

Jones in the Fast Lane

A Case History in Computer Game Design

Mykel Kochenderfer

March 22, 2001

Stanford University

Introduction

I was in fourth grade when I was introduced to Sierra On-Line's *Jones in the Fast Lane* at a slumber party. We would stay up all night playing this game "of real life" that allows the players to "vie to be the first to accomplish their goals of money, happiness, education and career," as the box advertises. We had to advance our education, find employment, pay our bills, buy necessities, and manage our investments. Looking back, it is quite amazing that such a game would entertain us for hours on end as nine-year-olds—a whole ten years before we would even be contemplating such issues. It was an "adult" game that simulated the "rat race," but with a game design easily understood by kids and with surprisingly captivating game-play.

Jones in the Fast Lane may be played with up to three friends or up to three computer opponents. It has the look and feel of a board game, but with all of the advantages of computer automation. The action takes place on the "Game Board," which represents a neighborhood with Security Housing, Rent Office, Low-Cost Housing, Pawn Shop, Z-Mart, Monolith Burger, QT Clothing, Socket City, Hi-Tech U, Employment Office, Factory, Bank, and Black's Market. The players take turns trying to make progress toward the goals set at the beginning of the game within the time allotted for each week. The game ends when all the goals are accomplished.

Besides being a fascinating game, *Jones in the Fast Lane* has an interesting history and has had an important impact on computer game design. In this paper we will look critically at the processes and contexts that affected the design of *Jones in the Fast Lane*. First, we will take a close look at Sierra Online and the business aspects significant to the development of *Jones*. Although practically nothing has been

published on the history of *Jones*, I will attempt a historical narrative of the creation of the game. We will proceed with an analysis of the game design using the general framework described by Chris Crawford in *The Art of Computer Game Design*,¹ and we will discuss the technological factors that were responsible for the success of the game. Finally, we will look at the public response to *Jones* and the ways it has influenced computer game design.

History of Sierra On-Line

Ken Williams founded Online Systems in the late 1970s, and it quickly became one of the most loved computer game companies in America. The company changed its name to Sierra On-Line when the company moved its headquarters from Los Angeles to Oakhurst, a small community in the Sierra foothills.² Ken Williams tried to attract the best hackers to Oakhurst by posting an ad in the *Lost Angeles Times* enticing them to “Boot into Yosemite.” The company was characterized by the “rowdiness and drinking and dope-smoking” of the young employees, and Steven Levy in *Hackers* compared the office life to “a weird combination of *Animal House* and *The Millionaire*.”³ The early years of Sierra were pretty wild, but they were wildly successful. Sierra’s games were continually among the top ten best-selling games listed in *Softtalk*.

Sierra On-Line expanded significantly, but the company remained tight like a family. Josh Mandel, who was involved in the development of *Jones in the Fast Lane* and many of Sierra’s early games, recalls:

Sierra was the second-largest employer in town (the phone company being the largest). Thus, the people of Sierra did not simply work together as they do in most of the country. These people are families, roommates,

and neighbors. The person who works in the cubicle next to you may be your girl or boyfriend, your spouse, your landlord. He/she may well have been in your wedding party, and may have driven you 45 miles to the hospital when you were sick (how else could you have gotten there?). Secrets never stayed secret for long; divorces, trysts, and personal traumas all were public knowledge. People at Sierra weren't just working together, they were living together.⁴

The games they developed reflected the spirit of this community. *Sierra* games, especially the adventure games, had their own charm and unique sense of humor.

Sierra reached what many would call her peak around 1990, when *Jones in the Fast Lane* was released. The company had millions of loyal fans and several successful adventure game series including *King's Quest*, *Space Quest*, *Quest for Glory*, *Police Quest*, and *Leisure Suit Larry*. Those who registered their games were given subscriptions to the *Sierra News Magazine* (later called *InterAction*). I remember receiving these magazines in the mail and feeling as if I were part of the Sierra family and had the inside scoop on all the new games.

Unfortunately, moral started to decay in the early 1990s and the entire company started going downhill. During that time, I noticed that Sierra was starting to become a *large* corporation and that the personality of their games started to become sterile. It was not until recently, in communicating with some of the early Sierra developers, that I discovered what was really going on. According to Christy Marx, the designer of *Conquests of Camelot* and *Conquests of the Longbow*, there was a long series of terrible managers that mistreated the developers.⁵

Warren Schwader, one of the lead developers of *Jones in the Fast Lane* who will be discussed later, agreed with Christy's recollections. Warren reported that the attitude of the management toward the programmers led to "low pay and low prestige in the company and was reflected in Sierra's low moral."⁶ Warren also reveals,

“Pay was far lower than the national average because K[en] W[illiams] felt that the ‘benefit’ of living in the mountains along with the low cost of living in Oakhurst warranted the low pay.”⁷

Ken Williams sold the company in 1996 to Cendant Software, which was acquired by Havas Interactive in January 1999. The developers remained in Oakhurst during this acquisition under the name of “Yosemite Entertainment.” On February 22, Yosemite Entertainment, the last vestige of original Sierra On-Line developers, was shut down. Christy Marx commented, “I have had the sad experience of watching Sierra On-Line go downhill, be sold and acquired and sold and acquired, and it is now nothing that even vaguely resembles the company once known by that name.”⁸

Josh Mandel wrote a eulogy for the death of the *real* Sierra, which he concludes with, “Thank you, Ken, for creating something utterly unique, something warm, fun and beautiful. Damn you, Ken, for allowing others to tear it down.”⁹

The Story

The story begins with Warren Schwader. While he did not come up with the original concept for the game, he was the lead programmer and responsible for much of the game design. By any standard, this “big blond hacker from rural Wisconsin” is a genius.¹⁰ John Romero, himself a brilliant designer, cited Warren Schwader as one of the great early game designers in one of his interviews.¹¹ Fortunately, I was able to get into contact with Warren, and he shared with me many of his thoughts on the development of the game.

Warren was one of the original hackers to head over to Oakhurst and join Sierra On-Line. He originally worked in the Parker Pen factory in Wisconsin and op-

erated the injection-molding machine. It was a very repetitive task, but Warren took pride in his perfect plastic pen parts. He also took advantage of the twenty seconds between coolings to program graphical effects in assembly. Eventually, he programmed *Smash-Up* (where the player controls a little car and avoids being hit) and a cribbage game, both carefully programmed in assembly with the perfectionism typical of Warren. According to Steven Levy, the story goes like this:

Warren Schwader sent the [cribbage] game to Ken Williams, who was impressed with the logic and with the graphics, which gave a clear, sharp picture of each card dealt. What was even more amazing was that Schwader had done this on the limited Apple mini-assembler.

It was as if someone had sent Ken a beautifully crafted rocking chair, and then had told him that the craftsman had used no saw, lathe, or other conventional tools, but had built the chair with a penknife. Ken asked Warren if he wanted to work for On-Line. Live in the woods. Boot into Yosemite. Join the wild, crazy Summer Camp of a new-age company.¹²

Warren ultimately decided to join Sierra, but the rowdiness, drinking, and drug use did not appeal to him. He was one of Jehovah's Witnesses. Having a number of friends that were Jehovah's Witnesses, I was curious how his religious commitment affected his career as a computer game designer. He said:

Being one of Jehovah's Witnesses and being in the computer games industry is a challenge. About half of the projects are unacceptable because of their content (sex, violence, gambling, etc.)¹³

He limited his social involvement with others in the company, and spent most of his time with other members of his faith. Nevertheless, Warren developed some of the greatest Apple II games, including *Threshold* and *Sammy Lightfoot*, and was known for his talent in making complex graphical effects run smoothly on remarkably slow

processors. Warren's skill in graphics programming is apparent in the animation and lip-synching of the live characters in *Jones in the Fast Lane*.

According to Warren, around two-thirds of Sierra's games were inappropriate, and so he ended up being the "Card and Board game person."¹⁴ Warren programmed the first four Hoyle products for Sierra. While the card games were interesting, Warren's big opportunity came when he took on the *Jones* project in 1990. He led a team of three other developers, including Ken Williams and Bill Davis (who was the lead of Sierra's entire art department and later became VP of development). Some of the greatest designers were involved in creating the game's look, interface, and play.

The concept for *Jones* did not originate at Sierra. It came from a group of four people: Kelly Walker, Cristopher Whaley, Meredith Whaley, and Robert Whaley. The game was originally called *Keeping up with Jones* for the obvious reference to the expression "keeping up with the Joneses." Someone said that they owned the copyright to that title, so Sierra changed the name to *Jones in the Fast Lane*. Warren Schwader never actually met Kelly or the Whaleys, but he saw their text-based prototype for *Jones*.¹⁵ The prototype was very "comicy," but most of the game mechanics were there.¹⁶

The development of *Jones in the Fast Lane* was rather unusual in that the designers storyboarded the entire game before any artwork or coding was done. According to Warren Schwader, few teams developed their products this way at that time.¹⁷ It is interesting to note that the way that Warren's team went about constructing the design before coding is precisely what Chris Crawford recommends in *The Art of Computer Game Design*.¹⁸ All too frequently, game designers string to-

gether a bunch of features and start coding too early. The careful planning of *Jones in the Fast Lane* is evident in its smooth game play and elegant design.

The Design

Jones in the Fast Lane seems to get everything right, and meets many of Chris Crawford's specifications for a well-designed game. The success of the design is owed to the focus of the designers. According to Warren Schwader, "We were focused on making a loose simulation that everyone of almost every mentality could play."¹⁹ The team's design decisions made the game playable by practically anyone, including forth-graders who knew little about the actual subject of the game!

Everyone is familiar with how a board game works, and so having a board as the interface into the game world proved to be intuitive to many people. The players just click where they want their characters to go. The artwork makes the places easy to identify on the screen, and signs eliminate any ambiguity. There is also a clock at the bottom of the screen that tells the players how much time is left. As a nine-year-old, I was able to move my character around and get into the workings of the game within a few minutes and without using a manual.

One might notice some similarities between *Jones* and the classic game *M*U*L*E** from Electronic Arts. Both are multi-player economic simulations, and there are some limited similarities in the game design and interface. *M*U*L*E** was a rather complex simulation, but the game could be controlled completely by a joystick. Likewise, *Jones in the Fast Lane* may be operated entirely by the mouse, which makes it very easy for a group of four people sitting around the computer to play the game. A keyboard would be far too difficult for a group to share. Besides,

limiting the interface to point-and-click is a straightforward way of simplifying the input. Warren wanted to make the control of the game as simple as possible. He remarked in an e-mail to me, "I still cannot figure out how to play my N64 NFL Football 1999 game." *Jones* does not have the sort of interface problems that typically plague simulation games.

Jones in the Fast Lane is easy to use and entertaining because it does not try to simulate everything. The model of "real life" is artistically simplified. As Chris Crawford says, "The game designer simplifies deliberately in order to focus the player's attention on those factors the designer judges to be important."²⁰ The game focuses the players' attention on Education, Career, Wealth, and Happiness, which are represented quantitatively by four respective progress bars. Of course, there is much more to life, but *Jones* imposes many restrictions on what is allowed in the environment to make the game playable. One might criticize the game for including only the "superficial" aspects of life, but the point of the game is to "keep up with the Joneses."

Without a manual, practically anyone is able to quickly figure out how the simulation works. You are allotted a certain amount of time in each week (which is represented by one day) and this time may be used walking around the board, working, going to school, or relaxing. When you enter a location, a screen appears with a list of things that you may do or items you may purchase. Your money appears in a little calculator window at the bottom of the screen. If you forget to eat during the week, you will be notified the next week and penalized with less allotted time. When your time is used up, the week concludes and control goes to the next player. You are told what you did on the weekend and how much money you spent. While it might be interesting to some people to control what they do on the weekends, it is a design

simplification that the developers consciously made to keep the game play clean and simple.

Jones in the Fast Lane has one of the friendliest learning curves for a simulation game. Warren Schwader observed, “Most simulations require you to learn many, many things about the game before you start having fun with it. I think Jones was different in that common sense and logic determined how well you advanced in the ‘sim.’”²¹ The final product was practically a textbook example of balanced game design, which was a result of the careful planning of the developers and the perfectionism of Warren Schwader.

The Technology

Jones in the Fast Lane was an ambitious project from the beginning. Warren wanted live actors in the game that were lip-synched with CD audio tracks, and he actually succeeded in making this work during the time CD ROMs were just starting to be produced. Lip-synched audio had not been done before at Sierra, but Warren’s graphics skills were up for the challenge. *Jones in the Fast Lane* was the first product from Sierra On-Line released on CD ROM.²²

The 256-color VGA graphics were also impressive for that time. Computer games were just emerging from 16-color EGA mode. The higher resolution and greater color depth made the characters real. While the character moves around the board, a large animation of the character (which the player chooses at the beginning of the game) is shown walking. The players are able to identify themselves more easily with the realistic looking characters. The person in charge of each location speaks

and responds through animation. The visual experience is very rewarding, especially for those in 1992 who were testing out their new multimedia hardware.

While computer games nowadays have far surpassed *Jones in the Fast Lane* in graphics and animation, few games have a better soundtrack. *Jones* was one of the first Sierra games that took advantage of the Roland MT-32 music synthesizer, which took computer game music to an entirely new level. Mark Siebert was in charge of the music, sound effects, voice audio, and the programming of the sound system for *Jones*, and he did a fantastic job.²³ Practically everything made the appropriate sound and different music played for each location. The soundtrack was catchy and added to the fast-paced atmosphere of *Jones*. The music is still being circulated around the Internet as MIDI and MP3 files.

Jones in the Fast Lane was also one of the first Sierra games to run in Windows and DOS. Microsoft Windows 3.0 with Multimedia Extensions was released in October 1991 and Windows 3.1 was released in April 1992. Most of the multimedia computers were coming with Windows, so many users expected their new multimedia games to work within that environment. As one would have expected, Warren Schwader pushed the envelope of the technologies available to him in *Jones in the Fast Lane* and published a highly entertaining game.

The Culture and Response

The “Sierra On-Line culture” is apparent in *Jones in the Fast Lane*. There is a feeling of closeness within *Jones*’ neighborhood, almost like Oakhurst itself (although Oakhurst is too small to have a university as in *Jones*). The owners of the shops seem to know you and treat you like a “regular” in a small town. There are

numerous inside-jokes and an atmosphere of friendliness, even at the Rent Office. There are also references to *Space Quest* embedded in the game (Astro-Chicken at Monolith Burger) just to make Sierra fans laugh. *Jones in the Fast Lane* reflected the “familiness” of Sierra as a company, and added a special charm to the game.

Unfortunately, *Jones in the Fast Lane* was not a big hit. Mark Siebert explains, “It was kind of a cool idea that didn’t really have a place in the mind of the public at the time.”²⁴ He also explains that because there was not a sequel like many of the other games at the time, it kind of “fizzled.” I asked Warren what he thought of the public response to his game, and he replied:

I have heard nothing but positive comments about the game. Even today you can search the Internet for Jones and find dozens of comments about the game and even many people’s personal web pages mention how the game was an important part of their lives. That gave me a lot of satisfaction even now. I don’t feel the game sold as well as it should have, but the people who did buy it all seemed to like it.²⁵

Warren Schwader formally ended his association with Sierra On-Line in February 1997, but he continues to live in Oakhurst with other ghosts of Sierra’s past. *Jones in the Fast Lane*, still playable in Windows 2000, is an artifact of the genius that once flourished at Sierra On-Line and will remain as an example of brilliant computer game design. Today, games such as *The Sims* (Maxis) continue to build upon the basic concept of *Jones*.

- ¹ Chris Crawford, *Art of Computer Game Design*. 1982. Washington State at Vancouver. 16 March 2001 <<http://www.vancouver.wsu.edu/fac/peabody/game-book/Coverpage.html>>.
- ² *Sierra's History*. Sierra Studios. 16 March 2001 <<http://www.sierra.com/corp/info/history/content.html>>.
- ³ Steven Levy, *Hackers: The Heros of the Computer Revolution* (Garden City, New York: Anchor Press, 1984) 333.
- ⁴ Josh Mandel, *R.I.P. Sierra*. 25 February 1999. Just Adventure. 16 March 2001 <http://www.justadventure.com/articles/RIP_Sierra/RIP_Sierra.asp>.
- ⁵ Christy Marx. Personal communication, 10 February 2001.
- ⁶ Warren Schwader. Personal communication, 12 February 2001.
- ⁷ *Ibid.*
- ⁸ Christy Marx. Personal communication, 10 February 2001.
- ⁹ Josh Mandel, *R.I.P. Sierra*. 25 February 1999. Just Adventure. 16 March 2001 <http://www.justadventure.com/articles/RIP_Sierra/RIP_Sierra.asp>.
- ¹⁰ Levy 12.
- ¹¹ Joyce Worley, *A Game Veteran Launches a New Company*. April 1997. Inside Games. 16 March 2001 <<http://www.insidegames.com/features/0497/f-romero.htm>>.
- ¹² Levy 340.
- ¹³ Warren Schwader. Personal communication, 25 January 2001.
- ¹⁴ *Ibid.*
- ¹⁵ Warren Schwader. Personal communication, 12 February 2001.
- ¹⁶ Tony Van. Posting on Moby Games, 6 December 1999. 16 March 2001 <<http://www.mobygames.com/game/trivia/gameId=370>>.
- ¹⁷ Warren Schwader. Personal communication, 25 January 2001.
- ¹⁸ Crawford 58.
- ¹⁹ Warren Schwader. Personal communication, 25 January 2001.
- ²⁰ Crawford 8.
- ²¹ Warren Schwader. Personal communication, 25 January 2001.
- ²² *Ibid.*
- ²³ Mark Siebert. Personal communication, 21 February 2001.
- ²⁴ *Ibid.*
- ²⁵ Warren Schwader. Personal communication, 25 January 2001.

Appendix: Screenshots



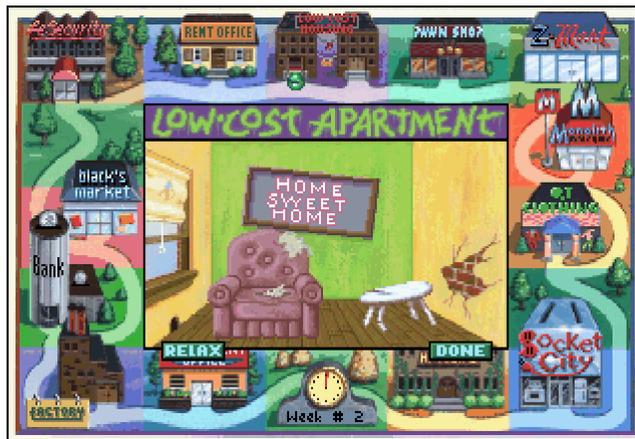
At the beginning of the game, the players select their characters. This is the first step in immersing the players into the game environment. Not surprisingly, this process tends to incite some of the same arguments as Monopoly (“I want to be the racecar!”)



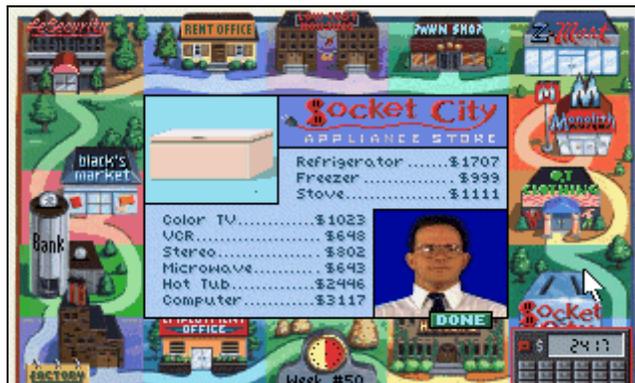
Before you start playing, you are asked whether you wish to “challenge Jones,” the artificial intelligence player. This allows a single human to play *Jones in the Fast Lane* and enjoy the competition that is inherent in the game.



Players are told at the beginning of their turn what they did that particular weekend and how much they spent. The developers took liberties in incorporating their characteristic humor.



While players need to spend most of their time working and going to school, the game allows them to “relax” at home.



Jones in the Fast Lane has a very simple, point-and-click interface. Players click on what they want to buy, and the price is deducted from their bank account.