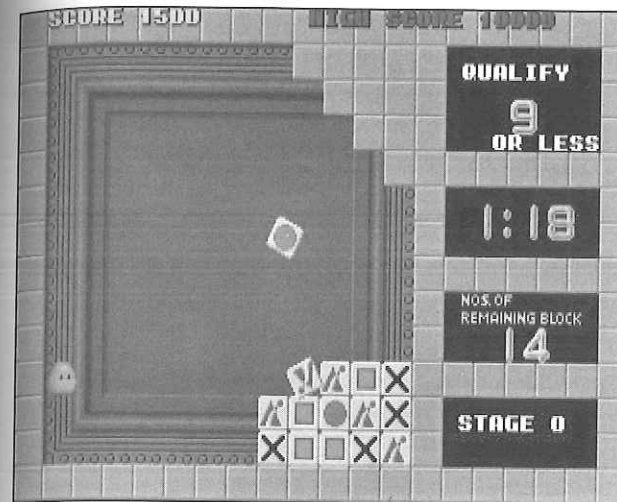


Figure 4.13
Plotting (Taito 1989)

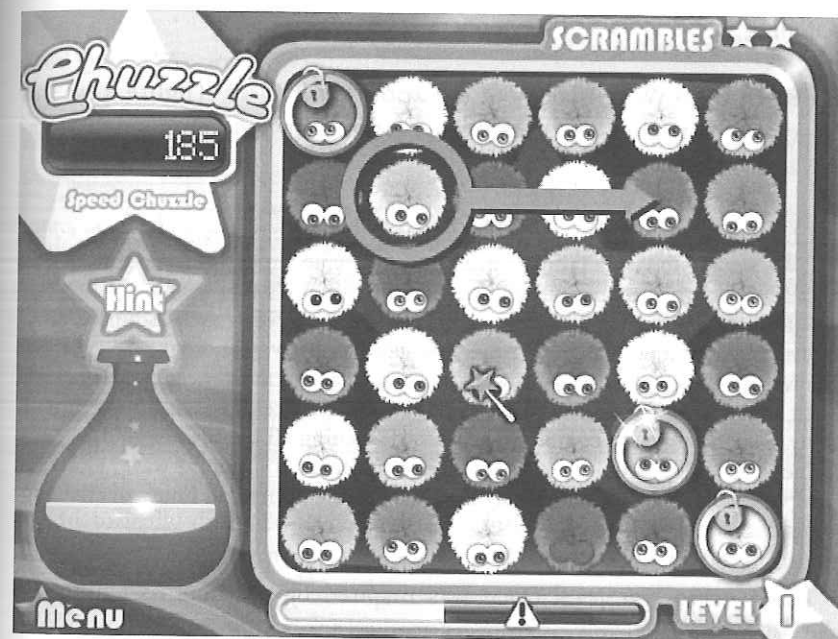


Figure 4.14
Chuzzle Deluxe (Raptisoft 2005)

games in the history here follow the *Chain Shot* model of having several types of tiles that can then be matched based on similarity.

Obligatory matches *Tetris* lets the player perform actions regardless of whether they lead to a match, but *Chain Shot* only lets the player perform actions that lead to a match. The overall effect of the latter is that the game requires fewer player actions and mouse clicks overall. In the family tree of matching games, most of the games to the left require the player to make matches, but most of the games to the right let the player perform other actions as well. The left side of the family tree is more **strategic**, and the right side of the family tree is more **hectic**.

From a design perspective, these four variations are quite special in that they are independent: the time mode of a game design can be modified without influencing the type of manipulation; the manipulation type can be modified without influencing the match criteria, and so on. Again, this is quite similar to Solitaire as discussed in the previous chapter; matching tile games are a **well-defined design space** that allows numerous variations based on a few simple building blocks.

Matching Tile Games and Developers

Jim Stern from iWin, makers of the 2004 *Jewel Quest*³⁰ (figure 4.15) has described their process of creating a new game by adding a small variation to *Bejeweled*:

Match-Three games have done well historically and have proven to be quite addictive. We wanted to take a familiar concept that people already enjoy and raise it to a level that is much more exciting and engaging than it's ever been.

With that in mind, we added new properties to the jewels (such as buried relics that require multiple matches before they can be removed and cursed items that can wreak havoc on your progress under special circumstances), new layouts (such as different shaped boards and areas that are inaccessible), and more importantly, a specific goal to complete each board (turning all the tiles to gold).

These relatively simple concepts, when combined in different ways, allow for great variation and ramping of play levels to provide hours and hours of challenging game play.³¹

This verifies that *Jewel Quest* was inspired by previous matching tile games, but it also explains the very gradual innovation in the family tree of matching tile games: every game adds only very small changes to previous games.³² As Jim Stern states, this allows a game to capture an audi-

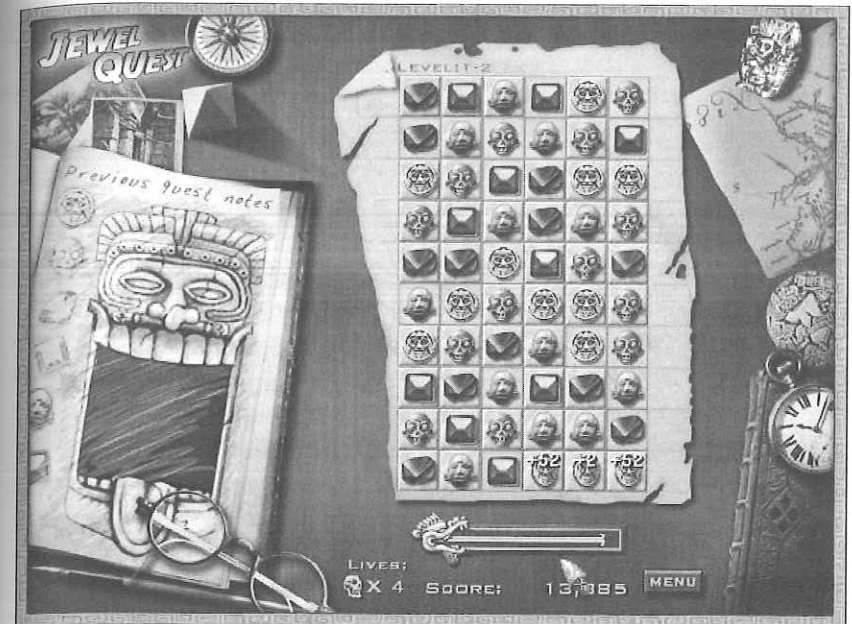


Figure 4.15
Jewel Quest (iWin 2004)

ence already familiar with the genre, while adding a few twists that give players new experiences.

The family tree shows how *Bejeweled 2* introduces special objects for big matches and how *Big Kahuna Reef*,³³ released later in 2004, adds an irregular playing field in addition to borrowing from *Jewel Quest*. All of these new elements are combined in the 2006 *7 Wonders of the Ancient World*³⁴ (figure 4.16) along with the introduction of special “cornerstones” that the player must move to the bottom of the screen.

Hence, *7 Wonders of the Ancient World* is a comparatively complex matching tile game that combines new features from at least three previous matching tile games. This **does not mean that matching tile games are historically destined to become ever more complex**, but it does **foreshadow the changing status of matching tile games as will be discussed later**.

Even more than other distribution channels, the casual downloadable game channel is characterized by the two opposing requirements of familiarity to the player and sufficient innovation to differentiate a game

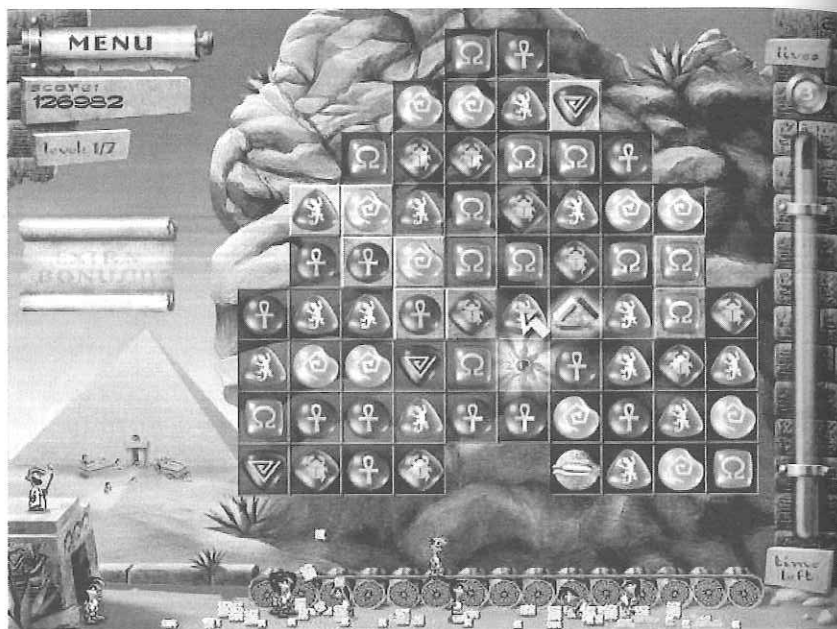


Figure 4.16
7 Wonders of the Ancient World (Hot Lava Games 2006)

from other games on the market. This creates a somewhat schizophrenic environment of cutthroat competition between developers simultaneously trying to out-innovate and out-clone each other. Consider the contested bottom-right corner of the family tree in figure 4.7: much of the initial response to PopCap's 2004 hit *Zuma*³⁵ (figure 4.17) described PopCap as creators of an original game that subsequently had been imitated by others,³⁶ including the three 2005 games *Luxor*³⁷ (figure 4.18), *Tumblebugs*,³⁸ and *Atlantis*.³⁹ A 2005 interview with PopCap's director of business development emphasizes PopCap's prototype-oriented development method and mentions the large number of *Zuma* clones.⁴⁰ (The interview does not explicitly claim that *Zuma* was an original concept developed by PopCap.) Subsequently it became known that *Zuma* was in fact very similar to the 1998 arcade game *Puzz Loop*⁴¹ (figure 4.19).

There have even been rumors of an impending lawsuit by *Puzz Loop* developer Mitchell against PopCap,⁴² but the legal basis of such a lawsuit is not clear. Ironically, one reviewer described a new version of *Puzz Loop* as a "clone" of *Zuma*.⁴³ To further complicate the issue of which game

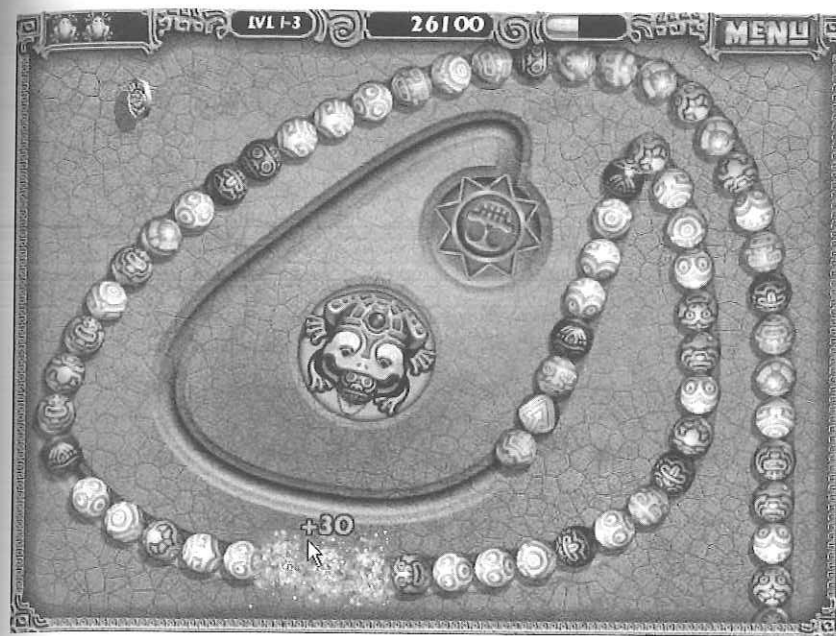


Figure 4.17
Zuma (PopCap Games 2004)

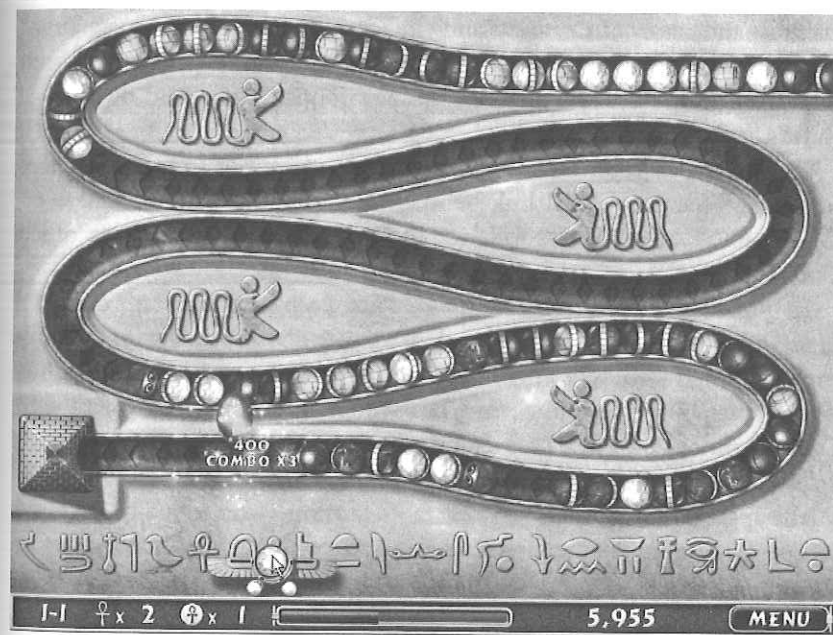


Figure 4.18
Luxor (Mumbo Jumbo 2005)

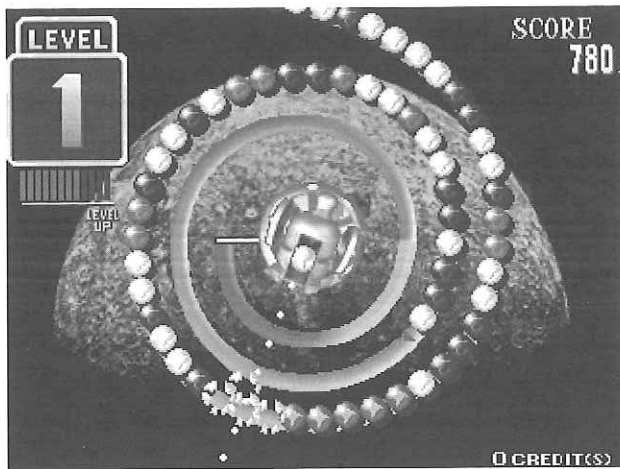


Figure 4.19
Puzz Loop (Mitchell 1998)

inspired which, Darren Walker of *Luxor* developer Mumbo Jumbo has in an interview downplayed inspiration from *Zuma* and emphasized the basic experimentation that lead to the game design: “When asked by the moderator about the influence of *Zuma* on *Luxor*, Walker hesitated, commenting: ‘*Zuma* was certainly a factor.’ After thinking about how to integrate the basics of *Centipede* and *Galaga* with puzzle game mechanics, the developers worked from the core mission to have a game without negative in-game actions, such as anti-power-ups, that would discourage players.”⁴⁴

Yet, *Luxor* was received as a *Zuma* clone with minor innovations. It is possible to see a potential link between *Luxor* and the 1980 *Centipede*⁴⁵ (figure 4.20), but *Luxor*'s similarities to *Puzz Loop* and *Zuma* are much more apparent.

As quoted, the developers of *Zuma*, *Puzz Loop*, and *Luxor* all exhibit a desire to be considered original and an anxiety about being seen as influenced by other games. Depending on which developer you ask, the history of matching tile games can be written three different ways, with *Zuma* as innovator, *Puzz Loop* as innovator, and *Luxor* as innovator (albeit inspired by other games) (figure 4.21).

Although the goal here is not to determine who actually inspired whom, I believe there are strong arguments for the type of history shown

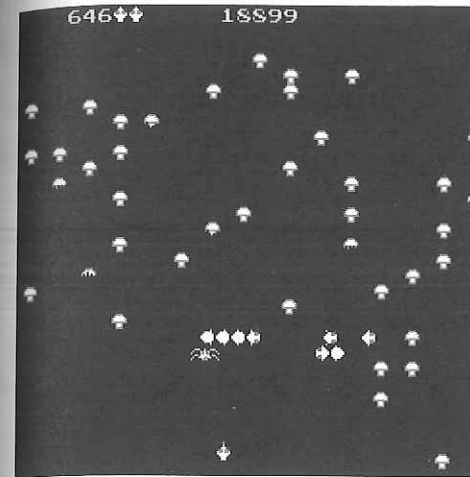


Figure 4.20
Centipede (Atari 1980)

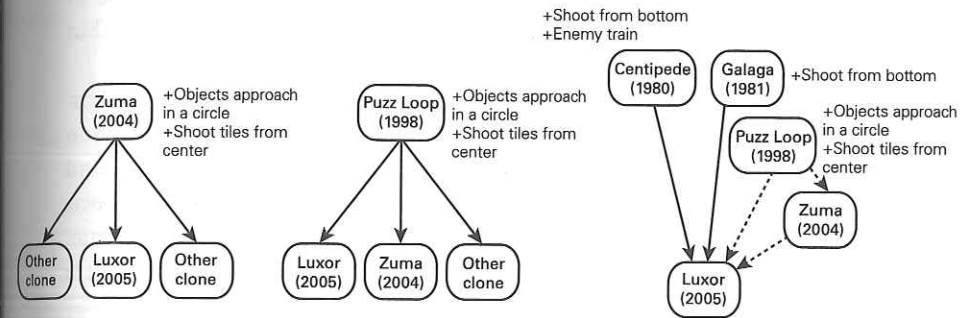


Figure 4.21
Zuma as innovator, *Puzz Loop* as innovator, *Luxor* as innovator

in the family tree in figure 4.7 with *Puzz Loop* inspiring *Zuma* and *Luxor*, and *Puzz Loop* being inspired by the earlier *Puzzle Bobble*⁴⁶ and *Plotting* in that it lets the player shoot tiles in order to make matches.

The Problem with Video Game History

This chapter traces a history of matching tile games during a period of more than twenty years. However, the history recorded here is not the

only one that can be written, and it is quite selective: I have only focused on matching tile games and only on video games, thereby leaving out many sources of potential inspiration. The **basic mechanic of matching** can be attributed to nondigital games such as Mahjong solitaire and dominoes, and card games including Solitaire. **Shooting tiles** (such as in *Plotting*) seems derived from the Japanese game of Pachinko. **Limiting the player to only making matching moves** may have been inspired by the nondigital games of Peg Solitaire as well as Solitaire itself. Since there are a potentially unlimited number of external influences on matching tile games, limiting the focus to video games is a simplification that makes it possible to discuss the history of matching tile games at all.

In 1936, Alfred J. Barr created a diagram of the history of “Cubism and Abstract Art” for an exhibition at the Museum of Modern Art in New York (figure 4.22).⁴⁷ Edward Tufte points out that Barr’s diagram only includes influences internal to the art world, and excludes influences from all other parts of society and history. Additionally, Tufte is critical of how all influences are mapped as unidirectional arrows, excluding mutual influences between artists or directions.⁴⁸ I think that this type of criticism does not render such a work of history impossible or false, but simply requires that it be clear about what it is a history of.

A more general criticism of this type of history is that it is a simplification of the way an art actually develops: **Game creation and consumption are much more complex, and a huge amount of data is neglected and suppressed in order to reduce the relation between, say, *Yoshi’s Cookie* and *Panel de Pon* to a single causal arrow.** This criticism certainly is true, but only true in the same way that *any* theory is not the world, but a theory about the world.

While the history of matching tile games written here is not the only one possible, a history of matching tile games is not just a theoretical idea imposed upon the world. Rather, the knowledge of conventions—including those of **game mechanics, genres, and interfaces**—is an important aspect of the development and consumption of *all* games.

Are Matching Tile Games a Genre?

I have been identifying matching tile games as a game mechanic because these games historically have had an inconsistent status. For a long period of time, matching tile games were considered derivatives of *Tetris*, which was given the status of a prototype game. A 2001 review of a

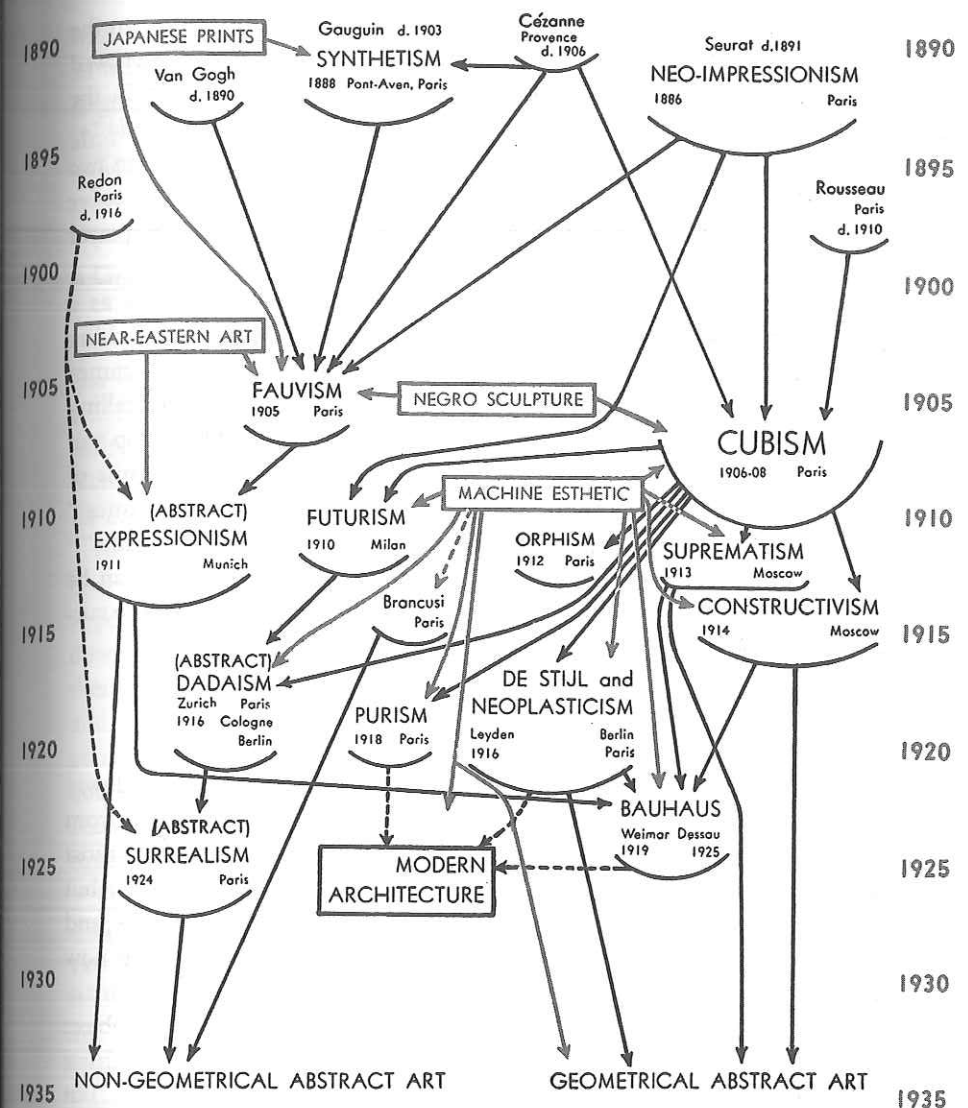


Figure 4.22
Cubism and Abstract Art (Barr 1966)

rerelease of *Dr. Mario* describes it as using elements from *Tetris*: “In the late 80s Nintendo had a great idea to make a puzzle game that borrowed elements from Tetris and Puyo Puyo and featured Mario’s name in the title. That idea was realized in the form of the NES release, *Dr. Mario*.”⁴⁹

While the review describes *Dr. Mario* as borrowing elements from two other games, the review misses the fact that *Dr. Mario* was released *before* the game *Puyo Puyo* of which it is claimed to be derivative. Again, player perceptions of history can be quite subjective.

After the success of *Bejeweled*, “match-three” gained popularity as a genre label, but was generally invoked to mean a subset of “matching tile games.” In one contemporary categorization, matching tile games are considered a *superset* of genres by distinguishing between “falling block puzzles,” “tile-matching puzzles (Creation)” and “Puzz Loop variants.”⁵⁰ In another, matching tile games are considered subgenres of several larger categories where match-three are part of “puzzle games,” but “marble poppers” (*Zuma* and others) are part of “action & arcade.”⁵¹ Genre labels change over time, but as with *Tetris*, a single game can be sufficiently popular to become a prototype name for a genre, and the success of *Bejeweled* led to the creation of the “match-three” label.

The End of Matching Tile Games?

Matching tile games are not as popular as they used to be. In the downloadable casual games distribution channel, a survey of sales data from 2001 to 2007 showed that matching tile games were the second most popular game type in 2004 and by far the most popular in 2005, but only the fourth most popular of a handful of genres in 2006 and 2007.⁵² A publisher I talked to in 2008 asserted that match-three now was a niche genre. Matching tile games were first eclipsed by *time management games* led by *Diner Dash*⁵³ (figure 4.5) and later by *hidden object games* led by *Mystery Case Files*⁵⁴ (figure 4.4). Is this the end of matching tile games? Not at all, for matching tile games are not going away, but simply moving from the high-profile status of a game type to the lesser role of a minor mechanic within larger games. *Puzzle Quest*, for example, uses matching tile games as one mechanic in combination with role-playing game mechanics. Matching tile games are also acquiring a different status today, that of a “traditional” game, in other distribution channels. *Bejeweled* and *Zuma*, for example, are now sold on cell phones and MP3 players, and are playable as in-flight games on airplanes along

with Solitaire games. Why? Because these games, like Solitaire, are now so well known that they can be assumed to be immediately playable by a large part of the population that happens to buy MP3 players or travel by air. It is not that matching tile games are going away, but rather they have moved from the top tier of downloadable casual games into other contexts and onto new platforms.

A Channel of Moderate Innovation

The mechanic of matching similar items is not new in game history: it can be found in a wide range of games including Solitaire, dominoes, and Mahjong. As in the discussion of Solitaire card games, matching tile games illustrate *how a game design is not tied to a specific technological platform, and how usability and low barriers to entry are important issues for any game.*

Not everybody is happy with downloadable casual games. Game developer Eric Zimmerman told me the story of his hope for, and later disappointment with, this distribution channel: “There was an idea that downloadable games could be a renaissance for innovation in terms of theme, content, and gameplay on a smaller scale in terms of budget size and production scope,” he said. “But in fact, the downloadable casual games industry has evolved into something *more* clone-driven and genre-bound than the so-called hardcore game industry that it sought to make and end-run around. So, the downloadable casual games industry has become a parody of itself.”⁵⁵

This is *developer* disappointment with the downloadable casual games channel. From a *player* perspective, things may look entirely different. The simplicity of the games in the downloadable casual games distribution channel makes the inherent conflict between innovation and cloning appear a little sharper than elsewhere. *Players have different interests in and amounts of tolerance for experimentation and variation.* If we are looking for a relaxed fifteen-minute experience, we often *do* want some variation, but a radically innovative game will in all likelihood not work. *The downloadable casual games channel may not be a place for radical game design innovation, but then it does not need to be: downloadable casual games compete not with experimental games or modern art, but with Solitaire games and crossword puzzles. It is the distribution channel for absorbing games with moderate innovation.*

fine. I'm not complaining about the tastes of players, I'm just saying if I were a journalist I would rather work at the *New York Times* than at the *New York Daily News*, because I'm pretentious that way. As a game designer, I don't want to make clones of existing games. I would rather work in a more, let's say, serious place where I feel I can do more innovative work and works with more lasting value. That's part of why Gamelab isn't really doing any more downloadable games.

JJ: *A few years ago you were telling a story about a slightly surreal game that the game portals would not publish.*

EZ: One of the major portals said, "We cannot post a game that might potentially offend any member of our audience." Imagine a record company saying that. There would be many, many genres of music that would have to be removed, whether it was country singers singing about conservative politics, or whether it was rap artists rapping about life in an urban environment.

Notes

1 A Casual Revolution

1. Namco, *Pac-Man*, 1980.
2. Blizzard Entertainment, *WarCraft III*, 2002.
3. Konami, *Dance Dance Revolution*, 1998.
4. Harmonix Music Systems, Inc., *Guitar Hero*, 2005.
5. Harmonix Music Systems, Inc., *Rock Band*, 2007.
6. Sandlot Games, *Cake Mania 3*, 2008.
7. Preece, *Desktop Tower Defense*, 2007.
8. Ryan, "Game Designers Focus on Girls," 2008.
9. Interview with Warren Spector, see appendix C.
10. Entertainment Software Association, *Essential Facts*, 2008.
11. Pratchett, *Games in the UK*, 2005.
12. Boyer, "NPD: 72% of U.S. Plays Games," 2008.
13. Lenhart et al., "Teens, Video Games, and Civics," 2008.
14. Gartenberg, *Simple Games*, 2007.
15. Dobson, "Study: 'Casual' Players Exhibit Heavy Game Usage," 2006.
16. See the player survey in appendix A and the developer interviews in appendix C.
17. There is a growing body of research on games and gender, such as Cassell and Jenkins, eds., *From Barbie to Mortal Kombat*, 1998; Y. B. Kafai et al., *Beyond Barbie*

and *Mortal Kombat*, 2008; Enevold and Hagström, "My Momma Shoots Better than You!," 2008; Nakamura and Wirman, "Girlish Counter-Playing Tactics," 2005; Flanagan, "Troubling 'Games for Girls,'" 2005; Fron et al., "The Hegemony of Play," 2007. This research has dealt almost exclusively with the question of girls and women in relation to games, the exceptions being Jenkins, "Complete Freedom of Movement," 1998 and Burrill, *Die Tryin'*, 2008.

18. Industry veteran Steve Meretzky has argued that the video game industry began losing contact with the casual audience around 1980, then reintroduced a separate category of games for a casual audience with the inclusion of Solitaire in Windows 3.0 in 1990, and that hardcore and casual games are now merging again (Meretzky, "What Is a Casual Game?," 2007).

19. Interview with a player of downloadable casual games, see appendix B.

20. Addison, "Confessions of a Non-Gaming Mom," 2008.

21. Howson, "Casual Games Rule Charts," 2008.

22. Microsoft, "Microsoft Reveals First Details of Next-Generation Xbox," 2005.

23. Sony Computer Entertainment Inc., "SONY COMPUTER ENTERTAINMENT INC. TO LAUNCH ITS NEXT GENERATION," 2005.

24. Gibson, "Phil Harrison on the Future of PlayStation Interview," 2005.

25. Costikyan, "Burning Down the House," 2005.

26. Since consoles have very different technical designs, there is no simple way to compare their computational or graphical power. I have here compared the raw clock frequency of the console CPUs. I have ignored that the Xbox 360 and PlayStation 3 have CPUs with multiple cores, and that CPUs are not equally effective per clock cycle.

27. VGChartz.com. "VGChartz.com," 2009.

28. According to a recent survey, 50 percent of consumers report price to be an important factor when purchasing a console, but only 11 percent reported high-definition graphics to be important (eMarketer, *Importance of Select Factors to US Console Video Gamers*, 2008). In the not-too-distant future, all video game consoles will undoubtedly feature high-definition graphics, but as of now high-definition is the prime example of how a technical selling point has failed to excite a broad audience.

29. In addition to the Nintendo Wii leading the current console generation, Nintendo's DS handheld game console is also outselling the Sony PSP handheld console—even though the PSP has technically better graphics.

30. Atari, *Pong*, 1972.

31. Psygnosis, *Wipeout*, 1995.

32. PopCap Games, *Bejeweled 2 Deluxe*, 2004.

33. Nintendo, *Wii Sports*, 2006.

34. Salen and Zimmerman, *Rules of Play*, 2004.

35. Taylor, *Play Between Worlds*, 2006.

36. Sony Online Entertainment, *EverQuest*, 1999.

37. Consalvo, *Cheating*, 2007.

2 What Is Casual?

1. Oberon Media, "GAME DEVELOPERS SUBMISSION GUIDELINES," 2007.

2. A discussion on the industry "IGDA Casual Games SIG Mailing List" in early 2007 yielded inconclusive results about the origin of the term "casual games."

3. Kim, "Games for the Rest of Us," 1998.

4. Personal correspondence.

5. Kim, "Games for the Rest of Us," 1998.

6. The WizardWorks Group, Inc., *Deer Hunter*, 1997.

7. Lohr, "Computer Games Venture," 1999.

8. Interview with Eric Zimmerman, see appendix C.

9. Finnish game researchers have pointed to six different uses of *casual* to name casual game culture, casual games, casual gaming, casual playing, casual gamers, and casual game players (Jussi Kuittinen et al., "Casual Games Discussion," 2007). For example, casual can be seen both as an identity (being a casual player) and as a specific way of playing (playing casually).

10. Range, "The Space Age Pinball Machine," 1974.

11. Los Angeles Times, "New Video Games Sweep Nation," 1974.

12. Harmetz, "Is Electronic-Games Boom Hurting the Movies?," 1981.

13. Midway, *Ms. Pac-Man*, 1981.

14. Goldstein, "Why Is Pac-Man Grinning?," 1982.

15. Pajitnov and Gerasimov, *Tetris*, 1985.

16. In the interview in appendix C, Margaret Wallace argues that *Tetris* can be considered the first casual game.

17. Meretzky, "What Is a Casual Game?," 2007.

67. Dobson, "Study: 'Casual' Players Exhibit Heavy Game Usage," 2006.
68. Compare this to Jason Mittell's discussion of how it is unclear to whom the word *audience* refers (Mittell, *Genre and Television*, 2004, 94–95). Who are the casual players? Is it those who spend the most time playing casual games? Those who spend the *least* time playing casual games? Those who spend the most time on casual game websites?
69. Malaby, "Beyond Play," 2007, 95.
70. Aarseth, "Playing Research," 2003, 7.
71. Mikael Jakobsson's study of *Super Smash Bros Melee* is a good example of a player-centric view of games. He observed how players made their own house rules in the game. Based on this, Jakobsson concludes, "As we have seen in the example of [*Super*] *Smash Bros Melee*, the very nature of a game can change without changing the core rules." In Jakobsson, "Playing with the Rules," 2007.
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3 All the Games You Played Before

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14. Parlett, *A History of Card Games*, 1990, 157–161.
15. Cadogan, *Illustrated Games of Patience*, 1876.
16. Jones, *Games of Patience for One or More Players*, 1898, 1.
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4 Innovations and Clones: The Gradual Evolution of Downloadable Casual Games

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6 Social Meaning and Social Goals

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