Chapter Three

**WHAT IS IT GOOD FOR?**

So, for the first time in the history of the videogame form, people who aren’t programmers or corporations can easily make and distribute games. But why would they want to? Why make a game—especially when there already exist the means to write stories, play songs, film yourself for YouTube? What can we do with games that we can’t do with those forms?

To begin, let’s define what a game is.

You’ve played games and you have assumptions about what they are. Maybe when you read game you imagine a videogame; maybe when you imagine a videogame you imagine a big-budget run-jump-shoot game. Maybe you imagine Tetris. Since I’m more interested in games, digital and otherwise, that don’t resemble games that already exist, I think a fresh definition is in order. I also think it’s worthwhile to have a definition that isn’t specific to digital games, because I’m interested in the commonalities between digital and non-digital games, and in connecting videogames to that much older tradition.

So here’s my definition:

A game is an experience created by rules.
That's pretty broad, huh? I'm interested in as inclusive a definition as possible, though you might argue that mine is too broad: for example, you can use it to describe getting stuck in a traffic jam or paying your taxes. A tax form is nothing but a series of rules you follow to produce a final number, after all. But is it useful to think about your taxes as a game? Not really. Do the rules on a tax form really create a strong experience, or are they just a method for producing a number?

A game is an experience, and that experience has a certain character. Maybe a game is a story, or maybe it's the experience of control giving way to panic giving way to relief. Maybe it's about taking something and making it grow bigger and bigger, or maybe it's about two rivals, equally matched, each trying to out-guess the other's plans. The experience that we identify as a game has character, and we can talk about what that experience is.

And if we're discussing an experience, then that implies someone is there to have that experience, someone we refer to as a player. We can't talk about a game without talking about the experience of the player playing that game, even if the playing experience we're talking about is often our own.

The experience we call a game is created by the interaction between different rules, but the rules themselves aren't the game, the interaction is! A game can't exist without a player or players: someone needs to be engaging with the rules for the experience to happen.

How does that work? Consider a game of Tag. Rules: One player is IT, and must tag as many of the other players as possible with a touch. Each of those other players is SAFE when she touches this gnarled-up oak tree. You can see the way the interaction between those two rules creates an interesting (and volatile) dynamic. The players who aren't IT want to
reach the tree, but the player who is IT wants to stop them.

You can imagine a situation where the IT player is standing between two other players—one to her left, one to her right—and the SAFETY of the tree. Maybe one of them will make a break for the tree, maybe IT will be forced to pick one of the two to chase while the other gets to make a run at the tree, maybe a fourth player will take advantage of IT’s distraction to make a run at the tree from behind. When we talk about a game of Tag, we’re talking about this experience. But this situation (and it’s a good, tense one) isn’t explicitly defined anywhere in the rules. However, notice how these rules guide the creation of that situation. The rules set the players in opposition to each other, give most of the players a goal, and give the other player a reason to intervene, creating a tense dynamic.

What if we were to take either of these rules away: the SAFE location or the player who’s IT? Without a SAFE location, players have no reason to stay nearby and interact with the other players, especially the IT player. The ideal strategy to avoid IT would be to go as far away as possible, and that breaks the tension and hence the experience of the game. What if there was no IT player? Then it’d just be people running around, and while a bunch of people running around has value, it doesn’t have the character or dynamic of a game.

But there’s certainly room to change the details of the rules. Tag, being a folk game, has been played by many people in many places with many, many different versions of the rules. In one version, a player might be done once she’s tagged the SAFE tree. As more and more players tag the tree and leave the game, the players who are less fast become greater and greater targets because the IT player can focus less on monitoring the tree and more on pursuing them.
Alternately, what if a player who touches the tree isn’t permanently safe—what if players are only allowed to be in contact with the tree for five minutes at a time? That keeps players vulnerable to IT and keeps the game from stagnating. Maybe a player who leaves the tree has temporary immunity to allow her to get safely out of IT’s sight, or maybe it becomes a stand-off, where the escaping player has to wait for another player to distract IT’s attention before she can make a break for it.

What about freeze tag? In this case, a player who’s tagged by IT is “frozen” and has to wait for another player to come and “rescue” her before she can move again. This variation has much more direct interaction between the non-IT players. Instead of just depending on one another as decoys, they have to actively put themselves at risk to aid other players, which only adds to the tension of the game. And it creates a new dynamic between the non-IT players: I rescued you this time, but if I get tagged you’re going to have to leave the tree and rescue me.

And that’s what games are good at: exploring dynamics, relationships, and systems.

The Story of Tetris
A “system” is what we’ll call the interaction (or ongoing interactions) between a set of rules. Let’s talk about Tetris now.
What are the rules of Tetris, essentially? The basic rules that drive Tetris are:

The game is played with pieces, comprised of every possible combination of four squares. (See the image above.)

- Pieces fall continuously into a well of a certain volume. The player can guide the pieces' fall to the left and right of the well, and also rotate the pieces both clockwise and counterclockwise.
- Pieces are removed from the well when and only when the player organizes them into complete rows.
- If there is no room left in the well for a new piece to fall, the player loses.34

You can see how these rules create a system where the player's mistakes compound on one another to cause further mistakes: Only full rows are eliminated, so incomplete rows stick around and take up space in the well. Clutter in the well then makes it more difficult to position other pieces and to create rows. As the row fills with mistakes, it eventually
becomes impossible to fit more pieces, and the game ends.

These rules function in tandem to give the game a momentum and shape: the player makes errors that cause further errors, until eventually the player is overcome. (And consider how well a commonly added rule, “the pieces fall faster every time ten lines are made,” works with these basic rules to help the game escalate.) We could consider this a system.

All games aren’t necessarily simulations of existing systems: it would be difficult to imagine a situation in the world that actually resembled Tetris. But it’s easy to imagine simulations that model systems of rules that are far less abstract: urban planning, politics, oil drilling. And there are games whose rules mimic such systems. Will Wright’s SimCity is a game in which the player plans a city, Jim Gasperini’s Hidden Agenda is a game in which the player governs a post-revolutionary South American nation. Arch D. Robison’s Seismic Duck models the way drillers use aimed sound waves and seismogram to find oil reservoirs.

You can begin to see how systems can be translated into game rules: a commercial zone in SimCity, for example, needs people to act both as a work force and as consumers. That means the people need homes to live in, transportation to get them around the city, power to make sure the lights are on. The system teaches concepts about the interdependency of urban forces. To again cite Greg Costikyan’s “Maverick Award Speech”: “I want you to imagine a world in which the common person is no longer ignorant of economics, physics and the functioning of the environment—things which are themselves interactive systems—because they have interacted with them in the form of games.”

Every game of Tetris has the same shape—errors compound on errors until the well is filled and the player is
overcome—because the system of rules we’ve discussed guides the experience in that direction. But the player places all the pieces herself. Every player will place the pieces differently, will play a different game, but experience a similar result. The same holds true for any system of rules, as simple as Tag or Tetris or as complicated as SimCity. Games have a lot of potential for examining the relationships between things—or, rather, for allowing the player to examine the relationships between things, because the player does not merely observe the interactions; she herself engages with the game’s systems.

**The Rise of the Designer**

Tag is an example of a folk game, along with Go, Chess, Poker, Stickball, Hide and Seek, and most of the world’s oldest games. Games have been around as long as civilization has; the game is by no means a new form or a recent invention. What is relatively recent is the shift from folk to authored games. Folk games, like folk songs and folk texts such as the Bible, have no single credited author, but rather many untraceable authors over many years. They’re artifacts shaped by entire cultures, and generally they can tell us a lot about those cultures.
For example, compare Chess, a continental European board game of warfare, with Hnefatafl, a Viking board game of warfare. Chess is a game of combat between kings with equal resources. Each player has the same pieces and starts in the same position on opposite sides of the game board. Each player’s goal is to capture the other player’s king. In Hnefatafl, one player represents a king and his defenders, who start in the center of the game board. The other player represents the attackers, who surround the king’s forces on all sides of the board. The king player’s goal is to get the king through the attacking hordes to safety, while the other player’s goal is to surround and capture the king. The differences between these games’ interpretations of combat tell us a lot about the differences between strategic thought between European vassal kings and Viking warrior bands: their priorities, the nature of their battles, and whether they approach warfare as a platonic war between equals. And the games themselves, in turn, shape the strategic thought of those who play them.

Our history is full of folk board games. Authored board games—games created by a single person or small group, and whose authors can be identified—are a more recent phenomenon. For example, I can tell you that the board game Cosmic Encounter was designed in 1977 by Bill Eberle, Bill Norton, Jack Kittredge, and Peter Olotka of Eon Games. (We can date Cribbage, by Sir John Suckling, to the 1630s.) These are games as texts of specific rules, rather than as patterns of rules that are subject to change through mimicry. A game of Tag will always have a chasing player and a safe position, but the actual rules will change from play to play. The majority of contemporary board games are designed by a single author or team, and the same is true of digital games.
Can there be folk videogames? Videogames retain credits better than board, card, and physical games. I think that there are digital games, though, that exist as patterns of similar rules, perpetuated through duplication with small mutations. There are a thousand different versions of Tetris, for example, each coded by one of a thousand different authors, and each version with a slightly different set of rules, a slightly different set of numbers, and often (to avoid litigation) a different name. There’s a digital game that’s commonly known as “the snake game,” which began as an arcade game called Nibbler by Joseph Ulowetz and John Jaugilas. In this game, the player directs a snake to gobble pieces of food. The snake dies whenever it crashes into either a wall or its own body by coiling around itself. Each piece of food causes the snake’s tail to grow longer, making it take up more space and making it more difficult for the player to avoid collisions with her own body. So many different authors have remade this game on so many different machines that all of its forms and variants are usually just referred to as “the snake game.” Is this how authored games become folk games?

But what can authored games tell us that’s different from folk games? Folk games tell us about the culture that created them; authored games tell us about the author that created them. Authored games have the potential to be more personal, and thus more specific and diverse, than folk games. Two plays of an authored game are likely to be more similar than two plays of a folk game, because the authored game retains the rules set created by its original designer. It’s the fact that folk games change with each player that makes them so long-lived, that makes them adapt to suit the culture that adopts them. But in this book, it’s authored games, and the diverse set of voices they embody, that I want to focus on.
What’s Video Good For?

In a board game, players have to track how much money is left in the bank, which pieces are in play, how high the water level rises. A deck of cards can keep players from knowing in what order pieces will come into play, dice can generate random outcomes to situations, and players have hands of cards that represent information they keep from the other players, but beyond these basic devices, little information can be hidden from the players, because the players must make sure the rules are being observed by tracking most of the information themselves.

In digital games, the computer keeps the rules. The computer tracks all the numbers. Digital games therefore have much greater control over what information the players have access to, making videogames capable of much greater ambiguity than board or card games.

What’s ambiguity good for? Telling stories! Digital games have great potential for storytelling. The author has a lot of control over the pace at which information is revealed; therefore the author can pace the telling of a story. This is not to say that videogame stories are being told as well as they could be. But the format of a videogame—which lets rules be changed and introduced over the course of the experience, and which lets the author hide the causes for events and show only the effects—lends itself more easily to an overt, sustained narrative than any physical game format.

Because the rules are kept by the machine, the rules in digital games tend to be more numerous and more subtle. Think of a game like Shigeru Miyamoto and Takashi Tezuka’s Super Mario Bros. Unless you’ve studied the game in great detail on a technical level, you probably don’t know exactly how high Mario can jump relative to the height of the screen, or how
fast he accelerates horizontally when he runs. The interactions between these hidden rules in videogames can result in very complex systems without necessarily complicating the game, because the player isn’t required to track and compare all the numbers. For example, imagine the designer creating a situation where there’s a tiny platform with a long pit on either side. Mario has to run to build up the momentum to clear the pit and land on the platform, but instead of stopping there he needs to immediately jump again in order to make the second pit without losing the momentum that will let him cross it. This is a problem that wouldn’t be obvious to someone who had just approached the game.

Through playing the game, the player develops a sense of the limits and subtleties of these hidden rules. This interaction between the player and the game, dependent on the game’s hiding information, gives digital games their special capacity for subtlety and nuance. You could compare it to the sense of “English” in a physical sport: the difference between hitting a ball and hitting it with a particular force, and in a particular direction.
Because of this capacity, videogames are often performative: they allow the player room to interact with rich and complex systems with grace and finesse. We usually refer to this as "skill." A system may persist through an entire game, but the game may start very permissive of less graceful playing and require the player to play with more and more finesse as the game goes on. The game gets HARDER, asking that the player become more skillful, but allowing her to learn the game's systems over the course of navigating increasingly difficult situations.

The systems that the player manipulates in Super Mario Bros. are introduced very early in the game, with the only added rules coming with the periodic introduction of new enemy characters or hazards. But the situations that Mario has to navigate start fairly relaxed and demand more and more skillful playing as the game progresses. In the first stage of the game, obstacles are low enough that a simple jump from a standing position will allow Mario to clear them. In later stages, the height of obstacles will require Mario to run and build momentum before jumping, in order to jump higher. In this way the designer teaches the player the subtleties of the game's complex system through careful use of machine-controlled variables. Digital games are thus good at teaching, and at communicating a sense of the player's progress, which often parallels the progress of the protagonist and the development of a story.

What else is handy for telling a story? The ability to generate or play video and audio, either as accompaniments or as central vehicles for information. Digital games can incorporate a variety of media when telling their stories. Consider how the music in Super Mario Bros. speeds up when there's only a hundred ticks left on the time limit to complete a stage, creating a
sense of urgency, or how the sound played when Mario jumps on an enemy gets higher and higher pitched, indicating that a reward—in this case, an extra life—will come if the player keeps doing what she’s doing. Consider how the player’s journey takes her through a changing visual landscape, from a sunlit field to a black-and-blue underground, to treetops, to the mushroom forest, and to Bowser’s castle, and the way each of these sights—withheld from the player until her skill develops to give her access to later areas—provides a sense of progression through the Mushroom Kingdom.

I don’t mean to imply that non-digital games are incapable of the things I’ve described, or that digital games are in some absolute sense better or more worthy of interest. There are many different kinds of games, all of them suited to different things. Digital games, because of their ability to withhold and pace the player’s access to information, because of the strict narrative control the author is able to have over the player’s experience (because the machine enforces the rules), and because of their capacity for generating a wide variety of sights and sounds to enhance or even define the playing-out of the rules, are particularly well suited for the telling of stories. And the telling of stories—games becoming more personal—is what especially interests me about games as a form.

Role-Playing Games
Digital games have certain strengths for telling stories, but