
Reflections on Video Games and Game History

An Interview with Jesper Juul

Jesper Juul is a video game theorist and occasional developer. He works at the Royal Danish Academy in Copenhagen and has taught at MIT and New York University. He coorganized one of the first academic video game conferences, had a hand in starting the video game journal *Game Studies*, and helped organize the first Nordic Game Jam. He coedits the MIT Press Playful Thinking series. He has published five books with MIT Press, *Half-Real: Video Games Between Real Rules and Fictional Worlds*; *The Art of Failure: An Essay on the Pain of Playing Video Games*; *Handmade Pixels: Independent Video Games and the Quest for Authenticity*; *A Casual Revolution: Reinventing Video Games and Their Players*; and *Too Much Fun: The Five Lives of the Commodore 64*. His first computer was a Commodore 64, on which he wrote games and demos.

***American Journal of Play*:** You describe yourself as a ludologist. For those who are not familiar with your research, what does that term mean?

Jesper Juul: Gonzalo Frasca had introduced me to the term *ludology*, the -ology indicating the study of play and games. I thought it was interesting to imagine there would be a *The Ludologist* journal like there is *The Economist*, and I started blogging under that heading. Because video games were considered a frivolous pursuit both practically and theoretically, it felt powerful to get out there and confidently declare that I was studying them, not just as a footnote to something else.

Ludologist for me means someone who takes video games seriously, who thinks about their design, meaning, culture, and politics too. I do not need to convince *American Journal of Play* readers of this. At the time I began my blog, it felt especially urgent to find a language to explain how the rules of games are also aesthetic and cultural objects that can be beautiful, express ideas, and give rise to experience. So ludologist for some came to mean a focus on the meaning of the rules, but I never felt we had to limit

ourselves to that. The strongest push-back I received was always against the idea of rules being expressive and meaningful, but I think with the current awareness of algorithms and AI, it has become widely accepted that rules and systems are important to examine, even within the humanities. To be a ludologist is to believe that video games can be studied and analyzed like any other cultural form, while also being attentive to what is specific about games. It later turned out that ludology had been coined independently by any number of people, going back to the 1960s at least.

AJP: What sparked your initial interest in studying video games?

Juul: Biographically, I was going back and forth between my literature studies and commercial tech and game development work, but I finally decided to merge the two and write my master's thesis on interactive narrative. This turned out to be much more interesting than I anticipated, and it led to me finding a community, writing a PhD dissertation, a book, and so on.

My original training is in literature, which I continue to enjoy, but literature feels quite safe in that we usually regard it as "important" culture. Video games are interesting because so many people clearly find them valuable, yet—like with other popular cultural forms—there has been a whole cultural discourse about how they are dangerous or meaningless. I suppose I like the cheeky uphill battle of taking something considered the lowest of the low and showing that it has structure, design, aesthetics, and value. Video games were a hugely important part of culture that was very poorly understood, and that proved an irresistible challenge for me.

AJP: Who are the scholars who helped shape your understanding of the study of games and play?

Juul: My general interest is probably shaped by my original humanities training in literature, which made me interested in how culture becomes meaningful to us. At the time, it did feel as though literary theory often came up short in addressing human experience. This included the very dry structuralist narratology I was taught, which did not care much what a story was about yet declared itself to be universal for all times and cultures. I found that I preferred film theory like that espoused by David Bordwell, who was willing to switch between themes, psychology, editing, narrative tension, industrial organization, and so on. This always felt more fruitful than assuming that the entire world could be seen in the grain of sand that a specific approach had taught us to focus on.

In games and play, I was inspired by Brian Sutton-Smith's playful atti-

tude toward the subject matter and his willingness to juggle contradictory perspectives in *The Ambiguity of Play*. Sutton-Smith was also fascinating because he sometimes started over and approached play afresh, without feeling bound by his previous work. Among my contemporaries, I have been inspired by Eric Zimmerman's very visible joy in and engagement with game design, including the idea that you can play games with the audience as part of a talk. I was also inspired by former colleague T. L. Taylor, who was also interested in the experiences of players but from a sociological point of view; by Espen Aarseth who showed a way to combine video games with literary theory; and by Marie-Laure Ryan's philosophy of worlds. Also by Nick Montfort, Susana Tosca, Lisbeth Klastrup, who are also literary scholars looking at computers, games, and culture.

A nonacademic pursuit that has inspired me is programming, which has helped me find a language for what it is like to interact with a system.

AJP: How has game studies as an area of research changed in the decades since you entered the field?

Juul: The constant in the field of game studies has been to question whether it is one field or more. Certainly, there are journals and conferences that have persisted for twenty years, but the field of game studies is always borrowing from and lending to other fields. In my local peer group, we were interested in understanding how to analyze games, but then gradually we merged this with other perspectives like sociology and cultural studies. As video games have changed—with new business and production models, new players, and new play forms—a number of other fields have become pertinent, including production studies, player culture, economic analysis, and so on. In a way, there really is no field you can safely declare will never be relevant to the study of games. Game studies by necessity is also influenced by larger cultural trends, having to contend with online radicalization and toxic cultures. Lately there has been much more work on local game cultures and game histories, as it becomes clear that game history has played out, and is playing out, very differently across different contexts. That is something we are still trying to learn.

AJP: In your first book, *Half-Real: Video Games Between Real Rules and Fictional Worlds*, you share stories about a childhood tic-tac-toe game with a friend and a racing game that you designed on a computer when you were eleven years old. Can you tell us about some of your other childhood play experiences?

Juul: Playing board games with my family, I remember the puzzlement at commercial Monopoly variations like Anti-Monopoly and Class Struggle, which retained the structure of Monopoly, but with antithetical themes. This made me wonder about the relation between structure and theme. I recall the disappointment in the Tivoli amusement park in Copenhagen, I must have been six or seven, when I realized that the steering wheel in a car ride did not actually work and we were just moving around a predefined track. That made me skeptical of high production value deception. I also distinctly remember long afternoons of playing card games like War, modifying the rules, and getting absurd experiences out of it, giving me a sense of the power of game design. I remember seeing the *Space Invaders* arcade game around 1980, shocked by its sheer force of science fiction, technology, and imagination. My parents were taking me to the university computer terminals, and I tried the various small games they included and tried my hand at making classics like the number-guessing game. Programming and game playing felt like one package to me, and I desperately longed to gain access to them at home. We did get a Commodore 64 when I was becoming a teenager, and playing the huge variety of games on that platform shaped me, as did programming games on it, as did having the sense that I could also make games.

AJP: Why are video games “half real”?

Juul: We can frame video games (and games) in several different ways: Are they fundamentally rule-based systems or are they fundamentally fictions (or narratives)? This created a tension in early studies of video games. It struck me that video games were much better understood as an interplay between the two—to play a video game is generally to interact with a rule system implemented in its programming, while imagining that you are part of a fictional world, perhaps taking on a role in that world. Seen this way, video games are exactly half real. Their rule component is absolutely real and governs what you can do as a player, yet the world inside a video game is an imagined fiction, separate from this world. Sometimes there is a close correspondence between the rules and the fiction, but more often there exists a tension—the fiction suggests something that is in tension with what the rules allow you do to. This is a core productive tension of games. Once you see video games this way, it becomes much easier to understand the range of experiences, from games in which the fiction is a thin veneer (the candy pieces in *Candy Crush*) to those with elaborate

worlds, say *Half-Life 2*, or any modern adventure game.

AJP: You have described the 2000s as a “casual” revolution in video games. What happened to video games and players during this cultural moment?

Juul: When I wrote *Half-Real*, I had the good fortune that the Western game industry had settled on one business and distribution model—selling video games in boxes at a fixed up-front price. This had supplanted earlier models, like the pay-per-play of the arcade, and other models, like subscriptions and mobile games, still felt a way off.

I wrote *A Casual Revolution: Reinventing Video Games and Their Players* a few years later in response to the rise of downloadable casual games for PCs and the Nintendo Wii, a new kind of console that reached a broad audience (much as early consoles had). This was a big shift in game design and in the target audience of the industry. For a long time, the assumption had been that games should be immersive activities that required several hours of committed time, but casual game design was about—and continues to be about—making games that fit into the lives of players, games that can be played in small chunks and be easily interrupted, that do not punish players excessively for failure, and that often feature happier and more pleasant fantasies than many console games. This was the path that led us to today, where in many countries, most of the population plays video games.

AJP: A decade and a half after you published *A Casual Revolution*, have video games become even more commonplace and inclusive? What has changed?

Juul: In the years after that book, the app stores for cell phones became the dominant platform for video games, and today cell phones are the most popular game platform, with the biggest revenue. The major lesson is that few people can or will buy a dedicated game-playing device, but now that a sizeable portion of the world’s population has a cell phone, this has become the most important platform. Game design has changed to accommodate the new playing situation—games should be playable on commutes and in short bursts in between whatever else players have going on in their lives. It would be wrong to say that video games are now made for everybody, but the shift from PCs and consoles to cell phones has made video games normal.

AJP: You have written extensively on failure in video games. What is unique about failure in video games as opposed to failure in other parts of our lives?

Juul: I would say that games are the cultural form that concerns failure. Where

a novel will deal with the failures and inadequacies of another person, games deal with our personal failures and inadequacies. If you lose, it really means that you were not good enough. Whether failure in a game is as important and weighty as nongame failure depends both on the tangible consequences you have attached to it (as when betting your possessions in a game of poker), and on your personal beliefs and the social context around a game. Are you tying the game to your identity? If you sincerely believe that any cultured person should excel at the games of Go and *StarCraft*, then failing in those games can be as important to you as any nongame failure. But if you consider them unimportant pastimes, then failure will feel much less significant.

In addition, you may be playing in a social context where winning a particular game is accepted as paramount for social status, and in that case, your personal alignment to the game can be overridden by the shared beliefs of the group. Games are really arenas for working with and through failure, inadequacy, and status.

AJP: In *Handmade Pixels: Independent Video Games and the Quest for Authenticity*, you explore the history of independent video games. What makes these games independent and different from other kinds of video games?

Juul: In this book I studied the history of the idea of independent games and showed that it was first used around the turn of the millennium in response to the consolidation of the video game industry. Once the industry was sufficiently streamlined, many developers felt a need for an alternative of small-scale and more experimental development. Of course, early video game development was also experimental and created by small teams, but that was just what we understood to be game development at the time. Borrowing from film theorist Geoff King, I distinguish three kinds of independence in games: First is financial independence—games made without publishers or external financing, usually thought to lead to increased creative control for the developers. Second comes aesthetic independence—games with different experiences, content, or visual styles. As I note, this is often a representation of a representation, where your modern device is used to emulate older, low-tech visual styles like pixelated graphics and pencil sketches. And third, we have cultural independence—games that make larger cultural or political points, perhaps about representation, about emotional vulnerability, against video game violence, or about the gig economy. The point then is that a given game can be, or be presented

as, independent in these three ways. A financially independent game can be indistinguishable from one made by a big company, and some developers claim that the financial dependence of working with a publisher gives them increased creative freedom. This is a way to capture the complexity of independent games.

AJP: What does authenticity mean in the context of independent games? And why have these game developers been on a quest to achieve it?

Juul: The big idea in *Handmade Pixels* is that independent games serve as an indictment of the big-budget game industry, which is seen as compromised by lack of innovation and financial interests and unimaginative and often violent content. Like other types of independent culture, independent games are often presented as the authentic alternative, as the games that are made from the heart, that are innovative, that offer better kinds of content, a more diverse set of creators, and even, hopefully, better working conditions for workers.

Inspired by Jackson Lears, I tie independent games to the Arts and Crafts movement in the late nineteenth century, which reacted against the sameness and dehumanization of machine production. I think independent games often share that type of antimodernism, the desire for an alternative to the anonymous sameness of the game industry. This is also why many independent games resurrect older genres and visual styles—to signal an affinity with an earlier state of the game industry now perceived as more honest and authentic.

AJP: For readers who are not familiar with independent games, are there two or three examples of games that you think are particularly significant that people should play and experience for themselves?

Juul: Today I would point to: *Gris*—ostensibly a platform game, but with wonderful hand-drawn graphics, very little chance of failure, and a theme of depression. I would add *The Graveyard*—an early minimal game, just about an elderly woman walking through a graveyard, sitting down, and reminiscing. Video games do not have to be more complicated than that! And, finally, I would include *Papers, Please*—a game in which players take the role of an immigration bureaucrat in a fictional Eastern European country. The game, and the player's role, is drab and depressing, but also tense, and makes a player think about immigration and bureaucracy.

AJP: Your *Too Much Fun: The Five Lives of the Commodore 64 Computer*, focuses on a single computer. What sparked your interest in the Commodore 64?

Juul: In the field, there exists an ongoing discussion about writing broader and more inclusive (less hegemonic if you will) histories of video games, and it struck me that I had played a part in promoting a default history of video games where *Super Mario Bros* is the primordial video game. Yet that was not my own experience of the 1980s at all. Growing up in Europe, consoles were almost nonexistent, and almost all game playing happened on home computers. Nintendo was not an important company. At first, I wanted to help rescue that European history of video games, but it also became clear that even early North American video game history often took place on home computers. Remember that in the 1980s Electronic Arts and Activision were making home computers games for the Commodore 64 among other machines!

In terms of computer history, I also wondered why the Commodore 64, which is by all accounts the best-selling home computer of the era and the one with the largest video game library, was often sidelined in histories of computing. This was the interesting challenge for me—to write a history of that machine, not to celebrate it, but to understand its role in game and computer history and to understand why it had been forgotten in much history writing.

Spoiler: In the United States, video game history became the story of the crash in 1983. The industry was eventually rescued by Nintendo, yet the crash was nearly a U.S.A.-only event. Even in the United States, home computer gaming continued almost unabated, but the Nintendo-centric history became the one that got repeated. In computer history, the later Mac-PC rivalry (personified as the Jobs-Gates rivalry) became the default telling of computer history, ignoring almost everything else, including the most popular home platform (the C64) and even the creation of the IBM PC. It is mesmerizing to go back to old magazines and see how history at the time was conceived completely differently and how the C64 was looked down upon with its colors, sound, and fast-moving games.

AJP: You write about what you call the five lives of the Commodore 64. What set this computer apart from its contemporaries that people are still using it more than four decades after it first entered homes?

Juul: I avoid saying that the C64 is the most important computer, but I argue that it has a specific design and trajectory that gave it its longevity. I divide its history into five lives: First, it was seen as a serious computer. It was first promoted mainly as a serious computer for the office, for education, and for

learning BASIC programming. Second, it was a game computer. Because of its large library of games, building on its game friendly hardware design, it came to be understood as an unserious game computer, which is also why it is not always mentioned in computer history. Third, it was a device for underground computing. Especially in Europe, a whole subculture grew around the machine, of software piracy and of demoscene competition making impressive audiovisual programs. Fourth, it was a computer trying to keep up with newer machines. As the C64's commercial life faded, developers tried to make programs such as games and graphical interfaces to almost match the features of newer machines. Fifth, and finally, it became what it is now—a comforting computer whose limitations are charming. In its current life, the C64's limitations, such as its large pixels, are no longer seen as limiting—they are rather celebrated and emphasized as interesting historical artifacts that can be used in a contemporary setting. The overall point I wanted to make here was that a technology can be tied to changing imaginaries over time and that there is a full history to examine after a device goes out of production. But I also wanted to capture the duality that, on one hand, it was users who reimagined what the C64 was at different times; on the other hand, it was the flexibility of the C64's hardware design that allowed users to reimagine it. It can sound paradoxical, but the machine's unchanging chips—and even flaws in the chips—collaborated with users to make the machine into something new.

AJP: For readers who have never heard of or used a Commodore 64, why is it important for us to better understand this computer from the 1980s?

Juul: The Commodore 64 was the best-selling home computer of the 1980s, selling at least twice as many units as competitors like the ZX Spectrum, the Apple II, or the Commodore Amiga. From 1985 to 1993, it was also the platform with the biggest video game library—bigger than other computers or any game console. Many of today's biggest game companies used to make games for the Commodore 64. Yet, it is perfectly possible to find video games histories that barely mention the machine. So the Commodore 64 is important as an example and reminder of all the video game history we tend to forget. Its old games—often surreal and surprising—are a catalogue of the roads forgotten and not taken.

AJP: What are you working on next?

Juul: I am working on a smaller project mapping the Danish game and Nordic industry, but on a bigger project I am writing about virtual objects. This

goes back to some of the discussions of *Half-Real*: Why do we accept that on-screen objects like a ball or a car are much simpler than the physical objects they appear to represent? This is logically strange but unproblematic if we don't think about it. I am both building prototypes and testing them on users. Perhaps that is my next book.