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Balancing Game Mechanics and Narrative

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In my last article, I wrote that horror video games are providing fertile ground for innovation in video game design. I argued that few other genres are able to mix engaging game mechanics and mature narratives together as deftly as many modern horror games. This month I would like to talk about the dichotomy of game mechanics and game narratives, and how the two must be balanced to produce an entertaining result.

First, some definitions are in order. When talking about games (video or otherwise), “game mechanics” is a term that describes how a game should be played. In Monopoly, for example, the rules consist of rolling dice, moving a figurine clockwise around a rectangular board, collecting cards, and acquiring property. The strategy for Monopoly is to try to buy up as many streets as possible of the same color so that you can purchase hotels and profit from the other players. The goal in Monopoly is to be the player with the most money at the end of the game. These three aspects of Monopoly—the rules, strategies, and goal—make up the mechanics of the game.

While game mechanics describe how a game is played, the “game narrative” is the context and presentation of the actual experience. The fiction of Monopoly is that each player is a real-estate tycoon trying to control the market by purchasing and developing increasingly expensive property. Mr. Monopoly, the cartoony money bag-toting character that has become an icon of the game, is part of the presentation, as are the graphics used for the Community Chest and Chance cards (in fact, these icons are so identifiable that Hasbro owns copyrights on all of them). The setting, presentation, and fiction of Monopoly give the game mechanics a context to operate in, and are part of what I am calling the narrative of the game [1].

All games have some combination of mechanics and narrative. It is technically possible for games to have such strong mechanics that the narrative aspect is inconsequential or even nonexistent, but such games are few and far between. Even Pong, which is almost entirely
mechanical, has a thin narrative defining the context of the game as a ping-pong match. Early versions of Tetris are even more narratively-thin (though later versions gave the game more context by introducing Russian motifs and music), but the game is one of the few that was a success based entirely on its mechanics. There are no games that are entirely narrative and include no mechanics; any type of interaction is a mechanic, so mechanic-less media is, by definition, not a game.

Traditionally, games designed for home computers have put more emphasis on narrative, while games designed for TV game consoles have put more emphasis on mechanics. Part of the logic behind this discrepancy had to do with the way games were played: games running on consoles benefited from having joysticks and controllers designed solely for the purpose of playing games, while PC games had to make due with the general-purpose mouse and keyboard. Another reason that console and PC games differed was that the customer was widely different. While a desktop PC cost several thousand dollars in 1986, a Nintendo Entertainment System was only $199. Consequently, the target audience for personal computers was skewed to an older age group than the mass-market consoles, and the games released for the PC during the 1980s reflect an older user base.

For example, consider the classic video games Super Mario Bros. and Shadowgate. Super Mario Bros. was a title designed for the Nintendo Entertainment System (commonly called the NES), and is almost entirely based around game mechanics. Mario can walk from left to right, run, jump, grow to twice his regular size, break bricks when tall, throw fireballs when tall, and become invincible. He can move down pipes and slide under ledges, and he is controlled by the player using the two buttons and the directional pad on the NES controller. There is very little narrative for the story (Mario is trying to save the Princess from Bowser, a giant fire-breathing turtle with spikes, who has apparently kidnapped her), and the enjoyment the game provides comes from learning how to deftly move Mario from one end of the world to the other. Shadowgate, a PC-based Adventure game by Mindscape, is almost the complete opposite. Players explore a trap-filled castle from a first-person perspective by clicking on hot spots and performing operations on items. Though there are monsters to be vanquished, none of them can be defeated by good motor skills; Shadowgate requires the player to solve such dilemmas by combining items and solving problems logically. The enjoyment Shadowgate provides is in its narrative.
The fundamental difference between Super Mario Bros. and Shadowgate is that the mechanics employed by Super Mario Bros. are designed to be intrinsically fun, movement and hand-eye coordination challenges that are enjoyable regardless of context. While Shadowgate has mechanics (books can be opened, torches can be lit, etc), these mechanics are not designed to be fun in and of themselves. Rather, they serve as a vehicle for Shadowgate to deliver its story. While these two games are extremes of the spectrum, all games must choose how to balance mechanics and narrative to produce an experience that is as fun as possible.
Over the years, the PC and console markets have converged somewhat, and various game styles from both sides have been successfully converted to both platforms. The PC is home to the first-person shooter game genre, which is predominately a genre concerned with mechanical challenges (shooting everything that moves). Developers of games for TV consoles have also attempted to increase the importance of narrative; the Role Playing Game (RPG) genre in particular is extremely narrative-heavy, and is home to some of the most mechanically-simple games ever made.

Other, more ambitious developers, are trying to find a sweet spot between employing exciting narratives and providing the player with a variety of mechanical challenges at the same time. In 2001, Sega released *Shenmue*, a game that layered a detailed narrative on top of a complex system of mechanics. *Shenmue* tells the story of Ryo, a young high school student who witnesses his father’s death at the hands of a mysterious Chinese master of martial arts. The game allows the player to move Ryo around a large neighborhood, speak with people, investigate items and locations, and occasionally get into fights. As Ryo progresses, he meets a wide variety of characters and begins to uncover the mystery of his father’s assassin. *Shenmue* is somewhat unique because it mixes solid mechanical challenges (getting into fights, avoiding obstacles by hitting buttons in the correct sequence, racing around a track) with a complicated and well-presented narrative (Ryo must track the mysterious killer by interviewing various witnesses and members of the town, researching his father’s secret past, and following a series of clues).
Sony Computer Entertainment took a different approach to balancing narrative and mechanics in their 2001 game ICO. While Shenmue was built by combining mechanical and narrative features from several different genres, the developers of ICO tried to simplify the experience as much as possible. ICO has no life bars, almost no dialog, no music, and all of its challenges are derived from tricky mechanical puzzles. However, ICO’s developers clearly chose to pursue quality over quantity, as both the mechanics and presentation of the game are extremely well executed. Though the game mechanics (which are based around running, jumping, climbing, leading another character through dangerous areas, and fighting off monsters with a stick) are designed to be intrinsically enjoyable, the narrative (trying to escape a maze-like castle with a young girl in tow) is so well executed that many players find ICO an emotionally substantive experience.

Games like ICO and Shenmue are important because they are examples of how traditional mechanical challenges can be merged with a strong narrative to create a more complete game experience. However, they also show how difficult such hybrid products are to develop. Both products took far longer to create than most games: six years for Shenmue and four years for ICO. Shenmue was, for a time, the most expensive game ever developed (it was created at a cost of twenty million dollars, but more expensive games have since been published). And while both games were embraced by the game development and review community, they failed to make a significant splash in the marketplace [2].
The primary obstacle to developing games that offer fun and challenge on both the mechanical and narrative fronts is time. Though the majority of video games on the market today are forms of mechanical challenges, building a set of game mechanics that are intrinsically enjoyable is a very difficult task. Most game developers struggle to make sure their game is easy to control, feels smooth and fluid, and makes sense to the player. Though mechanics need not be complicated to be fun, they must feel very natural or the player will experience frustration. Building solid mechanical challenges requires a lot of iteration: an idea must be tested and tweaked over and over again until it feels right. Many game developers have a hard time producing solid mechanics to drive their game[3].

Developing complex narratives is also a costly process, as artists, script writers, animators, and programmers all need to work together to produce the content that will deliver the narrative. Whether the narrative is related to the player through interaction (such as in Valve Software’s recently released *Half-Life 2*) or through pre-animated sequences that take control away from the player for a brief period of time, a large volume of content must be created. Such work is expensive, as it requires many people to complete and is often prioritized behind work that is critical to the mechanics of the game. Most game developers do not have the luxury of four- to six-year development cycles, so often only part of the product receive adequate attention. Games that do pay a lot of attention to narrative (such as the horror games I discussed in my previous article) are typically forced to rely on simplistic mechanics as a result.

There are a finite number of mechanical challenges that can be created as long as players use controllers or keyboards to interact with games. Though there is still quite a lot of room for mechanical innovation using traditional input devices, some game developers (notably Nintendo and Sony) have begun exploring alternate methods of interaction in the hope of creating new forms of mechanical challenges [4]. Barring this research, games still have plenty of room to expand in the narrative frontier, and I think that it is safe to say that the current generation of interactive storytelling and presentation barely scratches the surface of what the medium is capable of.

Ultimately, games that combine mechanical and narrative challenge are likely to be appreciated by a wide spectrum of people. Though producing such games is an immense challenge, they benefit the industry as a whole because they reach across traditional genre lines and grab the interests of gamers from all walks of life. As I discussed last time, they also pave the way for an increased level of literacy in video games, and move the medium closer to being considered a legitimate art form by the public. As narration and interaction converge, new and exciting experiences will be possible, and video games as a medium will move forward. Though it will not be an easy road, game developers must begin to move toward such hybrid experiences if the medium is to survive.

**Footnotes:**

[1] I’m using the definition of the word “narrative” a bit loosely here, as *Monopoly* and many video
games have little in the way of a traditional story. However, my dictionary tells me that “narrative” can mean “the representation in art of an event or story,” so I think I am in the clear.

[2] ICO’s average review score is 91% over about 100 reviews, according to www.gamerankings.com. Shenmue’s is 89.3%. The vast majority of video games fail to break the 80% mark, so the scores of these two games are very significant. Neither game was marketed well in the U.S., and both sold poorly despite being very well received.

[3] For example, 3D 3rd person games must often deal with the problem of using a tracking camera that is intelligent enough to avoid running through obstacles but also knows how to show the player everything they need to see to play the game. This is a very difficult problem to solve.

[4] Sony’s EyeToy peripheral for the Playstation 2, a camera that allows a player to interact with the game world by moving their body around, is a good example. Another is Nintendo’s new handheld console, the Nintendo DS, which features a touch screen as an input device. Nintendo has publicly stated that they believe the game industry to be in an innovative slump because the usefulness of current-generation controllers is quickly reaching its apex.

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2 THOUGHTS ON “BALANCING GAME MECHANICS AND NARRATIVE”

Cleopatra Glessing

on January 30, 2014 at 6:17 PM said:

Fantastic items from you, man. I have remember your stuff previous to and you’re simply extremely wonderful. I really like what you have received right here, certainly like what you’re saying and the best way during which you assert it. You are making it enjoyable and you continue to care for to keep it sensible. I cant wait to learn far more from you. That is really a tremendous website.

Cork board ideas

on February 5, 2014 at 1:43 PM said:

A fascinating discussion is definitely worth comment. There’s no doubt that that you should publish more on this topic, it may not be a taboo subject but generally people don’t talk about these issues. To the next! All the best!!