

Characterizing and Understanding Game Reviews

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ABSTRACT

Game reviews are one of the primary forms of videogame journalism and are also one of the prevalent forms of discourse about games. How can we characterize them and better understand the role they might play in helping create and shape our understanding of games? This article reports on the results of a study that analyzed and deconstructed a selection of game reviews from popular online websites. Our findings show that game reviews are rich and varied in terms of themes and topics covered and that considering them purely as “shopping guides” ignores the broader role they play in the discourse of games. We found that game reviews often include game design suggestions, hypothesize about the intentions and goals of game creators, and offer advice to readers on how to approach and best enjoy particular games. More generally, game reviews can also help preserve videogame history by contextualizing the links and historical connections that exist between games.

Categories and Subject Descriptors

K.8.0 [Personal Computing]: General - *Games*

Keywords

Videogames, game reviews, understanding games, reviews

1. INTRODUCTION

Game reviews are one of the primary forms of videogame journalism. Andy McNamara, editor-in-chief of *Game Informer Magazine*, recently commented at the 2008 Game Developer’s Conference that the purpose of game reviews is to help consumers by leading them to games that make them happy (2008). His words echo the purpose, or role, that game reviews attempt to fulfill, namely inform the reader so that he or she may make a decision of whether or not to purchase or play the game reviewed. From this perspective, game reviews can be considered as consumer advice. In fact, Stuart argues that most game magazines are structured in such a way to guide the reader through to purchasing a game (2005). The reason for this is that presumably “most readers seem to see magazines as buying guides and little else. They want to know what they’ll be able to buy in the future, and what’s worth buying now” (Stuart 2005).

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Game reviews often overshadow other forms of journalistic discourse surrounding games such as news, investigative reporting, and commentary (Thomas 2007). Reviews have also been maligned for a variety of reasons such as being inconsistent in writing and style (Thomas, Orland et al. 2007), or being “rife with grammatical errors, historical inaccuracies, plagiarism, run on sentences, [and] clichés” (Buffa 2006b). They have also been accused of failing to take a critical and analytical viewpoint (Costikyan 2008). Another accusation is that reviews don’t explain what playing a particular game feels like and that they don’t analyze what a game means outside the game itself (Klostermann 2006).

Despite the controversy surrounding their quality or importance¹, game reviews are undoubtedly an influence on the ways that people view, understand and talk about games. In a prior study, Zagal and Bruckman found that students taking videogame-related classes at the university level had difficulties expressing ideas about gameplay or articulating their experience with games (2007). They argue that a possible explanation for this lies in the fact that most of what students read about games are videogame reviews, and that they are thus generally lacking in models of what in-depth analysis or critique about games look like. However, what are game reviews like? How can we characterize them? How do game reviews talk about games and what things do they talk about? Is the professional game designer Ernest Adams essentially correct when he says that “reviews only compare games to other games; they don’t analyze games in their larger cultural context” (Friedl 2002)? These are some of the questions we explored by analyzing and deconstructing a large number of game reviews. Our goal was not to determine whether game reviews are “good” or “bad”, comment on the quality of their writing, or consider whether or not they are effective for guiding purchasing decisions. Rather, we aimed to get a sense of the kinds of things that appear, or are routinely discussed, in games reviews in order to better understand how these may shape our understanding of games and the discourse surrounding their use.

2. METHODS AND DATA COLLECTION

In order to characterize videogame reviews we sampled and analyzed a random selection of game reviews from the most popular specialized media sources on the world wide web. In order to determine popularity (and thus, indirectly, reach) we used the Alexa web ranking system. The only game review sites² to

¹ For a summary refer to (McCrea 2007).

² GameFaqs, ranked #30, was not considered because although it does have game reviews, these are written and submitted by site

appear on the 100 most popular sites on the web were IGN (www.ign.com, ranked #43) and Gamespot (www.gamespot.com, ranked #48).³ We considered Alexa's ranking of the most popular sites by users in the United States only.

For each of the sites, we created a list of all of the reviews posted during the year 2006 and then, as needed, randomly selected reviews from the list for our analysis. We decided to sample from an entire year rather than shorter period such as a few months in order to minimize the effects of the lack of uniformity in games releases over an entire year.

Analysis of each of the reviews was conducted in an iterative process in which data from one review confirmed or contradicted data from others in order to refine theoretical categories, propositions, and conclusions as they emerged from the data (Glaser and Strauss 1967). Essentially, we used open coding to bring themes to the surface from deep inside the data (Neuman 2000). We assigned codes or labels to each sentence (or, in some cases a few sentences) in a review. Initially, these codes or labels often overlapped, and individual sentences often had more than one code or label assigned. As we analyzed more reviews, new codes emerged and existing ones were modified. The goal of this process was to identify consistencies between codes (codes with similar meanings or pointing to the same basic idea) that would begin to reveal themes. This process continued until no further codes emerged. By the end of this process more than 120 different reviews were analyzed.⁴

3. FINDINGS

As described earlier, we were not interested in evaluating the quality or effectiveness of game reviews. Rather, our goal was to get a sense of the kinds of things that appear, or are routinely discussed, in games reviews. Do game reviews have particular characteristics that define them? For example, are game reviews focused on the technical aspects of games such as the quality and resolution of the graphics? When reviewing games, what sort of context and knowledge do reviews assume the reader has? Also, are there different styles of reviews and how do they vary? Finally, how could we explain or understand these characteristics and what might they tell us about the medium of videogames in general?

As mentioned earlier, our analysis focused on deconstructing game reviews (ie, breaking them down into sentences or groups of a few sentences) and then characterizing what these components "are about". These characteristics are what we will now describe. Taken together, they represent the most salient features and qualities that game reviews have. They also inform us of what this particular form of discourse surrounding game is like. They provide us with an insight regarding the assumptions made by game review writers about what things they feel readers need to know, what they already know, and what their role is within the broader community of people who play games (and read game

users and are not representative of mainstream games journalism.

³ As measured on Feb 25, 2008.

⁴ Additionally, we performed preliminary analyses with reviews from print magazines. The data from those reviews informed, but was not used directly in the study we report on here.

reviews). While some of these characteristics are predictable, there are others that are perhaps particular to games (further research would be required to explore this in detail).

From our analysis we were able to identify nine common themes: description, personal experience, reader advice, design suggestions, media context, game context, technology, design hypotheses, and industry. Each theme wasn't necessarily present in all of the reviews. However, each review had more than one theme in evidence. For instance, the first few passages of a review might relate the personal experience of the reviewer. The following sentences might be descriptions interspersed with reader advice before wrapping up with some sentences about the media context of the game being reviewed.

We will now briefly describe each theme and show excerpts from game reviews that exemplify the theme described. In order to provide sufficient context the excerpts may include sentences that were coded differently from the theme being described. We also note that the themes are not presented in order of prevalence or importance.

3.1 Description

Perhaps the most evident or obvious theme for a game review are those passages dedicated to describing the game being reviewed. This theme essentially covers the description of the features, modes and/or characteristics, and gameplay of a particular game.

"The gameplay in Emergency 3 is divided between a 20-mission single-player campaign and a freeplay mode. In freeplay, you can complete a series of challenges or address an endless stream of emergency situations spread out over a large town. Regardless of which mode you choose, the basic gameplay remains the same. You're given specific objectives to complete and you must use a variety of rescue units to do so." – Emergency 3 (PC)

Additionally, it is common for the description to include a brief discussion of what the player needs to do to play this game. Sometimes the descriptive parts of a review may include specific instructions such as what buttons need to be pressed on the controller to achieve certain results.

"You control the action almost exclusively using the touch screen, and while this may sound strange, the system works well and eventually becomes second nature. During the strategic portions of missions, you simply draw your ships' flight path for the next turn, pointing them wherever you want them to go. During battle, you move the stylus around the screen to fly in different directions, and you can make your ship execute a highly useful barrel roll by rubbing the stylus from side to side." – Starfox Command (DS)

It might be considered superfluous for a game review to present instructions on how to play or refer to the specific buttons and commands used. This information is, after all, generally available in the game's manual and is often presented to the player during their initial interactions with the game itself. However, when attempting to understand what the experience of playing the game is like, the reader arguably has need of information that somehow communicates the potential complexity of managing a games' input. For instance, the reader might not be willing to consider

playing a game because of its extensive use of complicated button sequences or combos. Alternately, as shown in the example above, the reader can consider the ease of use or naturalness that the interface might provide to the player.

3.2 Personal Experience (as Player)

Game reviews often include first-person accounts of the experience the game reviewer had with the game in question. Sometimes, these personal narratives recount interesting actions carried out by the player. More often, however, they consist of descriptions of the emotions felt both during play as well as after. We note that sometimes, such as in the example of a racing game below, these first-hand descriptions may convey emotions that normally would not be associated with a particular game.

“Quite quickly several of our games turned into insanely comedic Blues Brothers scenarios. It was humiliating/hysterical to see the inane blunders!” – Need for Speed Carbon (PS2)

Another common aspect of personal experience includes descriptions of the sensations and perceptions associated with the act of play itself. The following excerpt describes how the reviewer feels that he is able to get an adequate sense of the weights of different cars in the videogame *The Fast and the Furious*. The notion of “sense of weight” is arguably an idea that is perhaps nebulous or hard to pin down objectively, so we find it interesting to note how often these kinds of sensations are described.

“The inference of weight comes through beautifully, with each and every car feeling like three thousand-pound pieces of machinery rather than paperweights on wheels. You have a great sense of speed and inertia because of this, and the power that your wheels are kicking out comes through the controller nicely.” – The Fast and the Furious (PS2)

Passages sharing this theme may also describe technical problems encountered, such as bugs or software crashes. As expected, emotions accompanying these descriptions often include anger, frustration, and disappointment.

The appearance of this theme is testament to the inherent challenges of describing a game: connecting what is “in the game” with what it feels like to play it. The former is arguably covered by the *Description* theme. The latter, covered by the *Personal Experience* theme, lies outside of the game. It involves the emotions and feelings experienced through play. Gillen (2004) argues for more games journalism that eschews the traditional (analytic) form of games writing over one that focuses on “what a gamer feels and thinks [...], not just the mechanics of how it got there.” (Gillen 2004) While we did find evidence of this sort of approach in game reviews, it is used mainly to support the analytic form of analysis.

3.3 Reader Advice

It may seem obvious that a review will offer advice to a reader. What surprised us was the form that most reader advice takes in game reviews. While the purpose of game reviews is, in theory, to provide purchasing advice to the reader, we found that more often than not, game reviews provide readers with advice on how to enjoy a particular game. For example, a review might advise on

what the appropriate mode of play is or what the player should do in order to avoid frustration and derive the most enjoyment.

“But if you are willing to invest the time to dig in and read a thick manual, experiment with more options and variations than you’ll ever be able to completely explore in an average lifetime, and patiently learn a complex but well-designed game system, Dominions 3 will reward you with one of the richest strategy-gaming experiences available on the PC today.” – Dominions 3: The Awakening (PC)

Alternately, *Reader Advice* might attempt to assuage the fears that readers may have about a certain game. Will this game be too complicated for me? How much of a commitment will be necessary for me to be successful at this game?

“Thankfully, there’s no real “wrong” way to play, just different and better ways, and the nature of the game is such that you can take it at your own pace.” – Guild Wars Nightfall (PC)

Reader advice may also include recommendations of certain modes of play as well as tips, tricks and strategies that may be useful to succeed. Additionally, reviewers also often commented on the kinds of skills and abilities necessary to play the game in question.

“You can also collect potions, which let you shoot a fireball. But potions can be limited, so they’re best used as a last resort.” – Solomon’s Key (Wii)

We found that readers were rarely directly advised whether or not to purchase a particular game.⁵ At most, the reviewer might share his or her opinion with the reader regarding the perceived value of the game (with respect to the recommended retail price).

“Many of the games we look at are simply too cookie-cutter to set them apart in our minds, and thus can’t be recommended as a \$30-\$40 dollar investment when it comes to consumers.” – Cars (GCN)

So, why does a game review try to educate the reader as to how you should (or could) enjoy the game being reviewed? It has been argued that game reviews cater to the games industry at the expense of the public (Buffa 2006b). From this perspective we could argue that helping a reader learn how to derive enjoyment from a particular game increases the chances that the game will be purchased. Another way to understand this issue is to consider the review writer as someone deeply impassioned by games and who wants to, as it were, proselytize. In the same way a friend might try to convince you play a game (“It’s so much fun to play it this way!”), the game reviewer cares enough for the medium that he or she wants to make sure the reviewed game gets a fair chance at being played and will truly be appreciated.

⁵ Arguably, review scores might play this role. A game with a low score will probably be ruled out as a possible purchase regardless of what the review says (assuming it is even read in the first place).

3.4 Suggestions for Improvement

It is reasonable to assume that a game review would explain the perceived flaws and problems a particular game might have. This was indeed the case. However, we were surprised that in addition to detailing issues, game reviews often provided suggestions for improvement. Alternately, they might comment on features they felt were lacking and should have been included in the game. Often, as in the example below, a reviewer might go into extensive detail regarding issues of game design.

"Although the concept of making your characters felons is cool, they could've been handled in some better ways. For one, you can literally let felonies sit at the post office without any positive or negative effect happening to your characters. You'd think that the court system might try to enforce their will at some point if you simply let these documents go, whether it was in the middle of a story battle or a different item world exploration. The second quirk is that while someone can be accused of a crime, such as having too high a level, anyone of your party members can stand in for them in the courtroom and take on their felony. This makes it entirely possible to avoid negative penalties as long as you make sure that someone in your party is guilty of that specific crime that you're accused of." – Disgaea 2: Cursed Memories (PS2)

In other instances, the review might draw attention to technical problems, or bugs.

"A single 'I want to play, find me an opponent' option would have been a better choice, but the same could be said for most of the other fighting games on Xbox Live, too. Other issues that are begging to be patched include a background bug that gives you the same background stage every time you play an online game." – Ultimate Mortal Kombat 3 (Xbox 360)

Generally speaking, we did not find that the suggestions for improvement referred only to issues of game. Suggestions weren't limited to gameplay, interface, narrative or level design but could also cover the business of making games, outsourcing of talent, or even casting of voice actors.

"There are a few fleeting bits of humor in the dialogue, but the script generally tends to hammer home the same moral messages of teamwork and honor at every opportunity. While that's nice and all, Bruce Campbell's legendary talents could've been put to better use on dialogue more suited to his comedic range." – The Ant Bully (PS2)

Although we do not have any evidence to describe the role that game reviews actually have in the design and development process of videogames, game reviews often assume a rhetorical position in which they are a contributing factor to the design and improvement of games.

"Nevertheless, when we reviewed FIFA Street we alluded to the fact that we'd very much like to see its problems addressed in a sequel at some point, and now, one year later, EA Sports Big has done just that." – FIFA Street 2 (PSP)

3.5 Media Context (non-game)

Bolter and Grusin explain that "no medium today, and certainly no single media event, seems to do its cultural work in isolation from other media, any more than it works in isolation from other social and economic forces" (Bolter and Grusin 1999). This also applies to videogames. It was thus unsurprising to find that many reviews took care to provide the reader with details of the broader (i.e., non-videogame) context relevant to understanding the game being reviewed. These cases were mostly of two types: a game is discussed in the context of a broader media property (ie. Star Wars games) or it remediates a cultural artifact from another medium (i.e., book, film, comic, etc.). For the most part, review passages of this theme referred to "licensed games". These are games that depend on the brand recognition of an external (ie, non-videogame) media property for commercial success.

However, we found that providing a media context for a videogame usually involved more than simply referring to the fact that, say, the game is based on, or uses characters from a TV show. The process of contextualizing a game within a particular media landscape can be complicated. The example below situates the events played in the game with respect to the general plotline followed by a Japanese manga (and anime) series: Naruto. We note that both the review as well as the game assume the reader is familiar with Naruto's world and storyline. This sort of knowledge is crucial to understand where the game "fits" with respect to the broader fictional universe of which it is a part of (Zagal 2008).

"Clash of Ninja 2 assumes that you will already be familiar with the whimsical and ninja-filled world of Naruto, and the story mode makes little mention of Naruto's origin as a wicked nine-tailed fox demon. Instead, the streamlined story mode focuses on the events after Naruto and friends have graduated from the ninja academy, with their confrontation with Haku and Zabuza on the bridge and the trials of the Chunin Exam serving as a couple of the highlights." – Naruto: Clash of Ninja 2 (GCN)

Reviews also provide a media context beyond referring to external media properties. For instance, some reviews might describe parts of a game in terms of conventions or clichés from other media or relate its aesthetic qualities to those from other media.

"If you've seen one of those terrible genre hybrid movies like Jason X, then you're well versed with the theme of Pocket Racers, Konami's 'spooky' rendition of The Fast and Furious meets Ghost Ship." – Pocket Racers (PSP)

"The story plays out like a modernized anime version of a myth, except with a far more original visual style than what most anime brings to bear." – Okami (PS2)

Finally, and perhaps most interestingly, we found passages of reviews that acknowledged (or hypothesized about) the sources of inspiration behind a game. We note that these passages may help the reader make connections that otherwise may not happen. In the example below, it isn't obvious that most readers would be

familiar with the film *WarGames* since it was released 23 years before the game *DEFCON: Everybody Dies*.⁶

"In a sincere act of tribute, developer Introversion has taken the deadly global thermonuclear warfare simulation from the classic 1983 Cold War film WarGames and fleshed it out into a full game called Defcon: Everybody Dies. The game stays true to the message of its source material, which is that there are no winners in nuclear war, though it does posit that perhaps with the right strategy, you can lose less when it finally does happen." – *DEFCON: Everybody Dies* (PC)

3.6 Game Context

Of all the thematic characteristics found, this is perhaps the richest in terms of variety and scope. Generally speaking, almost every single game review analyzed referred to other games in some way or another. It almost seems impossible to review a game without providing the broader ludographic context in which it resides. Sometimes, when a game is part of a series or franchise, the review might describe the essential changes between the game currently being reviewed and earlier games in the series.

"One of the most popular and certainly original aspects of the first FlatOut was its stunt mini-games, affectionately called the Ragdoll Olympics, where you hurled your driver out of your vehicle and at some sort of goal or target. [...] One of the most-wanted features after last time out was the ability to hold a marathon of events rather than skipping from single event to single event, and Bugbear has delivered." – *FlatOut 2* (PS2)

Alternately, there might be references to other popular games that may be similar in theme and/or gameplay.

"Much of Scarface is based on what we've seen in Grand Theft Auto. In fact, it's fairly obvious that Radical used said series as the blueprint and then went back and re-evaluated its shortcomings. The result is that we have a game that fixes many of GTA's problematic elements, like the targeting system or having to drive out of the way to stock up on weapons, while also retaining many of its standardized and fun aspects." – *Scarface: The World is Yours* (PS2)

Reviewers also commonly assume that the reader is familiar with other videogames (not necessarily from the same series) and hope to leverage that knowledge. For instance, a review might refer to game genre conventions without providing details as to what those conventions refer to or mean.

"Gamers at all familiar with traditional 3D platformers will immediately discover that Pac-Man World has unfortunately not strayed far from the original formula. The play controls and level designs follow the guidelines in Platforming 101." – *Pac-Man World 3* (GCN)

In other cases, the game context provided to the reader is largely historical. For example, it may refer to the history of a game series or the track record of the company that developed the game.

⁶ The game's developer later explicitly acknowledged the film's inspiration (Delay, Arundel et al. 2006).

"Developed by Z-Axis (a very talented crew that brought us the excellent extreme classics, Aggressive Inline and Thrasher: Skate and Destroy), X-Men lacks the polish and depth that the crew's previous software has always had." – *X-Men: The Official Game* (Xbox 360)

"Did you like Breakout back in the late '70s? How about Arkanoid in the '80s? [...] Taking the classic block-breaking concept of the aforementioned games, and adding in some varying mode types and a Gadius-like power-up structure, Break 'Em All has some merit as an update to those classic games." *Break 'Em All* (DS)

What is perhaps most surprising about this theme is the apparent dependence that game reviews have on other games. This might conspire to make game reviews inaccessible to readers who may not already be deeply invested in videogames. Do game reviews cater only to most committed fans and exclude everyone else? Or, do they serve as sources rich in jumping points from which less-knowledgeable readers can begin to learn and explore videogames?

3.7 Technology

Technological platforms both limit as well as afford the implementation of certain kinds of applications. As Bogost and Montfort argue, videogames are no different (2007). Thus, it is perhaps unsurprising to find that explanations of the technology on which videogames run, and the implications of that technology in a game's design and user experience appear frequently in game reviews. Oftentimes, the discussion centers on the particularities of the interface controllers, particularly so when they are novel or specific to the game being reviewed.

"Like any peripheral-based music game, much of beatmania's success lies on the shoulders of its unique controller. While the beatmania controller isn't perfect in its design, its implementation is great and helps separate beatmania into its own, entirely unique experience." – *Beatmania* (PS2)

On other occasions, specific platform issues may be discussed. For instance, the footprint of the installation of the game can be relevant for PC games, backwards compatibility may appear in reviews of console games, or technical comparisons might be made for games that have been ported from one platform to another.

"There's a slight, jarring pause as you go into and out of this menu, as if the game simply can't hold all the different weapons in memory at once like it could on the PC." – *Painkiller: Hell Wars* (Xbox)

Oftentimes, the discussion centers on technical aspects related to computer graphics or video formats. For example, reviewers might discuss issues such as framerates, video formats and resolution, pop-up, or directly address what seem to be limitations in the implementation of the game.

"While no 16:9 mode is available, the game does run in 480p, which makes a huge difference for any HDTV owners out there." – *Trauma Center: Second Opinion* (Wii)

Interestingly enough, the technical capabilities of the hardware are also often referred to in terms of whether or not the hardware is being utilized to its full potential. The underlying tone seems to be one of “more is better”, and that, particularly in the case of console games, a game that utilizes the hardware platform to its maximum capabilities is somehow “better”.

"Far Cry Instincts was one of the best games released on the Xbox last year. It was also one of the most demanding, and you could easily tell that the Xbox was being pushed to its limits. Unfortunately, Xbox 360 owners looking to run the game on their next-generation consoles haven't had any luck; the game isn't currently backward compatible with the Xbox 360." - FarCry Instincts: Predator (Xbox 360)

3.8 Design Hypothesis

The *Design Hypothesis* was another emergent theme whose appearance surprised us. We often found passages of game reviews where the reviewer openly hypothesized (or guessed) about the goals or intentions of the game developers. These hypotheses can be viewed as, generally speaking, an attempt to rationalize or explain certain design decisions in the game.

"It's almost as if the designers still wanted to keep a thin layer of abstraction there to maintain the idea that this is a tactical game, not a shooter." - Full Spectrum Warrior: Ten Hammers (Xbox)

"There are always three suspects in any case, and eventually you'll get warrants to bring them all in. The third one you bring in is always the guilty party. [...] Is it some kind of lame tie-in to the fact that it's the third Las Vegas game, and that there's a 3 in the title? Did someone actually think this was clever?" - CSI: 3 Dimensions of Murder (PC)

As in the *Suggestions for Improvement* theme described earlier, this theme highlights the implicit assumption of the role that game reviews play in the games industry. By directly addressing the creators of the game, reviews not only assume that industry members read game reviews but that they also incorporate that into their work. Game reviews are thus presumably part of a dialogue between game creators and game reviewers. More specifically, we can say that game reviews often actively “call out” game creators for their design and implementation decisions asking them to explain why things were done in a certain way.

3.9 Industry

Game reviews also often find the space to comment on the state of the games industry in general or discuss industry-related information that may be relevant for the game being reviewed. The following three excerpts provide examples of this theme by discussing developer/publisher relationships, market trends, and business strategies.

"[...] but you won't be able to shake the feeling that this game exists as a contractual obligation between Activision and DreamWorks." - Over the Hedge (Xbox)

"Electronic Arts seems like one of the last companies to cash in on its past with some sort of retro compilation, but it has finally happened" - EA Replay (PSP)

"But Wii Sports is also significant because it is the perfect representation of a new development direction for Nintendo - one focused on simple gameplay controls and uncomplicated, primitive graphics. The title is the result of a company-wide effort to win over the elusive non-gamer -- your mom, your dad, and maybe even your grandfather, too." - Wii Sports (Wii)

Some reviews also comment on business models adopted in the games industry. References to in-game advertising, product placement, and digital distribution are some of the concepts commonly referred to or discussed.

"Big Bumpin' is one of three games being sold at Burger King as part of a limited-time promotion. Each game is available for around \$4, provided you buy some food to go with it. [...] Rather than the despicable acts usually associated with product placement--the Burger King's appearance in Fight Night Round 3 immediately comes to mind--these games are top-to-bottom advertisements." - Big Bumpin' (Xbox)

3.10 The Missing Theme

We also want to note something that was notoriously absent in game reviews: discussion pertaining to the methods and means through which game reviews are conducted. Aarseth notes, in the context of game analysis, the importance of acknowledging a methodology of play (Aarseth 2004) and Buffa hints that game reviewers might not actually play the games they review (2006a). What would the reader stand to gain if he knew that the reviewer did not complete the game? Does knowing that the game was played with the help of a strategy guide make a difference? In the case of games that are open-ended, how much playtime is enough for an adequate review? Stuart notes how game reviewers rarely have more than a couple of days to play a game (2005). In what ways does this influence or affect a game review? These aren't questions for which we have answers. However, we feel that they highlight an issue that is perhaps absent in the discourse of games. As the *Reader Advice* theme suggests, understanding a game comes not only from what is in the game, but also from what the player brings to the table when it is played.

4. DISCUSSION

Jenkins describes how “games provide the basis for social interactions at home, at school and at the video arcades. Children talk about the games together, over the telephone or now, over the Internet, as well as in person, on the playground or at the school cafeteria. Boys compare notes, map strategies, share tips, and show off their skills, and this exchange of video game lore provides the basis for more complex social relations (Jenkins 1998).” What role do game reviews play in the scenario Jenkins describes? Do these boys talk about games as game reviews do? Although we don't address it directly in this paper, we want to understand the role that game reviews play in games literacy and the meanings that people make from videogames.

Table 1: Summary of Themes Found and Descriptions

Theme	Description
Description	What you need to do to play this game as well as its features, modes, and characteristics.
Personal Experience	Emotions felt due to the game (during or after play). Also includes technical problems experienced.
Reader Advice	Recommendations, strategies for success and enjoyment of game as well as discussion of the skills or abilities necessary to play this game.
Design Suggestions	Discussion of features that are missing or lacking or suggestions for future improvement of game.
Media Context	Contextualization of game with respect to non-game media properties from film, books, TV shows, comic books, and so on.
Game Context	Contextualization of the game with respect to other games, game genres and their conventions as well as the history of games in general.
Technology	Affordances and role of hardware on which game runs. Includes discussion of the controllers used or other capabilities.
Design Hypotheses	Design Goals that developers/designers had for the game
Industry	Discussion of state, issues, or trends of the games industry as a whole.

Our study identified nine prevalent themes in game reviews (see Table 1). So, all together, what do these themes tell us out videogames? The themes of *Description* and *Technology* address the more expository issues of videogames. They inform the reader about what is in the game and what the player uses to play it. These issues are perhaps analogous to summarizing the plot in a film or book review. The *Technology* theme, however, reflects the importance that computation plays in videogames. While it is arguably possible to understand and enjoy films without a knowledge of the technologies used to create (or present) them, a degree of technological and computational literacy is implicitly assumed (or required) when it comes to discussing games. Does it really matter if a game utilizes the underlying hardware to its utmost capacity? Perhaps not. How about a game that implements novel gameplay ideas thanks to a technological innovation or a clever programming trick? The answer would seem to be yes. In this sense, game reviews are inextricably linked to the broader discourse of computational and procedural literacies.

The inseparable relationship between game and platform raises an issue called “innovation bias”. Dang argues that game reviews tend to focus on discussing the innovation (or lack of) a game might exhibit compared to its predecessors and that game reviewers are generally incapable of reviewing a game outside of that context (2006). The ubiquity of the *Game Context* theme is testament to the importance that older games have in understanding current ones and it is hard to imagine how this could not be the case. However, we believe that *Game Context*

plays other roles. The collection and preservation of videogames is something that has recently been drawing attention (Gooding and Terras 2008). Most efforts have concentrated on the preservation of physical artifacts and digital files (Winget and Murray 2008). Game reviews, on the other hand, can serve as “curators” of the knowledge that goes along with the artifacts and files. They help preserve videogame history. Although this may change as the history of videogames becomes longer, game reviews are one of the few places where an uninformed reader can unravel the links and historical connections that exist between games. In what ways was this game influenced by others? How has this particular game genre evolved? What design directions were attempted and ultimately abandoned? These are just a few of the things that can be teased from game reviews even considering that much of this information is implicit or presumably already familiar to their reader.

The “innovation bias” of game reviews is perhaps not a problem, but rather a feature of the medium of videogames. We may argue that a “game design” is effectively always a work-in-progress that is regularly instantiated, as it were, by the release of a game title. *Grand Theft Auto III* is arguably a revolutionary game. However, we should not forget that it is the third iteration of a game design that has been continuously polished and improved. Movie sequels don’t “improve” on the original. Games do, for the most part. While you perhaps shouldn’t watch, say, *The Godfather Part 2*, without seeing the original, the same is usually not the case for games. Why play *Age of Empires 2* after playing *Age of Empires 3*? We are, of course, generalizing, but it speaks to the particularities of the medium to note that its strengths lie in the iterative process through which games are improved and allowed to extend in new directions⁷. This evolution is also coupled to the affordances of new technologies.

The unspoken role of game reviewers as curators of game history might also help explain the *Design Suggestions* and *Design Hypothesis* themes. We found that game reviews are artifacts that attempt to establish dialogue between the consumer public (represented by the author) and those that create games. While it seems awkwardly presumptuous for a game reviewer to proffer advice on how to design better games, a game reviewer has arguably played many more games than most game developers and may thus know more about the medium. Whether or not the dialogue actually goes both ways is, however, an open question.

To conclude, although game reviews are often maligned for a variety of reasons, we have found that they are rich and varied in terms of the themes and topics they cover. To speak of game reviews as serving purely as “shopping guides” ignores the broader role they play in the discourse of games. We should not underestimate how reviews help create and shape our understanding of games and their history. That being said, we are excited by the increasing diversity of ways games journalism talks about games. For example, British videogames magazine *Edge* features what are perhaps two subgenres of traditional game reviews: ‘The Making of...’ and ‘Time Extend’. The former provides a view behind the process of creation of a particular

⁷ The film industry, with its recent interest in multiple editions of a film (directors, extended, etc.), is perhaps taking a cue from games.

game while the latter constitutes a retrospective in-depth game review focusing, with the benefit of hindsight, on some of the more interesting or innovative qualities of a particular game.

5. FUTURE WORK

We are currently using our findings from this article as part of a new research study where we analyze a larger number of game reviews. The results from this study will hopefully provide us with deeper insights on common structural patterns as well as possible correlations between the themes we've identified and broader issues. For instance, we look forward to exploring potential differences and similarities between game reviews, other kinds of reviews (film and book), and media (print or web).

6. ACKNOWLEDGMENTS

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7. REFERENCES

- [1] Aarseth, E. (2004). Playing Research: Methodological Approaches to Game Analysis. Game Approaches / Spil-veje. Papers from spilforskning.dk Conference August 28-29, 2003. W. Bo Kampmann, Spilforskning.dk.
- [2] Bogost, I. and N. Montfort (2007). New Media as Material Constraint: An Introduction to Platform Studies. 1st International HASTAC Conference. Duke University, Durham NC.
- [3] Bolter, J. D. and R. Grusin (1999). Remediation: Understanding New Media. Cambridge, Massachusetts, The MIT Press.
- [4] Buffa, C. (2006a). "How to Fix Videogame Journalism." Retrieved December 15, 2008, from <http://www.gamedaily.com/articles/features/how-to-fix-videogame-journalism>.
- [5] Buffa, C. (2006b). "Why Videogame Journalism Sucks." Retrieved December 15, 2008, from <http://www.gamedaily.com/articles/features/opinion-why-videogame-journalism-sucks/69180/?biz=1>.
- [6] Costikyan, G. (2008). "Game Criticism, Why We Need It, and Why Reviews Aren't It." Retrieved December 15, 2008, from <http://playthisthing.com/game-criticism-why-we-need-it-and-why-reviews-arent-it>.
- [7] Dang, A. (2006). "The 5 Problems with Videogame Journalism." Retrieved Dec 11, 2008, from http://firingsquad.com/features/problems_with_video_game_journalism/.
- [8] Delay, C., V. Arundel, et al. (2006). "Post Mortem: Detonating Introversion's DEFCON." Game Developer December: 26-29.
- [9] Friedl, M. (2002). Online Game Interactivity Theory. Hingham, MA, Charles River Media.
- [10] Gillen, K. (2004). "The New Games Journalism." Retrieved September 25, 2008, from <http://alwaysblack.com/blackbox/ngj.html>.
- [11] Glaser, B. and A. Strauss (1967). The Discovery of Grounded Theory: Strategies for Qualitative Research. Chicago, Aldine.
- [12] Gooding, P. and M. Terras (2008). "Grand Theft Archive: A Quantitative Analysis of the State of Computer Game Preservation." The International Journal of Digital Curation 3(2): 19-40.
- [13] Jenkins, H. (1998). Complete freedom of movement: Videogames as gendered playspaces. From Barbie to Mortal Kombat: Perspectives on Gender and Computer Games. J. Cassell and H. Jenkins. Cambridge, MA, MIT Press: 323-356.
- [14] Klostermann, C. (2006). "The Lester Bangs of Videogames." Esquire Retrieved December 8, 2008, from http://www.esquire.com/features/ESQ0706KLOSTER_66.
- [15] McCrea, C. (2007). "Fear and Loading in Game Journalism." Retrieved December 15, 2008, from http://www.escapistmagazine.com/articles/view/issues/issue_108/1318-Fear-and-Loading-in-Game-Journalism.
- [16] McNamara, A. (2008). Up Against the Wall: Game Makers Take On the Press. Game Developer's Conference 08. San Francisco, CA.
- [17] Neuman, W. L. (2000). Social Research Methods (4th Edition). Boston, MA, Allyn & Bacon.
- [18] Stuart, K. (2005). "State of play: is there a role for the New Games Journalism." Retrieved Feb 26, 2008, from http://blogs.guardian.co.uk/games/archives/game_culture/2005/02/state_of_play_is_there_a_role_for_the_new_games_journalism.html.
- [19] Thomas, D. (2007). Game Criticism Redefined: "Is This Game Any Good"? The Videogame Style Guide and Reference Manual. D. Thomas, K. Orland and S. Steinberg: 97-99.
- [20] Thomas, D., K. Orland, et al. (2007). The Videogame Style Guide. Game Press & International Game Journalists Association.
- [21] Winget, M. A. and C. Murray (2008). Collecting and Preserving Videogames and Their Related Materials: A Review of Current Practice, Game-Related Archives and Research Projects. Annual Meeting of the American Society for Information Science & Technology (ASIS&T). Columbus, OH.
- [22] Zagal, J. P. (2008). A Framework for Games Literacy and Understanding Games. ACM Futureplay 2008 Conference Proceedings. B. Kapralos, M. Katchabaw and J. Rajnovich. Toronto, Canada, ACM: 33-40.
- [23] Zagal, J. P. and A. Bruckman (2007). From Gamers to Scholars: Challenges of Teaching Game Studies. Proceedings of the Digital Games Research Association International Conference (DiGRA) 2007. A. Baba. Tokyo, Japan: 575-582.