University of Alberta

Genre Evolution in Video Games and a Framework for Analysis

by

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Abstract

The generic categorization of video games is fundamental to discourse about games, but specific developments surrounding game genres are not often discussed. As games have matured, there has been considerable genre cross pollination. Genre monikers have become complex and they differ from source to source. Originally genre categorization was straightforward and almost universal. Games were divided into simple categories. Many review outlets and academic works now list upwards of forty different genres for games and these differ from publication to publication. Many of these genre monikers are simply the combination of other genres. While there is a lack of agreement upon these specific terms, the result is clear: Video games are evolving beyond the current genre nomenclature. This evolution is acknowledged and glossed over at best and often entirely ignored and taken for granted. The history of literary genres, in particular the novel, parallels the video game case. Aristotelian genres were originally accepted as canonical and gradually opinion changed to accept literary genres as evolutionary, like video games. By looking at how genres names have evolved over the past two decades and tracing some of the history of literary genres I will make the case for a new way of looking at video games. This framework uses Mikhail Bakhtin's work in *The Dialogic Imagination* (1981) to view video games through three different, but related lenses, Media History, Chronotope and Player/Game Interaction. Media History refers to the way earlier games and media works influence and are integrated into a video game. Chronotope refers to the specific time/space relationship present in a game and player/game interaction is the way in which a player interacts with a game to play it. These three facets create a framework that allows a relatively complete way to discuss games without relying on, but allowing for discussion of genres.

Table of Contents

List of Figures

List of Tables

Introduction

The generic categorization of video games has been fundamental to discourse about games, but specific developments surrounding game genres are not often discussed. As games have matured there has been extensive genre cross pollination. Genre monikers have become complex and they differ from source to source. This has led to confusion and lack of cohesion in the genre concept for games, undermining the original purpose of genres.

Originally genre categorization was simple and almost universal. Games were divided into simple categories like Action, Adventure, Simulation and Role Playing Game (RPG) by their styles of gameplay. As the medium of games progressed, genres began to intertwine. Action game elements combined with RPG elements to create the Action-RPG genre. Increased processing power led to ultra-realistic racing simulations. Many review outlets, game design texts and academic works now list upwards of forty different genres under which games are categorized and these differ from publication to publication. Many of these genre monikers are simply combinations of other genres. While there is a lack of agreement upon these specific terms, the result is clear: Video games are evolving beyond the original genre nomenclature and this evolution is acknowledged and glossed over at best and often completely ignored and taken for granted. Many game design texts present taxonomies of potential genres to consider when developing a game, but these differ from book to book and, by and large, do not make note of changing genres. Game studies, on the other hand, acknowledges the idea of evolving genres, but focuses on creating taxonomies then admitting they will change. The actual nature of this genre evolution is not being discussed.

Literary genres, in particular the novel, evolved and changed in ways very similar to video games. Aristotelian genres were originally accepted as canonical but gradually opinion changed to accept literary genres as evolutionary, like video games. Unlike video games, however, there has been extensive writing about genre evolution and genre itself in literary theory. Since the Romantic era literary scholars have pondered genre. The entire history of literary genre parallels games but by the early twentieth century some of what scholars were saying, Mikhael Bakhtin in particular, is directly applicable to game genres.

Chapter one examines how the genre lists of three high profile game journalism sites have changed over the past two decades to see how game genres have evolved when categorized organically, as they are reviewed, as opposed to using explicitly defined taxonomies. Annual reports from the Electronics Service Association are also examined, as each one contains explicitly defined genre taxonomies. These sources will be compared to see how they treat genres and genre evolution.

Chapter two looks at game design literature and shows the different ways genre has been dealt with, from passing remarks to in-depth taxonomies, both acknowledging genre evolution and ignoring it completely.

Chapter three looks to game studies literature, examining both literature explicitly dealing with genres and literature dealing with more general categorization and understanding of video games, but not strictly referencing genres. These general works present frameworks for analyzing games, but not through genres. These frameworks do, however, show the usefulness of having a framework within which to analyze games and lead to my own framework, after having looked at genres in literary theory.

Chapter four traces the analysis of genre through the history of literary theory, showing that literary theory dealt with a similar evolution of genre, though over a much longer timeline. Russian Formalism and Mikhael Bakhtin's work on the novel, in particular give useful analysis of genre for use in a game framework. Bakhtin's idea of space-time, called the chronotope, and the dialogic history are particularly applicable to video games as any given game has a specific treatment of space and time and an inherent relationship between the two. A game will also have some evident links to prior media forms allowing a critic to trace influences to better understand the game.

In chapter five, the findings from the previous chapters are brought together into an analysis framework. This will support the idea of evolutionary genres in games and lead into a new framework for analyzing games. The framework uses three big ideas, as lenses to dissect games. All three are linked and no one aspect can stand alone, but they need not be applied to a game in any particular order.

- Bakhtin's ideas of the dialogic history of a text, or the way a given text can be broken down into component parts coming from older works that, taken together, make something new.
- Bakhtin's chronotope, or the time-space of a work; how time and space interrelate to make the specific experience the author intends. Different genres and works have different and specific chrotonotopes making unique experiences but also taking cues from other works in many cases. The chronotope also builds on the dialogic history.
- Interaction is what makes games a unique medium and is deemed the medium's defining feature by many scholars. Looking at the method of interaction as well as related features such as perspective and specific hardware for playing a game. A game's interaction often builds on both the dialogic history and the chronotope.

As these ideas are introduced their direct application to video games will be explained and examples of specific games will be given. *Batman: Arkham Asylum*

(2009) will be used as the primary example because of its strong ties to the Batman franchise, and therefore other media, and its critically acclaimed gameplay.

Through the prior research, showing genre to be problematic and limiting, and this framework I will show that this framework can be used to critically analyze games, allowing genre to be referenced, but not relying on genre for the analysis.

1. Video Game Genres

Introducing Genre

Genre, in video games, is a term applied to a game, intended to convey information about the game based upon its characteristics. Ernest Adams (2007) explains genres thus,

> People need a way to talk about the kinds of games they like to play, and game retailers like to display similar games together. The concept of genre helps them do this. A game's gameplay determines its genre. Games can have identical settings and yet belong to different genres, so a medieval role playing game belongs to a different genre than a medieval war game. Similarly, a construction and management game can be set in any location and time period, but it is still a construction and management game. (p. 390)

Tracy Fullerton (2008) describes genres as giving, "designers and publishers a common language for describing styles of play. They form a shorthand for understanding what market a game is intended for, what platforms the game will be best suited to, who should be developing a particular title, etc." (p. 415). Genres form the fundamental categorization system for video games, allowing both developers and consumers to know what to expect from a given game before developing, purchasing or playing it. Gameplay characteristics are the largest determining factor for a game's genre, but representational characteristics can also influence its categorization. Early game genres were few and were strongly different from one another. Most early categorization of genres list Fighting, Platform, Action, Shooter, Racing, Adventure, RPG, Sports, Strategy, Simulation or Puzzle, though they differ somewhat from source to source with some listing fewer genres. Adventure

and RPG, for example, are sometimes grouped together as they are both heavily story driven and Platform games are sometimes listed separately from Action games due to their prevalence, though both Action and Platformer games tend to rely on quick reflexes and game flow over story. Despite differences, these early genre lists are as close to a genre canon as can be found for video games, though they are only guidelines to start genre analysis and are not universally agreed upon. Over the past twelve to fifteen years there has been an explosion of genres with many more than the core genres being listed by most outlets and bodies categorizing genre and no two lists are the same. Many of these new genres are combinations of older terms, Action Adventure being the most widely accepted. These new genres and combined genres show that video game genres are evolving as genre elements are transposed between genres and creatively combined to create new genres and new types of games within older genres. The proliferation of new genres and differing nomenclature, however, undermine the idea of categorizing games for developers and players to understand what to expect from a game, especially considering there has never been universal agreement on genres. This section will examine three prominent online game news sources, Gamespot, Gamespy and IGN, to see which genres they have listed and how the listings have changed from 1998 to 2010, paying special attention to evolving genres. Then the Electronic Software Association's (ESA) Essential Facts from 2005 to 2010 will be examined, specifically their list of genres and how it has changed.

Many game review sites categorize their review listing by genre so visitors can quickly display lists of the types of games they want to play. IGN.com, Gamespy.com and Gamespot.com are three well established and often referenced game review sites. Their listings have developed organically over time, rather than being

taxonomies devised all at once. Using the Internet Archive's Wayback Machine website archive, it is possible to trace the genre lists on these three sites to see how their listings have changed from 1998 to 2010. Table 1 lists the game genres used by IGN.com, Gamespy.com and Gamespot.com, from the earliest available references on the Wayback Machine.[1] Genres in the table are organized to line up identical or similar genres, showing the parallels in the early genre taxonomies.

IGN.com	**Gamespy.com[2]**	**Gamespot.com**
(From 1998)	**(From 1998)**	**(from 1997)**
Fighting		Fighting
Platform		Platform
Action	Action	Shooting
Racing		Driving/Flying
Adventure		Adventure/RPG
RPG	RPG	
Sports	Sports	Sports
Strategy	Strategy	Strategy/Sim
Simulation		
Puzzle		Puzzle/Classic

Table 1 Early game review genres

Until 2005 Gamespy approached genre in a different way than the other two sites, having sub-sites for selected popular genres, rather than separating games by genre within their reviews. Each of the three publications notes Action, RPG, Sports and Strategy as fundamental categories, with the other genres listed by IGN and Gamespot being almost the same, though organized slightly differently. The only major differences are Gamespot listing Classic and Flying where IGN does not, and Gamespot's choice of Shooting as a genre, while IGN chose Action to be all encompassing. Genre demarcations similar to these form the foundation of genre lists. Most authors and publications list some form of Strategy, Action, Driving/Racing, Simulation, Puzzle, Sports and Adventure genres, though not all are

[1]The Wayback Machine is an archive of past versions of web sites, organized by site and date. http://www.archive.org/web/web.php

[2] No specific genres, rather sub-sites about particular genres

always represented. These genres are as close to genre canon as can be found. These genres are either linked to pre-video game activities, often board or card games, or are strongly different from each other, as with the fast pace of Action games versus the slow, story-focused progress of Adventure games. The result is a fairly strong difference between these genres, though they are sometimes shown as intersecting. These lists of genres are quite close to the list used in the ESA's "Essential Facts" up until 2010, despite game review sites' lists having drastically changed over that same time.

From 1998 to 2010 these three websites saw an explosion of new genres, with each site going from the genres listed in Table 1 to around forty genres each, with each site listing different genres. New genres appear and disappear over this time, but the canonical genres change very little. This chapter will trace the evolution of genres on IGN in detail, as the Wayback Machine has a large number of archived pages for IGN. The genre lists on Gamespy and Gamespot from 1998 will also be compared with their current lists. Detailed evolutionary analysis is not possible for those sites there are fewer archived pages and their genre lists are not as well organized as that of IGN.

IGN Genre History

In order to show both the genres listed and how they interlink a series of genre diagrams have been developed.

Figure 1 IGN Genre Map Legend

Each map shows all the genres from IGN.com for that year and, after the first year each map also displays the genres that were added or removed, as compared to the last year mapped. To emphasize new genres and removed genres dotted outlines and muted colours are used. Genres that are combinations of other genres are colour coded to illustrate that. See figure 1 for the diagrams' legend. The maps do not go year by year, but show all the years available on the Wayback Machine. The maps are organized around the final genre layout from 2010, so in the earlier years there is significant white space, but as more genres appear, the whitespace fills in without the original genres moving at all. An animation of the IGN timeline showing genres appearing and disappearing from 1998 to 2010 can be found here: http://www.vimeo.com/22619042

Figure 2 IGN Genres, 1998 (NOTE: genres are organized based upon final 2010/2011 genres. Empty space will fill in as genres appear)

These are the same genres as shown in Table 1 for IGN. Genres from 1998 are canonical and simply categorized. Each genre is significantly different from the others, with the possible exception of Platform, which is sometimes categorized as a sub-genre of Action. These genres, again with the possible exception of Platform

make up the core genres for many publications. They are well established and generally accepted, as each has strong historical ties to pre video game media.

Figure 3 IGN Genres, 2000

The core genres in 2000 remain the same, with the addition of Puzzle, Wrestling, Online and Other. This is also the first year where IGN offers the ability to sort reviews by genre (sorted pages are inaccessible in the archive) implying that viewing all the games in a given genre was deemed to be a necessary feature for the site. Online and Wrestling are genres that could be related to others. Online could be a reference to early Massively Multiplayer Online games, but no links to games of that genre exist. Additionally Wrestling could be under Sports, but Wrestling games garnered much popularity independent of other Sports titles, and may be separately listed for that reason. As of 2000 there does not appear to be any genre cross pollination or evidence of evolving genres, in fact the opposite is true, and genres that could be linked are instead given separate categories.

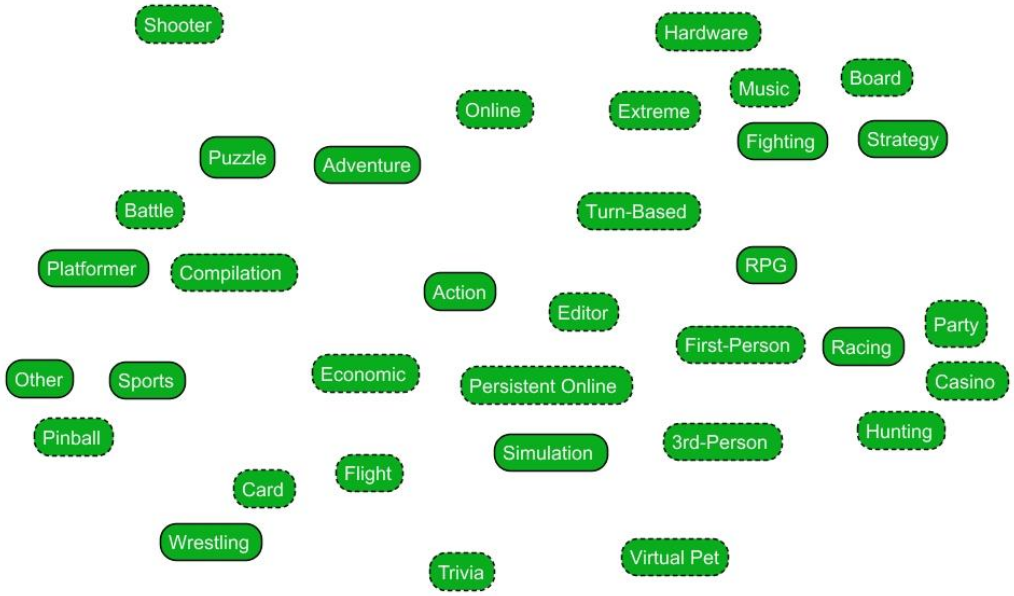

Figure 4 IGN Genres, 2002

2002 sees an explosion of genres listed, but again, none linked through nomenclature. The genres are still fragmenting. For example, there are separate genres for 3rd-Person and First-Person games and different genres for Online and Persistent Online. Genre demarcations based upon perspective and Internet connectivity will later disappear. Even Hardware is given a genre. Despite the fact that the genres are fragmenting, rather than cross pollinating at this point this explosion of genres shows genre evolution in early stages. The explosion of new genres is evidence that, in 2002, fundamental video game characteristics were changing but nomenclature was had not adjusted to address the phenomenon. The genres here show more demarcations than will later years, with genres shown separately like First-Person and Turn-Based later combining (as in Turn-Based Strategy) or being amalgamated (eventually the perspective based genres disappear). These genres could be interpreted as being linked by their names. For the purpose of these diagrams, however, I have chosen only to link new genres that

explicitly combine genres. Additionally some of these genres, like Compilation and Hardware are more categories than genres and many of these categories will later disappear and be replaced with combination genre names, owing more to the original genres listed in 1998 and less to perspective, hardware, and Internet connection characteristics.

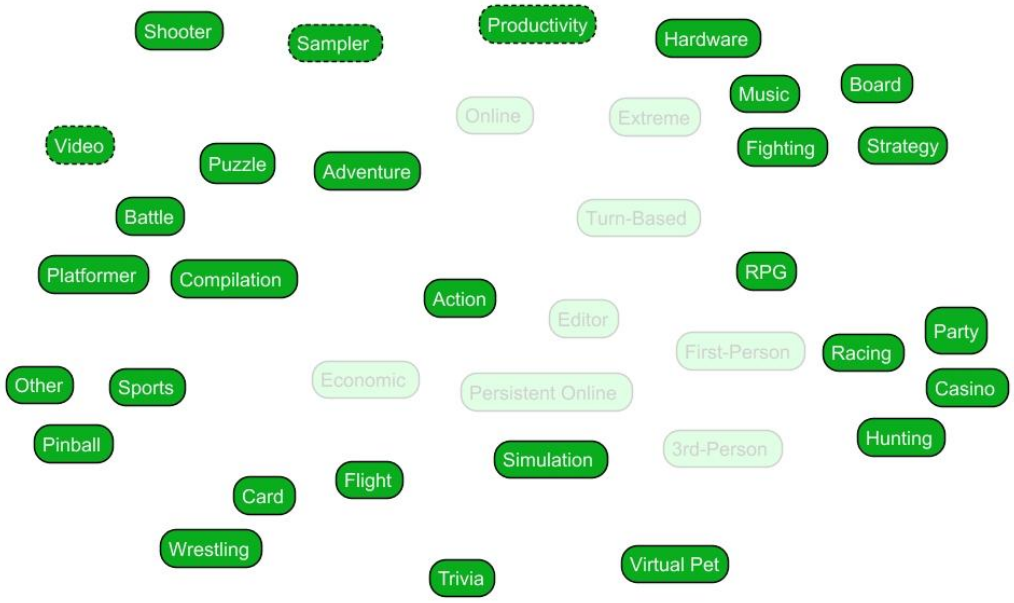

Figure 5 IGN Genres, 2005

In 2005 the perspective and Internet connection based genres disappear and Productivity is added as well as Sampler and Video. Sampler and Video seem like strange choices, but again, there are no archived pages to show games in those genres. There are still no combined genre names, but some of the more fragmented genres have disappeared leaving the genres somewhere between those seen in 2000 and 2002. This year shows further experimentation with nomenclature as genres evolve. Some genres created in 2002 disappear and a few new ones appear. Presumably some of the games previously categorized in the removed genres have been moved to pre-existing, or new genre categories.

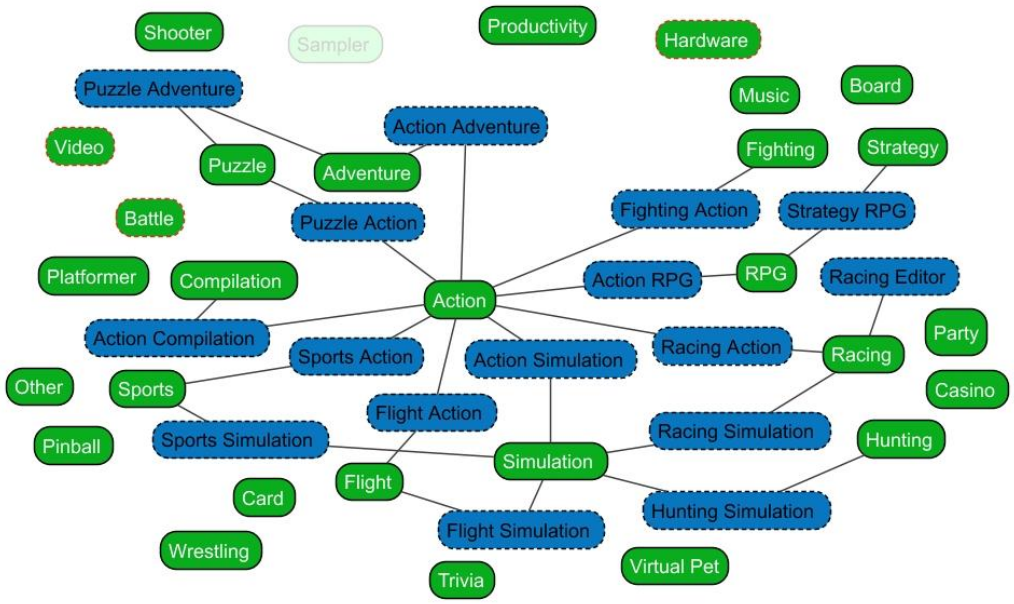

Figure 6 IGN Genres, 2007

2007 is the first year where genres made up of combinations of other genres appear, and there are many. All the core genres (those listed in 1998) are linked to other genres by at least one combination genre. Action is linked to every other one of the core genres except Strategy, though strangely not to Shooter, given that Shooters have characteristics similar to Action games. There are so many links that they can be followed through Action to indirectly link every core genre together. Some of the stranger genres like Sampler, Video and Hardware have been removed. Most of the core genres are linked to numerous other genres by combinatory terms and the more experimental genre names have all but disappeared leaving only Other as a catch-all genre. This genre listing shows IGN's nomenclature adjusting to the genre evolution that had been hinted at in earlier lists. There are eighteen genres made up of combinations of other genres and seventeen of them are new for 2007.

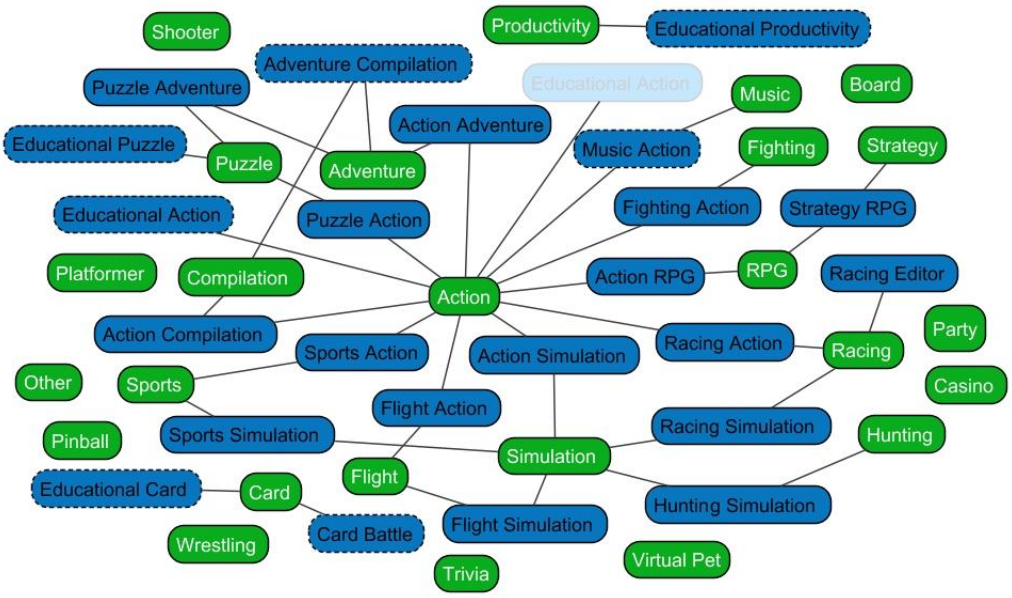

Figure 7 IGN Genres, 2010/2011

2010/2011 shows the same combined genre names with a few additions, mostly educational games. This coincides with the recent explosion of "educational" games, fitness training, brain-training, etc., though Educational Action has been removed as a genre. The reason for that is not clear. This most recent list of IGN genres has a total of forty nine genres, of which twenty three, or almost half, are hybrid genres. These hybrid genres show that genres are evolving and new genres, made up of characteristic of at least two other genres are becoming more and more common.

Between 1998 and 2010 IGN's genre listing underwent major changes. First there was an explosion of specific genre names, with no explicit links between genres. Many of these genres then disappeared and were replaced with combined genre names. These combined names make up almost half of the listed genres on IGN. This shows that, at least on IGN, genre categorization has been evolving, with new genres being created. More recently the new genres have been the result of genre cross pollination with new genres being made up of combinations of other genres.

Gamespy and Gamespot's Current Genres

In this section the current genre listings of Gamespot and Gamespy are examined, with some comments on past listing trends. More detailed analysis of these publications was not possible as there were not enough pages saved between 1998 and 2010 in the Wayback Machine Archive.

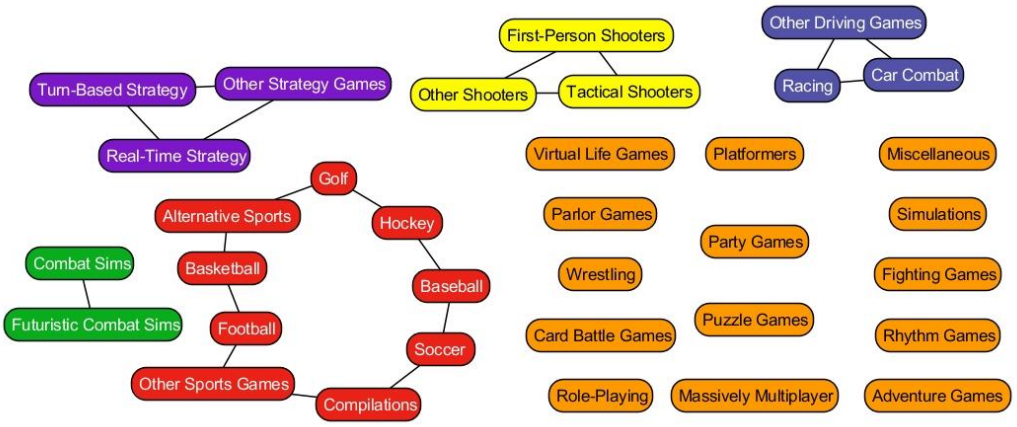

Figure 8 Gamespot Genres, 2005-2010 (linked genres colour coded as per my interpretation, since Gamespot has no combined genres)

Gamespot and IGN's genres were very similar in 1998 (see Figure 1) but Gamespot's current list of genres is very different from that of IGN. Gamespot has no combined genre listings, instead choosing to group based on gameplay and representation. Unlike the IGN list, here I have marked implicit links in genres, as there are no explicit links. This helps with comparing to IGN and Gamespy's lists, but also highlights the differences in Gamespot's list. Sports games are differentiated by sport, rather than game type (Sports Simulation, or Sports Action on IGN). They have broken up Strategy into gameplay related types, Real-Time, Turn-Based and Other. Shooters are broken up in a similar way and they also use Combat Sims as a genre. Combat Sims, according to the list of game are Flight Simulations and Naval Simulations and Futuristic Combat Sims are Space Flight Simulations and Giant

Robot type games. There also is a genre for Car Combat games, which is differentiated from Racing and Other Driving games. Despite differences, Gamespot's genre list has certainly grown and shows genre evolution, though not in the same way as IGN. Gamespot's genre evolution appears much more localized with only "subgenres" and no combined genres. Though a lack of archived pages makes it difficult to conclusively determine, it appears that Gamespy has not changed their genre list since 2005. That may contribute to the lack of combined genres, as IGN also had none in 2005. Both IGN and Gamespy started with very similar lists in 1998, but over the past twelve years of genre growth and evolution their lists became very dissimilar. IGN's list explicitly shows genres combining into new genres, while Gamespot's simply shows new genres that can be inferred as being related. Both are evidence of genre evolution but Gamespot's list shows less evidence of genres combining as part of that evolution.

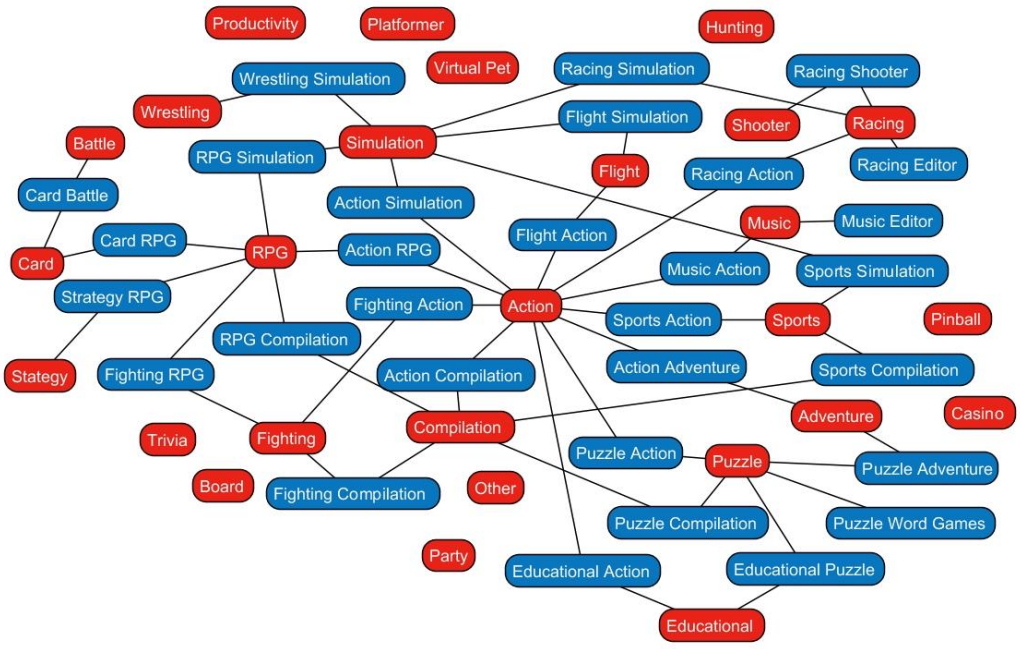

Figure 9 Gamespy Genres, 2010

Gamespy's 2010 genre listing is similar to IGN's with many combined genres, in contrast to Gamespot's list, with no combined genres. In fact Gamespy has even more combined genres, thirty to IGN's twenty three, with one major difference; Gamespy has no category for Shooter. It appears that Gamespy's list of genres underwent some evolution. Around 2001/2002 the site lists mostly canonical genres; though in 2002 Action/Adventure and Combat Flight Sim appear, showing Gamespy to have listed hybrid genres before IGN or Gamespot. Gamespy and IGN end up with similar genre lists and underwent similar evolutionary processes.

Genre Evolution

By tracing IGN's genres from 1998 to 2010 as well as looking at other major publications' genre lists from 1998 and 2010 it becomes apparent that genres are changing and evolving. All three publications show similar overall evolution, with more genres appearing over time. However specific genre names differ between publications with Gamespot, in particular, keeping the same genres since 2005 while the other two publications went on to use combined genre names. Some patterns emerge when examining IGN's evolving genres list. From 1998 to 2002 there is a large increase in the number of genres listed. This is likely evidence of game reviewers' attempts to address genre developments. New types of games beget new genres, until later when reviewers make a conscious effort to amalgamate genres into hybrid genres.

Some games are genre categorized by developers but it is likely that IGN reviewers do the genre categorization themselves. Since game genres were evolving over this time it stands to reason that IGN's taxonomy of genres would change to initially adjust to these changes. This could have been an editorial decision, or could simply be reviewers trying to organize genres in a comprehensive and comprehensible way.

This can be seen in the large number of new, but not combined genres in 2002, followed by some genres disappearing in 2005, and a few others appearing. These genres are evidence of the games industry innovating, with new types of games being given new genres. This is followed in 2007 by a large influx of combined genres and only one genre disappearing. This appears to be the next evolutionary stage. A large number of genres had appeared and stabilized and the next developmental step was genre cross pollination as developers took aspects of different genres and combined them to make new genres. These bursts of evolutionary activity within games show genre evolution to be similar to punctuated equilibrium, an evolutionary concept introduced by Niles Eldredge and Stephen Jay Gould in 1972. In the article Darwinian evolution is described as gradual linear changes,

> Paleontology's view of speciation has been dominated by the picture of "phyletic gradualism." It holds that new species arise from the slow and steady transformation of entire populations. Under its influence, we seek unbroken fossil series linking two forms by insensible gradation as the only complete mirror of Darwinian processes; we ascribe all breaks to imperfections in the record. (p. 84)

In contrast, punctuated equilibrium shows evolutionary history to be largely static with bursts of evolutionary activity,

> The history of life is more adequately represented by a picture of "punctuated equilibria" than by the notion of phyletic gradualism. The history of evolution is not one of stately unfolding, but a story of

> homeostatic equilibria, disturbed only "rarely" (i.e., rather often in the fullness of time) by rapid and episodic events of speciation. (p. 84)

The history of video games, so far, has been too short to say definitively how exactly the genres evolve. The evidence from the Wayback Machine exists only in already discrete temporal references, but shown through those references are taxonomies that stay static for a number of years then drastically change over a short time. Taking into account the reviewers adjusting to these changes as being a reason for some of the alterations in taxonomies genre evolution looks to be punctuated equilibrium.

Evolution, in nature, is how the strongest creatures survive. While this may not be the exact case in video game genres, in 2007, the year that combined genres first appeared, was a year where a few very high profile games with overt genre cross pollination were released to great critical acclaim. *Bioshock* (2007) and *Call of Duty 4: Modern Warfare* (2007) both mixed First Person Shooter characteristics and RPG elements and have been recognized as classics of the video game form.

Another effect of this organic genre evolution is a lack of consistency in taxonomies. Since IGN, Gamespot and Gamespy each developed their genres over a period of years through categorizing games, rather than devising the overall taxonomies, each one is different and has been updated at different times. Gamespot and IGN's current taxonomies look vastly different. Gamespot's has not been updated since 2005, before IGN's taxonomy even had combined genres. Genre evolution is clearly happening and is shaping how games are viewed and categorized, but it is happening organically without much thought being put into consistency and

standardization. Because of this, similar taxonomies develop that are different in small but noticeable ways. Differences in taxonomies undermine the perception of genre as a universal concept and are detrimental to the usefulness of genre, if it is taken to be a universal concept, fundamental to the understanding of games. In many ways genres are still presented as being an easy and comprehensible way for both developers and consumers to organize and understand games, but major review outlets presenting different taxonomies shows that this is not the case for genres. Taxonomies are problematic because so many variables go into genre categorization that it is impossible to create one taxonomy that is universally useful and will never have to be revised.

This begs the question; is genre evolution bad because it is confusing the genre concept? I do not think so. Genre evolution is evidence of the medium changing for the better. Video games are a relatively new medium that have exploded over the past decade. The evolution of genre taxonomies shows that the medium is in a state of flux. This evolution is for the betterment of the medium. IGN's 2007 list shows earlier experimentation with genre names coalescing into combined genres. 2007, in the games industry, was a year of stabilization. There were three competing consoles, each well established, and the graphics race had slowed down. This allowed developers greater freedom of experimentation and resulted in a large number of critically acclaimed games that combined characteristics from different genres. In 2008 G4TV's Adam Sessler said of 2007, "With three consoles competing, and the technology as advanced as it is, gamers are having the best year in the history of videogames." High profile publications like The Guardian (Howson, 2007), as well as gaming sites like Infendo and ps3blog, also posited that it may have been

the single best year in gaming. It is unlikely that the appearance of combined genres in a year hailed as, possibly, the best in gaming is coincidence.

Despite the critical acclaim these new types of games garner, the old genre model persists. It is easy to see why it was originally useful but the insistence on creating taxonomies and the reliance on them for game categorization is contrary to the evolution of the medium. More categories, even ones that combine existing categories only lead to fragmentation in genre discourse and do not help consumers and developers in consuming or developing games.

Electronic Software Association's Essential Facts

The ESA is "the U.S. association exclusively dedicated to serving the business and public affairs needs of companies that publish computer and video games for video game consoles, personal computers, and the Internet."[3] Each year it publishes an "Essential Facts" document outlining video game trends for the previous year. It discusses sales and demographic data, including a percentage breakdown of sales figures for each genre. Looking at these figures from 2004 to 2009 shows how the ESA has broken down genres, how those categories have changed and how sales of the designated genres have changed. While game review sites simply catalogue game genres as they review the games the ESA makes a conscious effort to collate genre data from total sales figures and it relevant for comparison. The year by year ESA listings differ greatly from the lists created by game journalism sites.

[3] http://www.theesa.com/about/index.asp

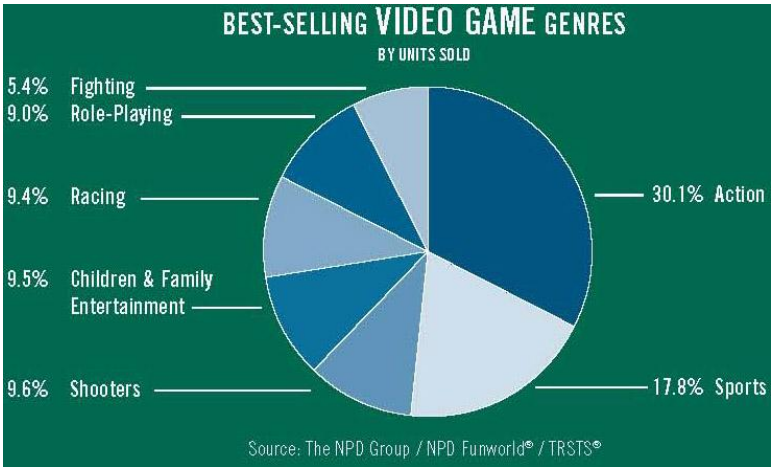

Figure 10 2004 Console Games (ESA, 2005)

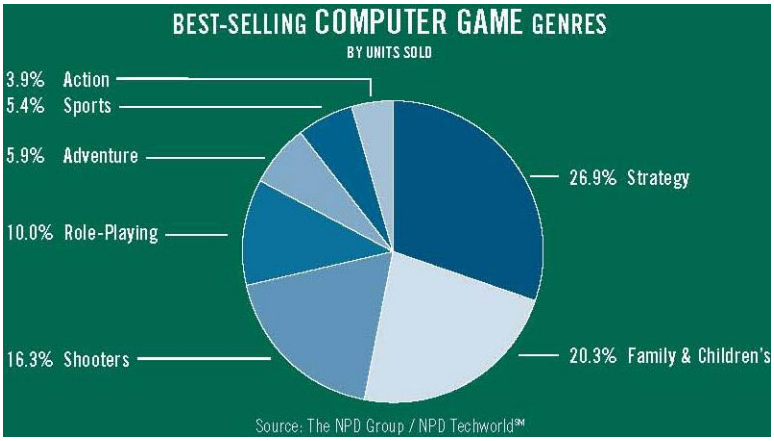

Figure 11 2004 Computer Games (ESA, 2005)

The ESA's lists of console and computer games genres for 2004 stays close to core genres with only Children & Family Entertainment being outside its scope. The two genre lists show different genres and neither list shows 100 percent of the games sold (console games shows 90.8 percent and computer games shows 88.7). This must mean not all genres are listed and the ESA's list is not a complete taxonomy of the genre landscape. Compared to gaming sites' list from 2004 this list is very short, resembling lists from five to eight years earlier. The ESA is less concerned with the genre landscape and more with sales, but these diagrams do show that despite what other sources list as genres, many of the core genres remained the most popular

genres up to 2004 or games listed outside the core genres on gaming sites were lumped in with core genre games in the ESA's list.

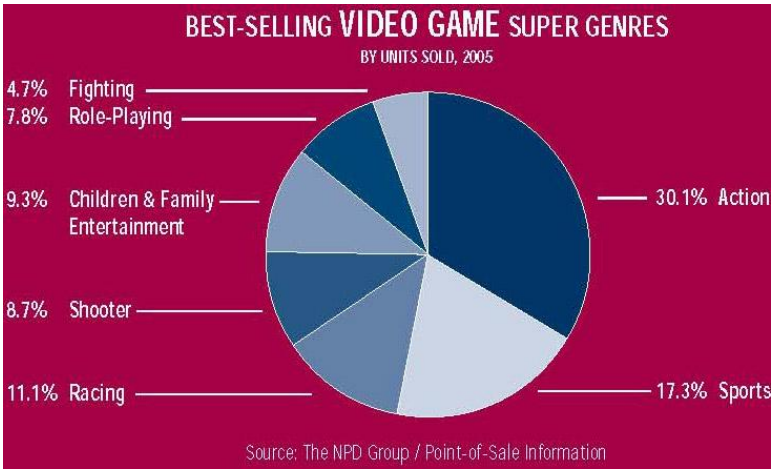

Figure 12 2005 Console Games (ESA, 2006)

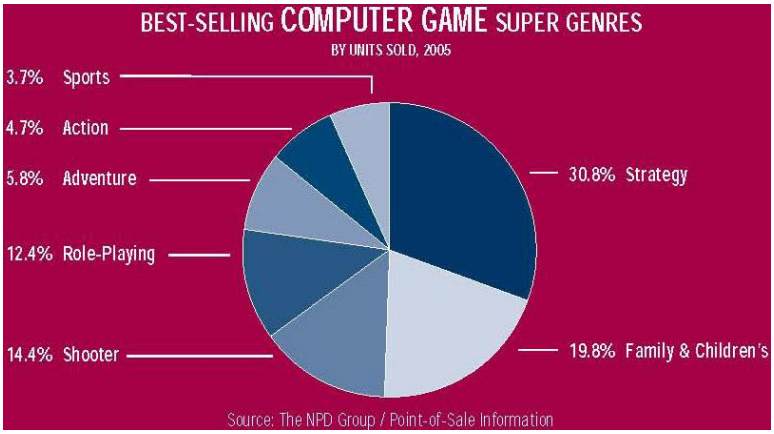

Figure 13 2005 Computer Games (ESA, 2006)

The differences between the 2004 and 2005 "Essential Facts" are relatively few. The same genres are listed as in 2004, though some sales percentages change, as do the overall percentages listed. The console games total 89 percent and the computer games total 91.6 percent. The total for console games is fewer than in 2004 and the total for computer games is more. Additionally the charts are labeled differently. The ESA claims to be reporting on super-genres, rather than genres. The

terminology changed to acknowledge that they are not reporting on all genres, but the genres listed did not change.

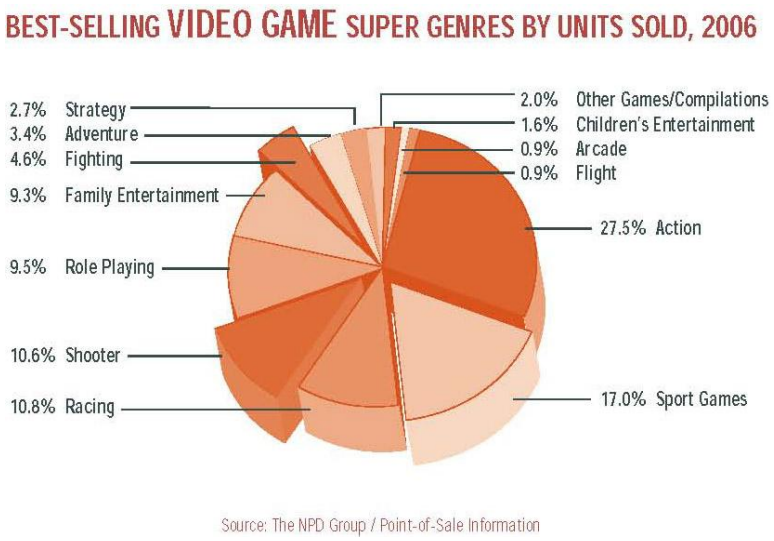

Figure 14 2006 Console Games (ESA, 2007)

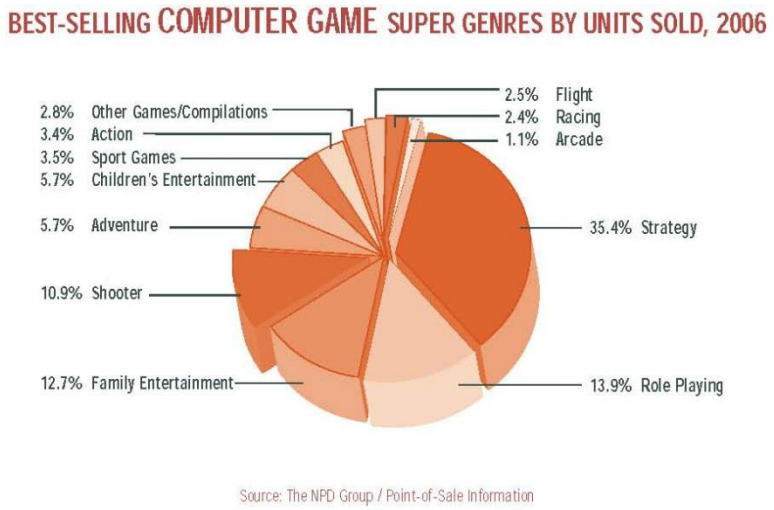

Figure 15 2006 Computer Games (ESA, 2007)

The genre sales reported for 2006 mark the first major change in the ESA's statistics. The 2005 list contained seven super genres both for console and computer, 2006's list of console games contains thirteen super genres and the list of computer super genres contains 12, almost double the year before. In addition the percentage of total sales represented went up with the console super genres representing 97.8

percent in total and the computer games representing 100 percent in total. This shows that despite still being labeled as Super Genres these genres make up most, if not all, video game sales. This is relevant as the lists presented by the ESA do not line up with genres listed by other publications at the same time. These newly introduced super genres are not strictly new genres nor are they explicitly evolutionary but the change in genre listings shows that genres changed, though to a far lesser degree than the organically created lists on game journalism sites. Family Entertainment and Children's Entertainment, for example are now listed separately and a category has been added for Other Games/Compilations. A category for Other Games shows that new genres could be appearing but not being given their own categories, perhaps more evidence of evolving genres.

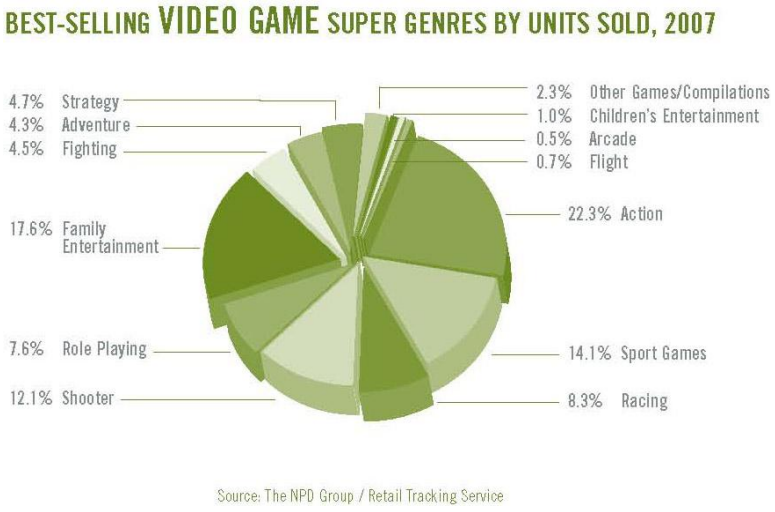

Figure 16 2007 Console Games (ESA, 2008)

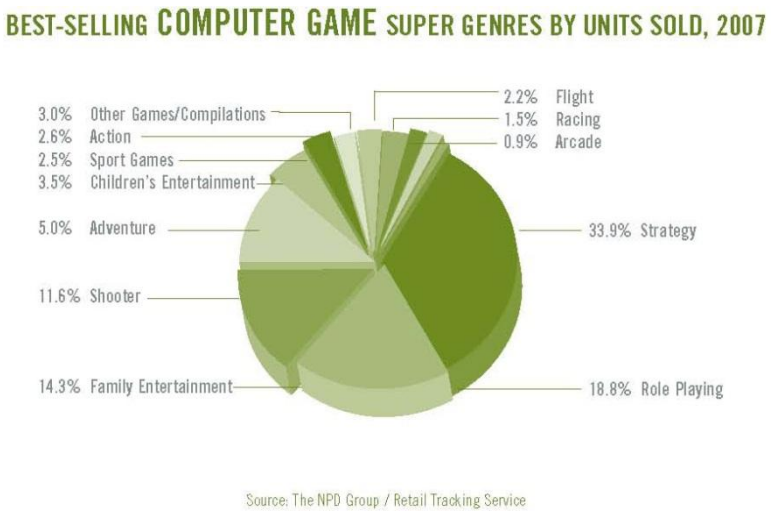

Figure 17 2007 Computer Games (ESA, 2008)[4]

Both the console and the computer games lists from 2007 are almost identical to 2008, though the percentages of games sold changed for both. The total percentages listed are both slightly lower than the previous year with console games making up 95.5 percent and computer games making up 99.8 percent. These changes are very small, but in a huge market like video games they could represent sales shifting to new genres not yet listed by the ESA.

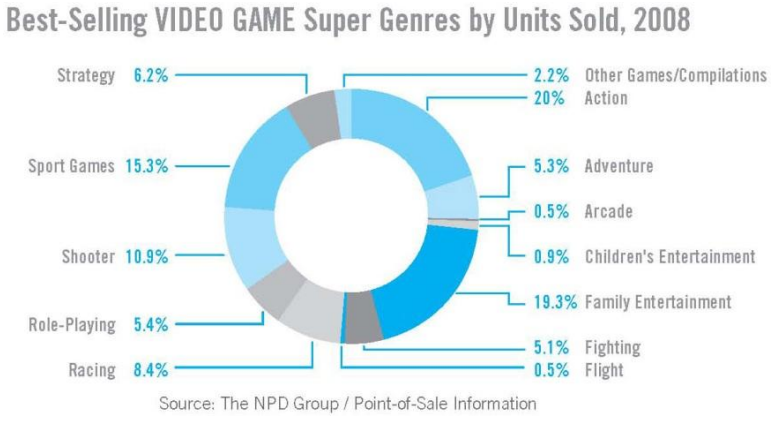

Figure 18 2008 Console Games (ESA 2009)

[4] The pie pieces in this chart are mislabeled by the ESA, but the percentages and super genres are correct.

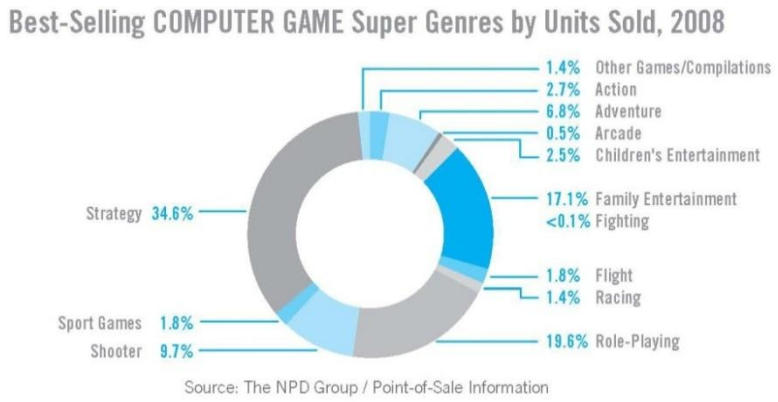

Figure 19 2008 Computer Games (ESA 2009)

2008 statistics show differing percentages as compared to the previous year, as well as the Arcade genre being added to the computer games list. For the first time in the ESA's Essential Facts the percentages of both console and computer games add up to 100 percent, implying that they are listing all the games sold that year. However, their genre list is much shorter than the lists on game journalism sites from 2007, let alone 2008. In 2007 IGN's genre list was not only much larger but had coalesced to the point of listing hybrid genres. This shows a further disconnect between genres listed by the ESA and genres reported on game review sites, showing continued heterogeneity in genre reporting, and potential confusion for consumers and designers.

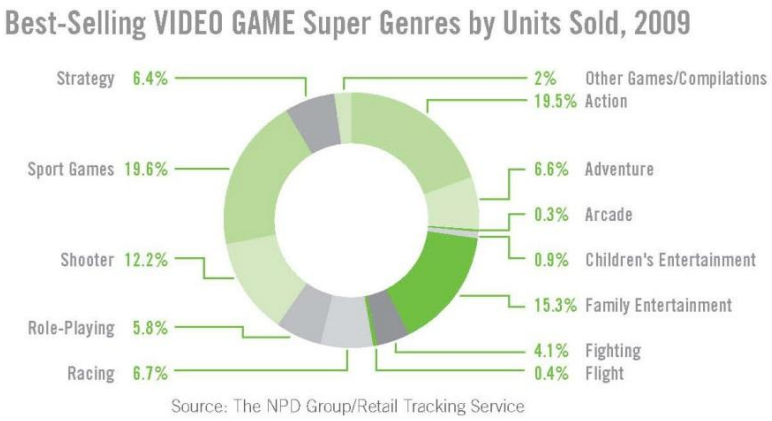

Figure 20 2009 Console Games (ESA, 2010)

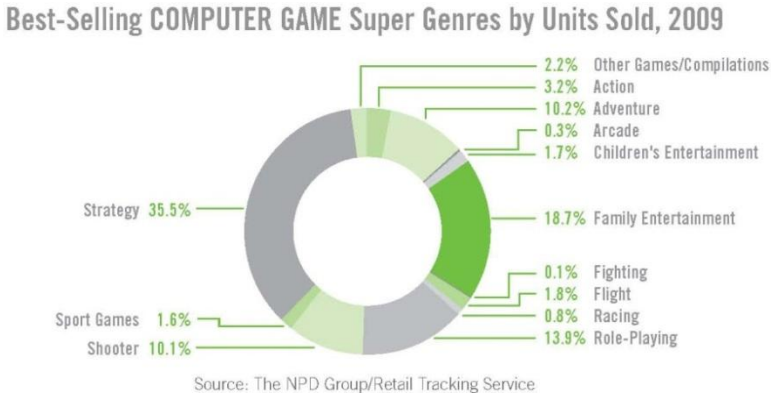

Figure 21 2009 Computer Games (ESA, 2010)

2009 figures again show few significant changes, with the overall numbers of genres for console and computer games remaining the same. The overall percentages, however, changed slightly. Console games are reported at 99.8% for total sales and computer games are reported at 100.1%. Again these increases could be attributed to new genres, but there is no conclusive evidence. The ESA reports do, however, lead to two certainties. Over the past five years the ESA's reported lists of genres have changed. The changes do not line up with the genre lists and changes those lists shown on game journalism sites. This shows that, while the ESA attempts to show conclusive genre sales figures, its facts do not agree with game review sites.

The game review sites themselves do not completely agree, but the disparity between them and the ESA is much larger.

Genre According to the ESA VS Game Journalism Sites

The genre lists on Gamespy, Gamespot and IGN show significant changes in their genre listings over the past decade, though the specific lists and changes are not the same for all publications. These changes in listings appear to reflect game journalists adjusting to a changing games industry with new genres appearing and disappearing until a set of combines genres that complement the canonical genres are settled upon. These changes can be seen in depth when examining IGN and similar trends, though without the same level of data, can be seen on Gamespy and Gamespot. Over that same time the ESA's listings show relatively few changes in genres listed, but generally report those genres as being all or almost all the games sold in a given year. The ESA appears to approach taxonomy creation differently than game journalism sites. The ESA's charts are genres by units sold, where the other taxonomies are built up from games being assigned genres as reviews are published. The ESA seems to take a passive approach to genre categorization. Games are lumped, mostly into already existing genres, to show what percentage of each genre was sold. Game journalism sites, on the other hand, are more active in their categorization, creating new categories as game mechanics change. The ESA's approach results in genre evolution being mostly ignored while the game journalism approach shows new genres appearing, changing and ultimately stabilizing.

2. Genre in Game Design Literature

Game review sites and the ESA make taxonomies of genres, but do not discuss genre evolution as that is not their function. Perhaps the phenomenon has been discussed in game literature. Many game design books discuss genre, from passing references to in depth explanations, encouraging developers and game designers to consider and understand genres when making games. This chapter will discuss four different treatments of genre in game design books.

1. Books that do not extensively explain genre, but do make reference to it, treating it as an established concept with which all prospective designers and players must already be familiar.

2. Books with extensive sections detailing common game genres in order to assist prospective designers in settling on one for their game. These books lay out extensive taxonomies explaining video game genres.

3. Books referencing genre evolution and still laying out detailed taxonomies

4. Books referencing genre evolution but that avoid creating taxonomies

None of the books go into any great detail about genre evolution, just as they do not provide any sort of depth in their mention of the genre concept itself. The overall case mirrors that of game review sites; a medium evolving faster than nomenclature and criticism about said medium, leading the genre concept to constrain and confuse developers and consumers.

Genre

Many books reference genre as an already established concept that game designers will know before reading a book about game design. It is not even a recommendation, designers are not told they *should* know about genres, it is

assumed that they will and that genre is an easily understood, universally agreed upon phenomenon. In "Game Interface Design", Brent Fox (2005) notes that interface designers need to know the genres in which they work. He tells the prospective designer to, "Understand what users have come to expect of games in the genre you're working in." (p.33) and urges him/her to, "Learn about all of the standards for your game genre and stick with them in most instances." (p. 153) These are the only references to genre in the book, showing that he treats genre as an accepted phenomenon with known characteristics, and that designing a game involves picking a genre and giving users what they expect to see in that genre. There is no reference to changes in genres or the creation of new genres.

Paul Schuytema's (2007) "Game Design: A Practical Approach" presents genre in the same way, as an important, established and well understood concept. In the section "Doing Your Homework" designers are urged to play games of the genre they plan to design, "You'll want to play games across multiple genres, so you understand what they are, even if they aren't your favorite. Play casual games, play FPS games, RTS games, tycoon games, MMOs—look for the best representation of each genre and play it until you understand how it fits the genre and how it expands the boundaries of that genre." (p. 48) Here too, the genres, knowledge of the demarcations between them, and a general understanding of their characteristics are expected. Though he acknowledges that a game might expand its genre boundaries, how and why are not discussed.

Deborah Todd's "Game Design: From Blue Sky to Green Light" again urges players to play the games in the genre they want to design, "Identify a few key titles in your genre that could be considered competition for your game (if you say there is no

competition you're not thinking creatively enough, and you're certainly not thinking the way a publisher would want you to be thinking—There's always something that could be considered your competition." (p. 137) Here she makes note of consumers' and publishers' tendency to use genres to demarcate games, which is indeed the case. But a game's genre is again taken to be an established empirical category from which competition can be easily plucked and analyzed. She also includes "Know Your Genre" in her checklist of things to do (p. 138) when testing the waters to begin developing a game, again stressing the importance of genre, but offering little explanation or clarification of the concept.

Genre Taxonomies

Game design books with extensive treatments of genre tend to devise taxonomies of genres, and then explain the elements of each genre. These taxonomies are all similar but, as with game journalism taxonomies, they do not line up exactly. Some of them do acknowledge that game genres can change but still devise extensive taxonomies of what they see as current game genres.

In "Game Design for Teens" Les Pardew (2004) explains genre using the following taxonomy (p. 67-81):

- Action-Adventure
    - Platformers
- Fighting
- FPS
- Hunting
- Puzzle
    - Word Games
    - Card Games
    - Jigsaw
    - Fast Fingered Clicking
    - Combination of Above
- RPGs

    - MMORPG
- Simulation
    - Life
    - Business
    - Building
    - Flight
    - Racing
- Sports
- Strategy

His taxonomy is similar to the ones seen on game journalism sites with many of the core, or canonical genres represented. All of his main genres, except for Hunting and Action Adventure are core genres for both Gamespy and IGN and Hunting is a core genre for IGN. In addition, Racing Simulation and Flight Simulation are listed by both IGN and Gamespy. Puzzle is a common genre but its sub-genres in his taxonomy are unique and he gives no explanation for general Puzzle games or any Puzzle games that are not Board Games, Card Games, Speed Clicking games or some combination of the three. That leaves no room for logic based Puzzle games or games like *Angry Birds* (2009) that rely on simulated physics and the occasional click rather than speed clicking.

His placement of Action-Adventure, too, is unique. Despite his use of Action-Adventure, a hybrid genre, he presents it as a genre not owing to Action and Adventure games, but existing in and of itself. His is the only taxonomy to place it (or any other hybrid genre) at the highest level, as core genre, and he asserts that the differences between Action and Adventure games are small, "There is a difference between Action and Adventure, albeit a small one. Action tends to have more fighting, and Adventure titles let the player collect more items and use them in the story. Both have what is usually a single-player story". (p. 68) Pardew defines an adventure game as what other publications label the hybrid Action-Adventure genre,

like *The Legend of Zelda: Ocarina of Time* (1998). In it the player collects many different items to use to advance the game's story but IGN, Gamespot and Gamespy all label it an action-adventure game. However, what other publications call Adventure games, such as Point & Click Adventure or Text Adventure games also involve collecting items to advance a story but look and play entirely differently than *Zelda* games. The Action/Action-Adventure/Adventure confusion shows some of the inadequacies of the current hyphenation model for genres; drastically different games can be, more or less correctly, labeled the same or similar genres, when in fact one may be a drastically evolved form of the genre in question.

Bob Bates' (2004) "Game Design", from the same publisher as "Game Design for Teens" presents a different taxonomy of game genres for game designers, again with no acknowledgment of evolving or new genres (p.39-88):

- Action Games
    - 1st & 3rd person
- RPGs
- Adventure Games
- Strategy
- Simulations
- Sports Games
- Fighting Games
- Casual Games
    - Card Games
    - Word Games
    - Sports Games
    - Casino Games
    - Puzzle/strategy
    - Trivia
    - Classic arcade
    - Classic board games
    - Modern board games
    - Game shows
- God Games
- Educational Games

- Puzzle Games
- Online

This taxonomy, like the last, encompasses most of the core genres. Adventure games and Action games are separate, as most publications and literature categorize them, with First and Third Person Action games appearing as sub-genres of Action. This is no longer used on game journalism sites but was used by IGN from 2002 to 2005. Unlike many taxonomies, God Games has been classified as a genre in and of itself. God Games could arguably be categorized as simulations or strategy games, as they are generally accepted as taking characteristics from those types of games and adding an overtly omniscient player perspective. They are not organized that way in this taxonomy.

The most interesting part of the taxonomy is the breakdown of Casual Games, especially in contrast to Pardew's taxonomy, that did not address Casual Games. Sports games appear both as their own genre and as a sub-genre of casual games. Games like EA Sports' yearly professional sports series, *Madden*, *NHL*, *Tiger Woods*, etc. are different than casual Sports Games like *Wii Fit* (2008) and *Kinect Sports* (2010) but are all Sports Games, despite some being casual. EA Sports games target a market that wants an in-depth sports simulation, allowing them to play through full seasons of sports, while the more casual games are designed for family friendly and easy gameplay. Sports and Casual Sports as separate genre is, arguably warranted, but perhaps not necessary, again showing lack of agreement in genre demarcations.

Historically speaking Classic Arcade Games are the antithesis of casual games. They were often designed to be incredibly difficult so players would have to spend a large number of quarters to make any progress in the game but, as the gamers that

originally played those games have aged, Classic Arcade Games have become nostalgia pieces and often been lumped together with casual games: short games played when people, often not regular or hardcore game players, have a few minutes to spare. *Pac-Man* (1980) appeared as the Google Doodle in 2010 allowing millions of people to spend spare minutes playing it in addition to the normal culprits for wasting time, *Farmville* (2009) and *Mafia Wars (2009).* The categorization choices made by Bates show that genre boundaries are fluid and changeable. Many of his choices are different than other scholars' but are not wrong per se, as they can all be justified using examples of specific games. Bates, however, makes no mention of the malleability of these genres or the possibility for change; he merely presents another taxonomy from which prospective game designers may choose a genre for their soon to be developed game, one with odd, but valid choices, when compared to other taxonomies.

Tracy Fullerton (2008) develops another taxonomy in her "Game Design Workshop", but acknowledges that genres can be problematic. She points out that genres, "give designers and publishers a common language for describing styles of play, (p. 415) and can help developers understand which market, platform and demographic they are developing for but genre can also, "restrict the creative process and lead designers toward tried and true gameplay solutions" (p. 415). She urges designers to consider genre, but not allow it to stifle creativity. Despite this warning she outlines a taxonomy of, "today's top selling genres" (p. 416) for prospective designers' consideration (p. 416-420):

- Action
- Strategy
- RPG
- Sports

- Racing/Driving
- Simulation/Building Games
- Flight and Other Simulations
- Adventure
- Edutainment
- Children's Games
- Casual Games

Fullerton's taxonomy is, again, similar to the others' but not the same. She covers core genres but breaks simulation into two different categories. For her Simulation/Building Games are games that focus on resource management for growth, building a company or a city for example, unlike Strategy Games that focus on conquest but also feature building. (p. 417) Conversely, Flight and Other Simulation games simulate direct control of activities like flying an airplane or driving a car, but do so with an emphasis on realism, unlike their action-based equivalents. Fullerton's taxonomy also contains Casual Games but includes both Edutainment and Children's Games as separate and, therefore, important genres. She sees Edutainment as games for children with teaching as primary purpose and Children's Games as focusing on fun (p. 420). This difference, for her, is important enough to give each its own genre. Fullerton does not discuss new or evolving genres. She warns that genres can stifle creativity but still lays out a taxonomy of genres and proposes no solution to stifled creativity. Her taxonomy, like the others, covers the same core genres but some are emphasized in different ways than in other taxonomies, leading to another different taxonomy and no clarification of genre.

Genre Evolution and Taxonomies

Some game design books acknowledge that genres change and evolve, but present taxonomies as well. These books end up with different taxonomies, as they

acknowledge changes in genres and new genres, but they all create taxonomies and each one is different from the last.

Ernest Adams' (2007) "Fundamentals of Game Design" presents a taxonomy of games and again, it is similar to the others, but his placement and genre choices differ slightly. He doesn't acknowledge genres as problematic but does note that there is not room in his book to cover all genres and he only, "addresses the best-known and long-standing genres" (p. 390). His taxonomy (p. 392-591) is shown below:

- Action Games
    - Shooters
        - 2D Shooters
        - 3D Shooters
            - Rail Shooters
            - Tactical Shooters
            - Survival Horror
            - Arena Games
    - Platform Games
    - Fighting Games
    - Fast Puzzle Games
    - Action-Adventure Games
    - Music, Dance and Rhythm Games
    - Other Action Games
- Strategy Games
- Role-Playing Games
- Sports Games
- Vehicle Simulations
- Construction and Management Simulations
- Adventure Games
- Artificial Life and Puzzle Games
    - Artificial Life Games
        - Artificial Pets
        - The Sims
        - God Games
        - Genetic Artificial Life
    - Puzzle Games
- Online Gaming

Adams' taxonomy has many of the same core genres as others' taxonomies, Action, Strategy, RPG and Sports, for example. But many of his genres and sub-genres differ

in organization and nomenclature, or were not covered in others. It is also the first taxonomy to list combined genres, and acknowledge them as such. Action-Adventure, a combination of two core genres is listed. Genetic Artificial Life and Fast-Puzzle Games are also listed, though they are combined with genres that are not listed anywhere else. Still, they are new. Many of the sub-genres he lists evolved from core genres but are not hybrid genres.

A number of the sub-sub-genres listed under 3D Shooter are forms of then genre that came about after genre progenitors like *Doom* (1993) and *Wolfenstein 3D* (1992). Unlike those games, which were essentially mazes full of monsters to kill, Tactical Shooters are Shooters that emphasize tactics and realism. They are often military themed and require careful progress to succeed (p. 396) Arena Games also evolved from early Shooters, *Doom* in particular had a large multiplayer community and subsequent games like *Quake 3: Arena* (1999) and *Unreal Tournament* (1999) were developed specifically to focus on multiplayer because of the popularity of the online components of prior games, and featured no single player story lines (p. 396). Adams' only mention of Shooter evolution is when comparing the graphics of *Maze War* (1974) those of *Battlefield 1943* (2009), not in talking about how gameplay mechanics and other characteristics have evolved to create these sub-genres.

In reference to Action-Adventure games, however, he does discuss the evolution that led to its creation, noting that it is a hybrid genre combining the physical dexterity required to play action games and the involved stories and characters, as well as the inventory systems of adventure games (p. 398). Adams also has a category for Survival Horror Games, a game type that is commonly known and was started by *Resident Evil* (1996). But survival horror games like *Resident Evil* and

Dead Space (2008) are categorized under Action Adventure on game journalism sites, with no genre called Survival Horror. Adams himself says the line between Action and Adventure games is very fine (p. 548), though this does not exactly explain why he has chosen Survival Horror as a genre and others have not.

Another interesting choice is his breakdown of Artificial Life Games, a category not seen in other taxonomies. This includes Artificial Pets, an extensive look at *The Sims* (2000), since it has been so influential for the simulation genre, God Games and Genetic Artificial Life. These types of games all fit in this category given them by Adams, but no other taxonomies feature it. These types of games are placed elsewhere in other taxonomies, usually Simulation or a sub-genre thereof, but this category also works, since Adams is defining the criteria for the genre. Genetic Artificial Life is the strangest choice as there are very few games in that genre.

Adams taxonomy looks different than the ones from books that do not talk of evolving genres and some of his listed genres are clearly evolved from others, but he only mentions this briefly and does not discuss the links between these genres in any greater detail than his treatment of Action-Adventure, nor does he discuss the concept of genre evolution in any detail, it is treated as a phenomenon that happens and nothing more.

Bateman & Boon's (2006) "21st Century Game Design" also goes into genre evolution and ends up with a taxonomy more like Adams' than those from authors not talking about genre evolution at all. While the two taxonomies are similar, there are some different genres listed between the two as well as some genres differently classified. Bateman & Boon acknowledge that genres change, explaining that genres are defined by usage and that a genre's meaning might change with time, as with

Adventure. It was originally rooted in Text and Point and Click adventure games but has since come to encompass games like *The Legend of Zelda* (1986) and *Tomb Raider* (1996) under the umbrella of Action-Adventure (p. 224). Adams (2007) also lists Action-Adventure, though under the Action heading. Adams focuses how it grew out of both Action and Adventure games, while Boon & Bateman talk of Adventure's meaning changing to include Action Adventure. Pardew (2004) only mentions Action-Adventure style games and not the older type in "Game Design for Teens" and others only talk of Adventure games.

To understand genre Bateman & Boon suggest taking a representative example of a genre, one game that possesses all the representative features that make up its genre. That one game can be used to compare against other games in the genre to monitor how the genre has changed (p. 225). Here they are beginning to propose examining genres as evolutionary. They make no mention of acknowledging wholly new genres but do recommend that games in a genre be weighed against progress, to gauge how a genre has changed in meaning over time. Their work also includes combined genres. They list Platform Shooters, Platform Puzzlers, Platform Adventure, Action Adventure, the non-committal Hybrid RPG, Action Puzzle and Adventure Puzzle. These genres are presented not as being new, but as combining elements of the two genres that form the name, not making something new. This feature of the genres, however, is what marks them as evolutionary, two genres combining to make a new one or to advance an existing genre. This results in the most complex taxonomy yet, as combined genres and sub-genres are all laid out and explained. Some genres are even unique to this taxonomy (p. 229), shown below:

- Action games
    - Shooters

        - Classic Shooters
        - Horizontally Scrolling Shooters
        - Vertically Scrolling Shooters
        - First Person Shooters
        - Third Person Shooters
        - 3D Space Shooters
        - On-Rails Shooters
        - Light-Gun Shooters
    - Platform Games
        - Classic Platform Games
        - 2D Platform Games
        - Platform Shooters
        - 3D Platform Games
        - Platform Adventures
        - Platform Puzzlers
    - Fighting Games
        - One-on-one Fighters
        - Scrolling Fighters
        - Extreme Combat
    - Racing
        - Driving Sim
        - Arcade Racer
        - Kart Racers
        - Top-Down Racers
        - Sports Racer
        - Futuristic Racer
        - City-Based Driving Game
    - Survival Horror
    - Stealth
- Quest
    - Adventure
        - Text Adventure
        - Point and Click Adventure
        - Action Adventure
    - Role-Playing Games
        - First-Person RPG
        - Western-Style RPG
        - Japanese-Style RPG
        - Dungeon Hack
        - Creature Raising Game
        - RPG Hybrid
        - MMO
- Strategy

    - Turn-Based Strategy
    - Squad-Based Tactics
    - Real-Time Strategy
    - Strategic Quest
- Simulation
    - Vehicle Simulation
    - Sports
        - Extreme Sports
    - Sim Game
        - God Game
    - Life Sim
- Miscellaneous
    - Puzzle
        - Action Puzzle
        - Adventure Puzzle
        - Desktop Puzzle
    - Rhythm Action Game
    - Traditional Games
    - Party Game

Bateman & Boon's top highest level genres are organized differently than any other taxonomy. They have Action, Quest, Strategy, Simulation and Miscellaneous at the top level. Quest and Miscellaneous have, as sub-genres, three genres that are normally top level or core genres, Puzzle, Adventure and RPG. Many of the other top level genres have sub-genres that do not appear in any other author's work. Many of these sub-genres are established styles of game that are not referred to as genres in other writing, though some appear in Adams' (2007) taxonomy. Action is broken down into four sub genres, each of which has its own sub genres. The sub-sub-genres are broken down by both representational and gameplay characteristics. Horizontally Scrolling and Vertically Scrolling Shooters have similar gameplay to each other, as do First and Third Person Shooters. They are differentiated more by representational characteristics than by game play. At the same time On-Rails Shooters and Light-Gun Shooters are differentiated by control method. Light-Gun Games use a gun shaped controller and gameplay consists of aiming and shooting

enemies, with the character remaining stationary. On-Rails Shooters play the same way but, usually with no gun peripheral, and often with the player character being in motion while shooting. Platform games, too, are differentiated by a wide variety of characteristics. Platform Puzzlers, Platform Shooters and Platform Adventures are differentiated by their links to other genres or sub-genres and 2D and 3D Platformers are differentiated by perspective. Bateman & Boon list both Stealth and Survival Horror as Action sub-genres. Both are accepted styles of games but not necessarily accepted as genres, though Adams also lists survival horror. *Resident Evil 4* (2005), the fourth iteration of the franchise that coined survival horror (O'Neill & Speer) is listed on IGN, Gamespot and Gamespy as Horror Action Adventure or Action Adventure. *Metal Gear Solid* (1998), the prototypical stealth game, is also listed under Action Adventure on IGN, Gamespot and Gamespy showing, again, that these genres assigned by Bateman & Boon are not universally accepted as genres, but are styles of game, in the video game vernacular.

The placement of Racing as a sub-genre of Action is odd as well since one of Racing's sub-sub-genres is Racing Simulation, Simulation being a larger category used by Bateman and Boon and having Vehicle Simulation as one of its subgenres. The descriptions of both Racing Simulation and Simulation itself lead the reader to believe that they are linked and interchangeable but this is not mentioned. The section on Racing Simulations discusses general Simulations and the section on Vehicle Simulations mentions Racing Simulations. In addition, City-Based Driving Game is listed under Racing, encompassing games like *Grand Theft Auto 3* (2001) and *Midtown Madness* (1999). The *Grand Theft Auto* series does indeed allow racing as a mini-game and take cues from Racing Games but it is not the focus, whereas *Midtown Madness* focuses entirely on racing, yet they are lumped into the same sub-

category of Racing Games. In this case the categorization of *Grand Theft Auto* under racing is incorrect, one can play puzzle mini-game in *Bioshock* to unlock doors, but that does not mean *Bioshock* should be categorized as a sub-genre of puzzle games.

Placing Adventure and RPG games under the larger umbrella of Quest Games is an interesting move, as both types of games tend to be story driven and involve progression through the completion of a quest. It is arguable that adventure games and RPGs are similar enough to warrant a genre in which to group them, especially one called "quest". Many platformers and other types of action games are laid out in quest structures too, so quest could actually envelope many more games and genres. The usefulness of quest as a genre aside, they separate Adventure and RPG games in similar fashion to other taxonomies, albeit more detailed, and with a few notable exceptions. There are Point and Click Adventure, Text Adventure and Action Adventure. Bateman and Boon, like Adams, have an Action Adventure category, despite placing games that other publications deem to be Action Adventure in other genres.

There are three notable sub-genres under RPG, Western-style RPG, Japanese-style RPG (J-RPG) and hybrid RPG. Differentiating between Western and Japanese RPGs is not often done in genre taxonomies but the term "J-RPG" has come to mean an RPG with specific features of games like *Final Fantasy* (1987). The general term RPG tends to refer to all non J-RPGs, from a North American/European perspective. Both types are RPGs but J-RPGs tend toward random, repetitive battles and feature a set of main characters whose appearance cannot be customized, but whose abilities can. (p. 272) Conversely western style RPGs developed from pen and paper RPGs like *Dungeons and Dragons* emphasizing varied character development, both visually

and in terms of skills. J-RPGs, at least historically were released for consoles while Western-style RPGs were released on PC.

Dungeon Hack is a somewhat narrower version of what is now commonly called an Action RPG, an RPG with a focus on fast combat and gathering items from fallen foes. It is interesting that, with the thorough treatment given to other genres and sub-genres the authors decided to forgo Action RPG and use Dungeon Hack instead. Hybrid RPG is another interesting choice. Hybrid RPG seems to be a catch all term for any RPG that brings in elements of other genres. Again this works, but seems an odd choice given the thorough categorization given to other game types.

Sports is relegated to a sub-genre of Simulation, an odd choice given that many sports games are not simulations, but simplified versions, like *Wii Sports* (2006), that distill the experience of a given sport into small, easily understood mini-games. These type of sports games are more akin to action or casual games than simulations. Additionally this is one of few taxonomies that do not place sports as a top-level genre. Sim Game, God Game and Life Sim are all broken up into individual categories, god game being a sub-genre of sim game. This delineation makes sense given the extensive treatment of other genres in the book.

Miscellaneous is perhaps the most interesting of the categorization choices as it appears to be a large catch-all genre for new game types and game types older than video games themselves. It is odd, however, that puzzle games are placed under miscellaneous and given three sub-genres. It seems to be a genre that, by virtue of the number of sub-genres and puzzle games, is an established genre. Rhythm action and party games also find themselves here, both of which have seen an explosion of popularity since the release of Nintendo's Wii and a resurgence in family gaming.

Perhaps this category would be better called casual, than miscellaneous. Adams, conversely, used action games as a sort of catch-all, using the category of other action games as well as rhythm action games.

It may seem like I am tearing apart this taxonomy, but it is (with a few exceptions) not incorrectly organized, it just differs significantly from most other taxonomies, even Adams, to which it bears many similarities. Most of the genre categorization choices are perfectly valid, which is the problem with these types of taxonomies; no two are the same, but they all try to lay out a complete picture of genres. And the more changing genres are acknowledged the more problematic the idea of a taxonomy becomes. These taxonomies are only useful to a certain degree. It is of note, though, that this taxonomy is among the most thorough seen thus far, but resorts to catch-all genres like Miscellaneous and Hybrid RPG multiple times, showing that, despite all the genres listed, it cannot cover them all adequately.

Genre Evolution

Certain game design books do not outline taxonomies of genres to assist players and designers, but do mention genres and acknowledge that genres can be evolutionary. None, however, talk about genre evolution in any detail. Richard Bartle (2009) notes that new genres are shaking up the established genre landscape, ""The recent success of Nintendo's Wii and DS consoles, the Guitar Hero (Harmonix, 2005) and Rock Band (Harmonix, 2007) franchises, and downloadable casual games such as Diner Dash (gameLab, 2005) provide proof that a larger market exists for games that offer new play styles outside the game genres that dedicated gamers loved, the so-called traditional hardcore gamer market" (p. 17). Bartle does not discuss how these genres came to be, however, only pointing out that they are large forces in the market.

Jesse Schell (2008) casts genre evolution in a positive light, but does not discuss it at great length. He asserts that reader of his book will master existing genres and be able to devise new ones. (p. xxvii) He mentions evolving genres in the introduction as well, saying, "genres come and go, but the basic principles of game design are principles of human psychology that have been with us for ages, and will be with us for ages to come" (p. xxvi). He also stresses the importance of this evolution in the section, "Look Into Your Crystal Ball" where he gives recommendations for considering the future of a game being developed and the industry at large. He asks how the genre of the given game will change and what new genres will appear within four years. (p. 413). Despite acknowledging genre evolution and stressing its importance, Schell, like some of the authors not considering evolution at all, presents genre as a known, standardized concept. He notes that each genre has its hardcore fan base, the experts of that genre (p. 393) and points out that when designing an interface it is helpful to look at other games in the same genre to find what has been successful in the past. Schell does, however, avoid creating a taxonomy of game genres, making the overall approach more successful than some other authors'. While referencing standard genre tropes and asserting that genres will change seems contradictory, at any given point genres do have established tropes. Schell seems to recommend looking at current genres at the time a game is designed, but to keep in mind that genres change. Had he included a taxonomy his advice would seem at odds, but as he stays completely within the realm of general advice his recommendations work.

Richard Rouse's (2005) "Game Design: Theory and Practice" gives similar advice to Schell also recommending designers look to existing games in their chosen genre to see what has been successful. Rouse goes farther than Schell and outright states that

looking at good examples of a given genre can help create an excellent game that will advance that genre (p. xxii). Rouse also references a standardized understanding of genre. He points out that console games are produced in such a way that fans of a certain genre can pick up and easily play almost any game in that genre (p. 134), showing that there are accepted characteristics of specific genres. He again references genre evolution when talking about the game design document, saying that, though standardized design documents for particular genres are useful they must be altered to keep up with changes in the genre, "Sure, within gaming there are certain genres or types of gameplay, and the design document format for a given genre, such as a first-person shooter, can be standardized. But even then, as the form of the shooter changes, as it implements new gameplay styles and mechanics, the structure of the document will need to adapt to these changes in order to communicate them effectively" (p.374.)

Rouse also notes the difference in hardware evolution and genre evolution saying that a three year old computer is generally obsolete while a three year old game can still be fun, indeed popular games like *World of Warcraft* (2004) and *Counterstriker: Source* (2004) still have strong player bases despite being released over six years ago. Rouse, like Schell avoids creating a genre taxonomy, instead talking about genres in a more abstract sense and recommending designers seek out their own genre examples. At the same time he acknowledges that genres change and new genres appear. That being said, neither Schell, nor Rouse talks about genre evolution in any great detail. They simply present it as a phenomenon that happens, much as they present genres as standardized, understood concepts.

Shari Graney Ray's (2004) "Gender Inclusive Game Design" presents genres in different light than the other authors, but acknowledges their evolutionary character. In her book she stresses genres as important, but avoids making a taxonomy. She does, however, refer to genre integrity, a concept unique to her book. In her introduction she states the goal of gender inclusive game design as reaching out beyond the traditional market, but maintaining genre integrity (p. xvi). She gives no explanation for genre integrity, from context she seems to be referring to enough characteristics of a genre for it to still be identifiable in a given game, while still creating a product that does something now. She also notes certain concepts, "Theories of learning styles, risk taking, spatial relations, and communication" (p. 74) supersede genre boundaries and notes that awareness and understanding of them will help design games without compromising genre integrity (p. 74).

She makes explicit reference to genre evolution when talking about *Ultima Underworld* (1992), "A good example of a game that took the traditional genre, FPS, and expanded on the concept of conflict was the groundbreaking title, Ultima Underworld, The Stygian Abyss. Released in 1992, this game contained many of the now familiar FPS traits, such as a first-person viewpoint over a hand wielding a weapon, multiple weapons to choose from, and an ultimate goal of regaining control of an area by eliminating the 'bad guys'" (p. 47). What is especially interesting about this passage is the fact that *Ultima Underworld* is not an FPS, but an RPG played in first-person. ACE Magazine's (1992) review of the game also states its pushing of genre boundaries saying it is "the next true evolutionary step in the RPG genre". It is arguable whether Ray's placement of the game as a FPS is wrong, since its first-person perspective causes it to have many characteristics of a shooter, but it is generally categorized as an RPG, not an FPS. This same phenomenon was seen in

other authors' work, especially with the use of Survival Horror and Stealth as genres. It shows that taxonomy, or no, genres are not cut and dry and may be subject to numerous valid interpretations, undermining the very idea of creating a taxonomy to categorize genres.

Examining game design literature has shown that genre is important enough for most books to at least mention it, with some going into great detail about genre demarcations. Some books acknowledge the evolutionary character of genre, to varying degrees, but none of them discuss the evolution in detail. The books generally take genre to be an accepted standardized concept that designers will be familiar with and treat it as natural and understood that genres will change, if they acknowledge evolution. Even the books the only discuss genre briefly do not contradict the idea of genre evolution. No books explicitly state that genres do not change or evolve; it is simply not discussed in many books. The varied treatment of genre leads to a lack of agreement in taxonomies created and in the nature of genre and genre evolution. This lack of cohesion leaves genre categorization, as presented by game design literature, as problematic. Most books recommend picking a genre but in reality games that embrace genre evolution over older genre categorization have proven successful. This was apparent in 2007, a year hailed as the best in gaming that also showed the introduction of hybrid genres in mainstream video game reviews.

3. Game Studies

So far, the case for both video game review outlets and game design literature has been the same; genre is an important concept that shows itself to be evolving but this evolution is, at best acknowledged, but never analyzed. This section will examine the stance on genre in game studies literature, to see what game theorists have written about game genres, and if there is a gap, as with game design literature. There are relatively few authors that deal explicitly with game genres, but some of game studies' pioneers have dealt with similar issues, such as the definition of a video game, what makes a game and the place of interactivity in digital games. This general game studies literature will lead into specific game studies treatments of genre in video games.

Game Studies Background

Janet Murray's *Hamlet on the Holodeck* (1997) is an early examination of what the interactive medium can do for narrative. She wonders if the computer can lead to an expressive narrative form, in the way the printing press did for novels and the movie camera did for films. She explores what the interactive medium could mean for narratives and, though she doesn't explicitly touch on genres, some of her thoughts have carried over into generic conventions.

She asks of immersion in virtual worlds, "How will we know what to do when we jump into the screen? How will we avoid ripping apart the fabric of the illusion? Participation in an immersive environment has to be carefully structured and constrained" (p. 106). She goes on to point out that conventions for physical interaction with immersive worlds are necessary and they need to "deepen the fantasy without disrupting the immersive trance" (p. 125). While full blown physical interaction with game worlds is not currently common it is important for players to

quickly understand how to interact with a specific game world. Part of the solution to this lies in genres, at least it did originally. When game genres were strongly delineated and there was little overlap, knowing a game's genre helped a player to understand how to play a game soon after starting to play. It also helped designers to figure out how to design games, as noted in game studies literature, even current texts. A player familiar with FPS games would have an easy time playing *Wolfenstein*, *Doom*, or *Ken's Labyrinth* (1993), despite the latter being relatively unknown. A player would know to expect maze-like levels, populated by enemies, to be navigated through from the character's perspective. Likewise Adventure, RPG and other games could be quickly understood because of their established gameplay. As games have evolved many of these concepts have become a kind of game vernacular. Many players now have an intimate understanding of these tropes, so game designers have begun to play with and combine them to create new gameplay experiences, but the original genre delineations are slow to change.

Conversely, as generic conventions combine and evolve newer games require knowledge of more and more games and gameplay tropes to be quickly understood. But game design has also adapted to address this issue. When a game like *Portal* (2007) needs to introduce a concept not seen in other games, in this case momentum conserving portals through which the player can travel, and use that concept for puzzle based gameplay, the developers must see that the game gradually teaches the player instead of relying on game and genre conventions.

Murray also talks about agency as an important aspect of games. Games let the player controls what is happening. This gets into player perspective and methods of interaction, also related to generic categorization. Different ways of enacting agency can form genre delineations. A shooter, first or third person, will involve direct

control over the character, a strategy game may let a player control multiple characters simultaneously, or prohibit direct control of characters, only allowing the player to exert influence, but no direct control.

Murray's work, overall, transcends genre, or ignores genre, depending on how it is examined. She is not talking about specific games, but about the idea of immersive worlds, like the Holodeck in Star Trek. Her work plays into the idea of genres but does not make any explicit reference to them, which may be an advantage; given that genre bending games appear to be the future of the industry.

Concurrent to Murray's work is Espen Aarseth's *Cybertext: Perspectives on Ergodic Literature* (1997). In it Aarseth introduces the concept of ergodic literature, literature where, "non-trivial effort is required to allow the reader to traverse the text" (p.1), trivial effort being moving one's eyes and turning pages. Aarseth devises a model for examining literature to describe types of textual media. In it he uses the concept of scriptons, strings that exist in the text, and textons, strings that are displayed to the user (p. 62). A text will contain a library of scriptons that may or may not appear to the user as textons. The model uses the following variables (p. 62-64):

1. Dynamics
2. Determinability
3. Transiency
4. Perspective
5. Access
6. Linking
7. User Functions

This framework helps determine the nature of an ergodic text and differentiate types of texts. It represents an early example of a typology for interactive works, including games. But the framework itself is deeply rooted in literature and older games, and is less applicable today.

Jepser Juul's *Half-Real* (2005) discusses video games explicitly (and is much newer) and positions them as half-real because, "a video game is a set of [real] rules as well as a fictional world" (p. 1). Broadly speaking, Juul says video games are structured in two basic ways; emergence and progression. A game is made up of, "a small number of rules that combine to yield large numbers of scenarios for which the player must design strategies to handle" (p. 5) and a progression, controlled by the game designer, wherein the player, "performs a predefined set of actions in order to complete the game" (p. 5). He then outlines the six features he believes are necessary for a game to actually be considered a game (p. 6-7):

1. A rule based formal system;
2. with variable and quantifiable outcomes;
3. where different outcomes are assigned different values;
4. where the player exerts effort in order to influence the outcome;
5. the player feels emotionally attached to the outcome;
6. and the consequences of the activity are optional and negotiable.

Juul considers this model of games akin to celluloid for films; it is the canvas upon which games are painted (p. 7). He asserts that, while the model does not mean all games are the same, the six features give a way to discuss how games differ from each other. He also notes that, while games adhere to this model they also modify it; they evolve. A model like Juul's would lend itself well to the discussion of game genres, a model to discuss games in the context of genres, without relying on genres.

These works show the categorization and analysis of games to be an important feature of games studies, even when genres are not explicitly considered. They consider the interactive medium in similar ways to later genre taxonomies, but without actually referencing genres. The importance of interactivity recurs in works specifically considering game genres, though game studies literature explicitly discussing genres is relatively rare. The three frameworks for analyzing games, or lenses for looking at games, outlined by Murray, Aarseth and Juul, however, are not suitable for analyzing current games, within a genre framework. A general purpose framework, like those they propose, is needed but theirs are general in the wrong ways. Murray and Aarseth are concerned with interactive fiction rather than explicit video games and Juul's framework determines what exactly constitutes a game. Genres that are already accepted have proven to be problematic enough, so a framework addressing genre concerns should place itself within the framework of what is accepted to be a video game, that is to say, a product marketed and sold as such. Some strides have been made towards a model like Juul's, for products defined as games but, in the same way as all the other literature on game genres, there is a lack of agreement and cohesion in the discussions.

Genre in Game Studies

Though early scholars of game studies approached games in a holistic fashion, the specific treatment of genre in game studies is similar to the treatment in game design books; some authors mention genre in passing and some authors are content to outline a taxonomy and admit it will become outdated. A few scholars, however, do examine the concept of genre further than in game design literature with nods towards more holistic frameworks for discussing genres. None, however, outline anything as thorough as Juul's game model.

Espen Arseth's (2004) "Playing Research: Methodological Approaches to Game Analysis" refers to video games as a cultural genre (p. 1) then goes on to mention genres within games (p. 3) Aarseth's use of the term assumes players to be familiar with game genres, as he gives no explanation but notes consideration of a game's genre as a possible analysis technique (p. 3, p. 6). Here, like in many game design books genre is taken to be established and understood and is therefore not explained. In order to analyze a game based upon its genre it must widely understood, but other gaming literature shows that genres are far from universally agreed upon. This problematizes the analytic approach to genre that he suggests.

Aki Jarvinen (2002) notes that genres are mostly unexplored in game studies scholarship, pointing out that most of the genres used for games come instead from game journalism (discussed in the previous chapter). He points to Crawford's (1984) and Wolf's (2001) taxonomy of games, noting that Crawford's idea of genre categorization did not find its way into general game studies discourse and saying of Wolf's taxonomy, made up of forty two genres, that, "if we see genre-based categorizations as a means of making sense out of a larger whole, 42 genres ceases to be useful." He suggests that for game genres to be useful, "we have to accept that the diversity of games requires many more genres and subgenres than traditional media products which have benefitted from genre studies" or accept, "that a game genre equals hybridity, because game genres are complex sums of interaction and rule mechanisms, audiovisual styles, and popular fiction genre conventions." Neither of these approaches explicitly acknowledges genre evolution, but they do acknowledge video game genres as being more complex than genres in prior media and that is a step in the right direction, as the complex interplay of video game

genres leads them to evolve in the complicated, interlinked ways noted in the diagrams in chapter one.

"Game Design Patterns" by Bjork et al. (2003) looks to find a unified way of describing game design, through patterns, for easier developer communication, but also touches on game genre. The treatment is brief but different from any other author's work. Like Jarvinen, they point out that Wolf's forty two genres are too many to be useful and note Crawford's taxonomy of games. They also note that the study of games antecedent to video games included the study of the historical development of genres, while most video game research has been primarily concerned with narrative (p. 2). No other sources discuss genre research in any type of games. Taxonomies are created and genres are referenced, but not studied. Bjork et al. go on to propose the same treatment of genres as I do in this document, saying they "do not propose that a redefinition of the concept of genre would provide a feasible basis for a common language of game research. Instead we believe that finding components that can be used to describe genres would be beneficial to all types of categorization of games." They go on to outline said components in the context of game design and not in a way easily transplanted to game analysis.

Crawford (1984) and Wolf (2001) appear to be the canonical or at least most frequently referenced bodies of work on genre in games. Both outlined game taxonomies and acknowledged the possibility of them becoming irrelevant, alluding to genre evolution. Crawford was, however, writing at a much earlier time in the development of the medium than Wolf and, despite the time given for the medium to mature, Wolf still devises a taxonomy for interactive genres of games that will become outdated.

In *The Art of Computer Game Design* (1984), Chris Crawford devotes an entire chapter to a taxonomy of computer games, separating them into two larger genres and twelve sub genres, shown below:

- Skill and Action games
    - Combat Games
    - Maze Games
    - Sports Games
    - Paddle Games
    - Race Games
    - Miscellaneous Games
- Strategy Games
    - Adventures
    - D&D [Dungeons & Dragons] Games
    - Wargames
    - Games of Chance
    - Educational and Children's Games
    - Interpersonal Games

This taxonomy does a reasonably thorough job of covering most of the core genres noted by IGN, Gamespot and Gamespy, up to combined genres, which it does not address. The overall organization; two large genres with numerous sub-genres, is different from every other source, though it bears similarities to Pardew's (2004) taxonomy. Some of the oddities in Crawford's taxonomy are likely due to its age; it was published in 1984. Crawford clearly did a thorough job, to have devised a taxonomy that matches up at all with those devised in 1998. (p. 21) Additionally, Crawford notes that he does not take his or any taxonomy of games as correct, "I do not claim that the taxonomy I propose is the correct one, nor will I accept the claim that any correct taxonomy can be formulated. A taxonomy is only a way of organizing a large number of related objects." (p. 21) He forms that opinion based upon the relative youth of the video game medium, "Without a wide array of games there is little opportunity to choose between games; without choice there can be no

natural selection. It is therefore impossible for us to devise a single, absolute taxonomy. (p. 21). He later notes the he expects his taxonomy to become obsolete as games change, "We would therefore expect the taxonomy presented here to become obsolete or inadequate in a short time. New taxonomies must be created to reflect the changes in the marketplace in the next few years. For the present, however, the proposed taxonomy can provide us with an organized way to view the menagerie" (p. 34). This seems to be what has generally happened with game genres. Different taxonomies or lists of genres have been devised, then changed as the medium and genres evolve. Crawford's approach is commendable, given how long ago it was written. He acknowledges genres as being evolutionary and notes that his taxonomy will become irrelevant, but he does not address genre evolution in any detail, just like more modern writing on the subject.

Mark Wolf (2001) Attempts a similar taxonomy for games, noting that the study of genres, in general, has been problematic, "The idea of genre has not been without difficulties, such as the defining of what exactly constitutes a genre, overlaps between genres, and the fact that genres are always in flux as long as new works are being produced. (p. 1) Wolf cites interactivity as a defining feature of video games and goes on to develop a taxonomy of games "beginning with the interaction required by the game's primary objective" (p. 2). He says that his taxonomy can be used in conjunction with existing genre taxonomies, like those of film and goes on to list the following forty two genres:

> Abstract, Adaptation, Adventure, Artificial Life, Board Games, Capturing, Card Games, Catching, Chase, Collecting, Combat, Demo, Diagnostic, Dodging, Driving, Educational, Escape, Fighting, Flying, Gambling, Interactive Movie, Management Simulation, Maze, Obstacle Course, Pencil-and-Paper Games,

> Pinball, Platform, Programming Games, Puzzle, Quiz, Racing, Role-Playing, Rhythm and Dance, Shoot 'Em Up, Simulation, Sports, Strategy, Table-Top Games, Target, Text Adventure, Training Simulation, and Utility. (p. 3)

Again, some of these genres show up in other taxonomies, but some like Demo and Utility are hardly even games, let alone genres. Wolfe ends up with merely a new taxonomy, again acknowledging that game genres change, and showing that they have, without addressing that fact. His work comes from 2001, seventeen years after Crawford's, and, despite acknowledging interactivity as an important feature of games he has simply created another taxonomy that will become outdated and one that contains too many genres to be useful for categorization (also noted by Jarviven [2002] and Bjork et al. [2003]). Crawford thought a greater pool of works to analyze would improve game genre discourse. Wolf's actual taxonomy shows little improvement over Crawford's, he still outlines a large number of genres that will become outdated. His insistence on the importance of Interactivity, however, is much more relevant. Interactivity is important for game genres, as it sets the medium apart from other media and literary forms.

Thomas H. Apperley (2006) also stresses the importance of interactivity in "Genre and Game Studies: Toward a Critical Approach to Video Game Genres". He sees the lack of consistency in the video game medium as a crucial problem for genre analysis (p. 6) and points to interactivity, a non-representational feature common to all games, as being the most important aspect for generic analysis,

> Contra to conventional genres I argue that the nonrepresentational, specifically interactive, characteristics of video games should be deployed by game scholars to create a more nuanced, meaningful,

> and critical vocabulary for discussing video games; one that can perceive the underlying common characteristics of games that might otherwise be regarded as entirely dissimilar if judged solely on representation. (p. 7)

Apperley goes on to succinctly state the problem with conventional video game genres and links it back to Aarseth's work, saying, "rather than being a general description of the style of ergodic interaction that takes place within the game, it is instead loose aesthetic clusters based around video games' aesthetic linkages to prior media forms." (p. 7) He suggests instead that game genres be analyzed using a model made up of the following three categories (p. 10):

- Platform: The hardware system on which a game is played.
- Mode: How the game world is experienced through environmental and experiential specifically relating to space/time in the game.
- Milieu: The visual setting of the game, Science Fiction, Fantasy, etc.

He then goes on to discuss Simulation, Strategy, Action and RPG genres within this context. Apperley is moving in the right direction in trying to devise a way to discuss game genres in the context of interactivity, but he is too quick to discredit the "loose aesthetic clusters based around video games' aesthetic linkages to prior media forms" (p. 7). The history of a game is important and should be acknowledged while talking about interactivity. The problem is not in thinking of games in terms of these aesthetic clusters, but in only thinking of them in that way. Additionally he puts too much stock in platform given that so many games exist on multiple platforms. It is a useful aspect to discuss, but not as one entire part of a three part system.

Despite Apperley's insistence that interactivity trumps all, describing video games in his terms, particularly milieu and mode, gives a unified and useful way to talk

about some aspects of video games without getting hung up on existing genres or creating new ones. It does not, however, allow for complete discussion of games, as he wishes to ignore the genre history of games. From Wolf and Apperley's work we can take that game scholars agree that video game genres are complex and that interactivity is central to games.

For more in depth analysis of genres it may help to turn to literary theory's hundreds of years of genre analysis, as is the case in Geoffrey Rockwell's (2002) *Gore Galore: Literary Theory and Computer Games*.

Rockwell starts with Crawford's (1984) taxonomy of games and notes that understanding games from a theoretical perspective requires treatment of their interactive nature and their tendency to integrate different media, or their multimedia nature, the very feature that Apperley (2006) called into question. Rockwell points specifically to Mikhael Bakhtin's (1986) work on the novel, from *The Dialogic Imagination*, as being relevant to games. This is the same approach I will take in this document. Before covering Bakhtin, however, it will be useful to cover relevant literary genre theory leading up to Bakhtin's work, for a full understanding of what literary theory can lend to game studies.

4. Genre Theory

In the introduction to *Modern Genre Theory* (2000) David Duff echoes Wolf's (2001) sentiments on game genre saying,

> In modern literary theory, few concepts have proved more problematic and unstable than that of genre. Having functioned since Aristotle as a basic assumption of Western literary discourse, shaping critical theory and creative practice for more than two thousand years, the notion of genre is one whose meaning, validity and purpose have been repeatedly questioned in the last two hundred years. (p. 1)

Duff's assertions about the problems with genre also apply to game genres; its "meaning, validity and purpose" have rarely been questioned but differing taxonomies and general lack of agreement on genres show it to be "problematic and unstable".

Through examining game journalism sites, game design texts and game studies literature, genre in games has shown itself to be evolving, but rarely is this evolution discussed. Contrary to the game genres case, genre theory in literature has dealt with the concept of genre evolution for centuries. Originally genres were absolute, but over the centuries opinion has changed to acknowledge genres as being evolutionary products of prior works. Examining genre theory helps to explain genre evolution in games as both cases prove remarkably similar.

The Romantic Period and Earlier

Before the romantic period, notes David Duff (2000), genres were thought to be absolute and never-changing. "It was therefore feasible to judge a work written in, say,

1750 by rules formulated in the fourth century BC, or to deny the existence of a new genre on the grounds that Aristotle didn't define it" (p. 4). "The Aristotelian doctrine of the division of genres" (p. 3) was thought to be absolute and all literature would fit into these genres indefinitely. This notion began to be questioned in the Romantic period (circa nineteenth century). Duff notes that "the recognition of the historical character of genre" marked a major development. (p. 4) Genres started to be looked upon as products of their history. Old works were acknowledged to have been influenced by even older works and newer works were viewed as the evolutionary products of older works and genres. This change view was influenced by Darwin's *Origin of the Species* (1859). Duff notes that the prevalence of organic metaphors already present in Romantic literature made Darwin's work an easy work with which identify and "by the end of the nineteenth century, most literary historians had adopted the evolutionary paradigm" (p. 4). According to Duff this resulted in "a new conception of genres as historically determined, dynamic entities" (p. 4). The Romantic era also gave birth to what became a fundamental shift in how genres are viewed; the idea that each work could, conceivably, be as different from previous works to be its own genre, thereby questioning the very validity of genre as a concept. Friedrich Schlegel summarized it thus, "Every poem is a genre unto itself" (Duff, 2000, p. 5). These two views of genre parallel the developments in the video game medium. As the medium has matured new genres have appeared and others have evolved out of the combination of two or more existing genres. In many cases one game or a select few games have led to new genres (according to certain taxonomies). *Metal Gear Solid* coined the Stealth genre and *Resident Evil* coined the Survival Horror genre, though they are not present in all taxonomies.

Beyond Romanticism

At the beginning of the twentieth century Benedetto Croce went farther than the Romantic literary theorists, asserting in *Aesthetic as Science of Expression and General Linguistic* (1909) that the whole notion of genre categorization is flawed, saying, "the greatest triumph of the intellectualist error lies in the theory of artistic and literary classes, which still has vogue in literary treatises, and disturbs the critics and the historians of art". Croce's problem is in the jump from an individual aesthetic work to the logical grouping of that form, since these logical groupings are attempting to express a something that the work itself already expresses, "You cannot express the form, for it is already itself expression. And what are the words cruelty, idyll, knighthood, domestic life, and so on, but the expression of those concepts?" In essence, attempts at genre are confusing the expression of individual pieces of art. This leads to works being categorized, before analysis, or instead of being analyzed, and artists tend not to adhere to these norms of categorization. As Croce puts it, "Every true work of art has violated some established kind and upset the ideas of critics. Thus they have been obliged to broaden the kinds, until finally even the broadened kind has proved too narrow, owing to the appearance of new works of art, naturally followed by new scandals, new upsettings and – new broadenings". Croce claims that genres impede interpretation of literary works and denies their existence. While this is not true for video games, genre evolution presents a similar problem. Picking a genre from a taxonomy for game development or game analysis applies a bias, as Croce claims. But with games the answer is not in the denial of genres, but a softening of genre borders. This can be seen developing in IGN's taxonomy of games, where new genres appear and disappear as reviewers adjust to changes in genre. Game genres lie somewhere between cut and dry

taxonomies and complete denial of genre. They change and evolve, but genres remain important.

Russian Formalism

The Russian Formalists, “considered literature as a complex unity of component parts, which could be analyzed as a system in a formal way” (Breure, 2001). The Formalists based their ideas upon the Romantic view of literary genre and maintained the idea of generic evolution and genre history. Their view was a bit different than Croce's; stating not that genres were useless, or counterintuitive, but that “a genre cannot be a static system because a new genre grows out of the consciousness that the old one has been supplanted by a new one” (Breure, 2001). Viktor Shklovsky put it thus, “a new form arises not in order to express a new content, but because the old form has exhausted its possibilities” (Duff, 2000, p.7). They also asserted that function was as important as form for genre, thus a genre could not be separated from its context. For example, “The Russian ode performs a different function in the eighteenth century than in the romantic period” (p.7). Additionally they asserted that the function of a genre evolves along with the form itself, so genre is subject to formic and functional evolution and new genres emerge as older ones are become irrelevant.

The formalist view of genre is useful for video games, as new genres do indeed grow out of older genres evolving and combining. Often these genres do not disappear altogether, but become nostalgic throwbacks. For example, FPS games have evolved significantly since *Doom* was released in 1993. *Doom* consisted largely of mazes populated by enemies to kill. Newer FPS games have incorporated the in-depth stories found in adventure games and experience points (XP) found in RPGs as well as vehicle sections drawn from Simulation and Arcade games. It is not often that a FPS of *Doom’s* ilk is

released but certain games like *Painkiller* (2004) and *Serious Sam* (2001) intentionally draw on the simplicity of games like *Doom* and were well received with gamers as entertaining nostalgia with improved graphics.

Vladimir Propp's *Morphology of the Folk Tale* (1968) is of particular interest when talking about genre characteristics. Propp's work broke down Russian folk tales into thirty one component parts of the narrative, ranging from trickery and villainy to rescue and wedding. Many games use very similar component parts, especially earlier games (up until the end of the 16 bit era). Take *Super Mario Bros.* (1985) for example.

- Absentation: The princess is kidnapped.
- Departure: Mario sets out to rescue the princess.
- Trickery: After each castle, prior to the final one, the princess is revealed to be a disguised enemy, not the real princess.
- Receipt of magical agent: Mario acquires power-ups to improve his abilities.
- Difficult tasks: Mario must complete numerous difficult levels to advance through the game.
- Solution: Mario rescues the princess.
- Wedding: Not a literal wedding, but Mario is rewarded for having rescued the princess.

Mikhail Bakhtin's later work on the novel, while not directly related to Propp's presents a more general way for considering this type of component parts and how they interact in novels. Again, I will argue that his work is applicable to games.

Baktin and Game Theory

Mikhail Bakhtin's work on literary genres helps to focus game genres further, as Geoffrey Rockwell points out in *Gore Galore: Literary Theory and Computer Games* (2002). Two of Bakhtin's ideas, in particular, are important for game genres; his idea of

the novel and his application of the chronotope, as Rockwell notes, “Bakhtin’s poetics of the novel draws our attention to the way a novel is a dialogue with other genres of literature or a metagenre that is unified by what he calls a chronotope, or the spatio-temporal experience created by the author” (p. 353).

Bakhtin picks up on the Romantic and Formalist ideas of the historical character of genres. He takes the novel as his case study and, in *The Dialogic Imagination: Four Essays* (1982), he outlines how he saw the novel as containing the dialogic history of its literary ancestors, “What was created was a new and large multi-genred genre, one which included in itself various types of dialogues, lyrical songs, letters, speeches, descriptions of countries and cities, short stories and so forth. It was an encyclopedia of genres” (p. 65). Rockwell notes that Bakhtin’s overarching point is that the novel is a genre that, “Incorporates poetic genres into a dialogized artistic whole. The literary critic of the novel must therefore unpack the voices, each with its own language and style, and then show how they are combined into an artistic unity” (p. 353). Rockwell talks of games within the umbrella of hypermedia and states, “The hypermedia work is not just a genre of game or literature, but a metamedia that combines other media including games and literature. The task of the hypermedia critic is then to unpack the types of media, the genres of discourse in those media, and to show how they are combined into an artistic whole” (p. 354). This idea plays beautifully into genre evolution, with one slight change. Rather than a dialogic history of language, like the novel, a game contains a media history, including not just language, but visual forms like film, television, photography and comic books. If a game contains all these clues about other older genres and older works then a game’s genre evolution can be, at least in part, traced through this media history, detailed in the next chapter.

Bakhtin also considers the functions of time and space in the novel and calls it the chronotope. Rockwell concatenates Bakhtin's introduction of the chronotope in *Gore Galore* as follows,

> We will give the name chronotope (literally, "time space") to the intrinsic connectedness of temporal and spatial relationships that are artistically expressed in literature. . . . we are borrowing it from literary criticism almost as a metaphor (almost, but not entirely). What counts for us is the fact that it expresses the inseparability of space and time . . . We understand the chronotope as a formally constitutive category of literature. . . . (Bakhtin, "Forms of Time and Chronotope in the Novel", p. 84) [p.354]

The idea of the chronotope, in the context of games can be viewed as a more general application of many aspects of Propp's folk tale morhphology, with the time-space relationship replacing many of the specific components laid out by Propp. Though Propp believed all folk tales to be made up of the same component functions, this is not the case for video games, since the medium is so diverse and changes so quickly. Bakhtin's more general chronotope helps to describe some of the same phenomenon as Propp, but allows for greater breadth of discussion.

Bakhtin discusses the chronotope of the Greek adventure in detail (p. 86-87). Most Greek adventures feature a hero separated from his bride to be. He sets out on a series of adventures and they are eventually reunited. In the Greek adventure the events of the novel are a hiatus from real life. All the events are separate from the character's normal life (p. 90). These events are presented as a series of segments (p. 91) that take place in alien world, "filled with isolated curiosities and rarities that bear no connection

to each other" (p. 102). At the end of the adventure the hero remains unchanged, "the hammer of events shatters nothing and forges nothing—it merely tests the durability of an already finished product." This also describes a game like *Super Mario Bros.* perfectly. The hero, Mario, is separated from the Princess, as she has been kidnapped by Bowser. Mario sets off through a series of levels that have little bearing on each other, apart from increasing difficulty. At the end Mario and the Princess are reunited and nothing really changes, Bowser kidnaps her in the next game and Mario repeats the whole process.

Bakhtin's next chronotope, that of the adventure novel of everyday life (p. 111), includes a key feature not present in adventure time, metamorphosis. It, "serves as the basis for a method of portraying the whole of an individual's life in its more important moments of *crisis:* for showing *how an individual becomes other than how he was*" (p. 115). The importance of this metamorphosis is in this crisis type of story, "we see only one or two moments that decide the fate of a man's life and determine its entire disposition" (p. 115). This also distinguishes certain types of games. Even newer Mario games have no character development but a game like *Mass Effect* (2007) shows the hero develop at key moments gives the player control over key decisions. These decisions can even be carried over to the game's sequel, allowing for greater immersion and emotional attachment to the character.

These two chronotopes in no way represent all games, nor would including Bakhtin's other chronotopes. But they show the concept of the chronotope as being applicable and relevant to games. Any game can be discussed in terms of its treatment of time and space and compared to other games, all without having to resort to genre taxonomies.

Rockwell also believes the chronotope can be applied to games, “What distinguishes these types of games – a typology that has emerged among game reviewers – is the pace of the game (its sense of time) and the types of settings” (p. 355). The chronotope gives us a generic way of looking at games. Games can be analyzed and unpacked as historic aggregates of their respective antecedents, and the characterization of time and space can be used as an overarching lens for this to put the component parts back together. Regardless of the dialogue of previous game genres at work in a given game the game will ultimately have a specific (or several specific) presentation(s) of space and time at work.

The literary consideration of genres in media before video games shows that the concept has been problematic for hundreds of years and opinion regarding it has undergone considerable change. Genres went from being considered completely unchanging to being evolving, socially influenced constructs without any hope of a single taxonomy. Video game genres have evolved the same way, but without similar scholarly attention devoted to the phenomenon. Bakhtin’s generic considerations on the novel, in conjunction with the previously mentioned stress on the importance of interactivity allow for a unified consideration of what makes up a game, without stressing genre demarcation or taxonomies. A framework based upon this is outlined in the next chapter

5. Analysis Framework

The survey of genre in video games has, so far, shown that genre is considered an important concept in game categorization and understanding, but there is little specifically written about it. Taxonomies developed through game journalism categorization of games during the review process and the ESA's Essential Facts bear many similarities to each other but lack significant parallels and differences increase over time. Taxonomies and consideration of genre is game design books suffer the same way; a huge number of different taxonomies exist with none being the same. Additionally these books rarely give the actual genre concept any consideration, expecting readers to be clear on a concept that is not clearly understood, and acknowledging genres as evolutionary with no consideration of how or why that is so. Select game studies scholars have also developed similar taxonomies and broadened the scope of genre to consider the importance of the interactive nature of games. Looking to literary theory treatments of genre shows genre in that sphere has similarly developed, but with much more consideration of the ways and reasons. This results in a useful body of work to apply to game genres, specifically Bakhtin's work on the novel; the dialogic history and the chronotope.

Given the apparent lack of agreement regarding video game genre nomenclature, evolution and taxonomies, but the importance given to genres, it would be useful to devise a way of describing and analyzing games, taking into account genre information but not relying on it. Jesper Juul and Espen Aarseth devise similar frameworks, but not for analyzing genre. Thomas H. Apperley attempts to do so for genre, but his approach is flawed.

Ed Buscombe (1970) states that genre elements in film manifest in three ways, iconography, structure and theme and creates a framework for talking about genre

elements. I would propose a similar approach for games. While movies are often generically categorized iconographically as Westerns or Science Fiction movies, Wolf (2001) points out that iconography is not ideal for describing games. Game genres are often independent of iconography; a strategy game could be either in a Western or a Science Fiction setting and feature identical gameplay, indeed modifications for games exist that alter only iconography.

Wolf's solution, as noted before, is to consider interactivity foremost. Bakhtin's writing on the novel shows the importance of the dialogic history and the chronotope in a work. These three elements can be used to focus game discussion and allow description of any video game within the context of those three elements, leading to a fairly complete analysis of a game, allowing for discussion of genre elements, but not relying on them. The importance of these elements may shift from game to game. Some games may not have much dialogic history, emphasizing the chronotope instead, and others may have a vast dialogic history but a simple chronotope. The order of the elements is not important. The presence and discussion of all three is important; no one element stands on its own. Any game will feature all three to some degree and the unified discussion of all three leads to a functional, general purpose analysis framework, outlined in detail in the following sections.

The Media History

Bakhtin explains that a novel is a "dialogized system made up of the images of 'language,' styles and consciousness that are concrete and inseparable from language" (1981, p. 49). He then explains how prior genres, the epic poem, the lyric and the drama, make up parts of the novel and become objects of representation within the novel (p. 49). With this in mind, he says "the basic task for a stylistics in

the novel are, therefore: the study of specific images of languages and styles; their typology (for they are extremely diverse); the combination of images of languages within the novelistic whole; the transfers and switchings of languages; their dialogical interrelationships" (p. 50). In this way the critic of a novel must unpack and consider these prior literary forms and how they interact within the framework of the novel. The novel is, in essence, made of these other genres. Video games are made up of these images of prior forms as well, but are not limited to language. A game might contain dialogue between characters, cutscenes to tell the story, audio dialogue during gameplay, still images during loading screens and perhaps even rules and constraints pulled from board or card games. These images come from all types of media; literature, film, photography, visual arts, games, for example. Bakhtin even considers the varied typologies at work in the genre, a large factor in the confusion of video game genres. So in considering a parallel to Bakhtin's dialogic history, I suggest a media history for consideration when analyzing a game. To repurpose Bakhtin's words, "the basic task for a stylistics in the [video game] are, therefore: the study of specific images of [media]; their typology (for they are extremely diverse); the combination of images of [media] within the [video game] whole; the transfers and switchings of [media]; their dialogical interrelationships".

Considering a game's media history in this way allows the game critic to understand and unpack the various media images that shape a game. Almost all non-interactive parts of a game come from this media history. Interaction and gameplay elements may also be influenced by prior media forms, or specific prior media artifacts. Understanding a specific game's generic conventions, as well as its overall presentation, requires a critic to consider the ways in which the game was influenced by, and takes cues from, other and earlier media. The media history is

also a way of gauging genre evolution, as cues taken from older games and references to other games can show genre elements being transposed to genres where they have not appeared before, like the appearance of experience points (XP), originally found in RPG games, appearing in action games like *Call of Duty 4: Modern Warfare* as a way of adding tangible progress to the multiplayer component of the game.

Take for example the game *Batman: Arkham Asylum*. *Arkham Asylum*, before even being considered as a game, must be considered in the context of Batman. Batman is a well-established character who has had decades of media representation. Simply by virtue of being a game about Batman it references previous media representations of the character, such as the dark comic book version of batman, the campy Adam West portrayal, the film noir Warner Bros. cartoon version and Joel Schumacher's version with the aesthetics of the Las Vegas strip, to name a few. *Arkham Asylum* developers, Rocksteady, chose a dark interpretation of Batman and cast many of the voice actors from the animated series to reprise their roles. The overall tone ends up being a more adult version of the animated cartoon aesthetic that shows influence from the darker comic book version of Batman. This links the game to specific versions of the Batman character, most prominently the Warner Bros. Cartoon, since it is aurally similar. The visuals, however, fall somewhere between the Tim Burton and Christopher Nolan film adaptations, less realistic than Nolan's and less carnivalesque than Burton's. To reinforce the particular version of Batman being shown in the game, the game is heavily story-driven featuring numerous choreographed cutscenes as well as extensive communication between characters while the player controls Batman's actual movements.

The story centres on the relationship between Batman and The Joker, both characters who react strongly to the ills of society. Batman's parents were murdered so he chose a life of crime fighting, while The Joker chose to embrace and encourage the insanity of modern life. Much of the story involves The Joker toying with Batman and testing his resolve. Much of the character backstory surrounding this is not discussed, as the game takes place in a limited timeframe, but the developers did include a level where Batman, as Bruce Wayne, relives his parents' murder, thereby conveying the single most important event in the character's history and letting the rest be nuanced through dialogue. This is not strictly necessary for a Batman game, but knowing the Batman origin story helps heighten the psychological tension of some of the game's scenes.

Arkham Asylum's overall gameplay design harkens back to *Metroid* and *Castlevania*. These games both feature large game maps with many branching paths. Throughout gameplay the player passes many inaccessible paths that can, or must, be returned to later after having secured a more varied toolset with which to access these paths. In *Arkham Asylum* the player is given a large, completely explorable virtual world, the entirety of Arkham Island, but not given all the tools required to completely explore it. This results in a linear story taking place in non-linear space. As the player is given new abilities, nooks and crannies as well as large pathways that were previously inaccessible become available. The fashion in which these are unlocked is tied into the game's story. Batman is originally trapped by the Joker but as he fights through the Joker's henchmen he is able to access tools he had previously placed on the island, should a large prison break (precisely the events depicted in the game) occur. This plays into the Batman character; resourceful, technologically savvy and well prepared. *Arkham Asylum*'s specific gameplay style is also heavily influenced

by the Batman character. Batman has no super powers, but is an excellent detective and adept and hand to hand combat, thus, these are the two main components of the game. Players explore and search for clues, then take down enemies, either in all out brawls, or by using Batman's heightened detective senses and stealth. Again, as players progress more abilities relating to detective and combat skills are unlocked.

Analysis of the dialogic history of *Arkham Asylum* shows it takes its level layout inspiration from action games like *Metroid* and *Castlevania*, its combat from a simplified version of fighting game mechanics, its detective mode from adventure games while its story and exposition tied tightly to the Batman character, particularly the Warner Bros. Cartoon version, with the character emphasis being on his relationship with the Joker.

The Chronotope

The media history of a game serves as one facet of analysis for a game, allowing the critic to unpack all the various media references contained within a game and understand many of its generic conventions. It rarely, however, tells everything about a game. Looking at the Chronotope gives another level of analysis, though elements can certainly overlap. Bakhtin explains that chronotope literally means time-space and is a term, "employed in mathematics, and was introduced as part of Einstein's Theory of Relativity" (p. 84). He stresses that the mathematical meaning is not important for his generic analysis, rather, "what counts is the fact that it expresses the inseparability of space and time (time as the fourth dimension of space)" (p. 84). His original work was in the context of novels, where he introduced the concept of the chronotope as well as laying out some common chronotopes in ancient novels.

As noted in the previous chapter, some of these chronotopes map directly onto certain genres of video games, particularly those prior to the introduction of 32-bit consoles like Sony's *Playstation*. Mapping Bakhtin's specific chronotopes onto games shows the specific parallels of a generally useful concept. All games have a specific chronotope and, along with the media history of a game, analysis of the chronotope helps shed light on how time and space function in specific games. Not all games fit into Bakhtin's chronotopes, but they will all have a distinct space-time relationship. It may come from generically similar games or be completely new. The commonality of the chronotope in games, even if it differs from game to game, gives a common vocabulary for discussion of the time-space relationship in games, whether comparing or contrasting.

Some of these chronotopes are influenced by a game's media history, though Wolf (2001) claims iconography to be unimportant to game genres. Games featuring Horror elements often feature slow progress through space, emphasizing the passing of time and increasing tension while games drawing from Action game tropes tend to be fast paced, featuring extensive progress through large levels. Military themed shooters like *Call of Duty* and the *Battlefield* series' tend to feature much faster paces than simulation style military games like *Tom Clancy's Ghost Recon* (2001) or *Operation Flashpoint: Cold War Crisis* (2001).

In the same way, however, games with similar iconography can have completely different chronotopes. *Dead Space* draws from both Science Fiction and Horror iconography but differs greatly from *Mass Effect*, a Science Fiction game with some Horror elements. *Dead Space* features small corridors with monsters jumping out at the player, while *Mass Effect* focuses more on dialogue with characters, gun battles with multiple enemies, and exploration. The chronotope is shaped by a game's

media history, but also encompasses how a game is played through it's time and space.

Continuing the previous section's example, consider the chronotope in *Batman: Arkham Asylum*. The game takes place on Arkham Island, the island housing the asylum for Gotham City's super villains. The game space is the entirety of the island. The asylum itself is the centerpiece of the geography but the island houses other buildings including the Warden's residence and a botanical garden, leading the game space to be varied, as all locations on the island are eventually traversable. It also gives the game a natural boundary; Batman is given no method of water transport. Progression through space comes from acquisition of new gadgets, allowing new paths to be opened. These abilities are unlocked by playing through the story, thus, the exploration options available are directly related to how much of the story has been played. The story unfolds in a linear manner, but the game space is non-linear allowing and even encouraging extensive back tracking for extra power-ups and to explore the story in a more in-depth fashion.

The spaces in the game come in three physical types with varied décor, from libraries and prison blocks, to hospital wards and sewer tunnels. The varied appearance of the spaces helps with the feeling of progression as, despite the relatively small number of overall room floor plans, each new area has different décor. This also helps the player stay oriented. At a few points in the game the player re-enters a previously explored area through a different door or passage. The décor helps the player quickly figure out which part of the island has just been entered, minimizing confusion from backtracking.

The three types of spaces are narrow hallways, large, completely open spaces, and large rooms housing multi-leveled, indoor structures. The larger spaces often have many secret areas and different options for approaching challenges, encouraging players to explore the game space. The narrow corridors have secret passages offering different ways to enter the large rooms that they connect. The large rooms contain story set pieces, action sequences and puzzles with the corridors giving the player multiple approaches and opportunities to listen in on enemies, prior to actually attempting the action sequences or puzzles.

These sequences feature two different gameplay approaches with differing chronotopes. Certain sections require careful exploration and detective work while others require combat. Exploration requires the player to consider all the physical space and look for secrets and different approaches as well as manually switching to a detective view that shows enemies through walls and other relevant information about the terrain and the enemies. Exploration can usually be done at the player's pace, with more thorough exploration and detective work resulting in the player being better prepared for combat encounters. Combat requires the player to consider how the environment can be used to defeat enemies as well as actually defeating the enemies. There is no set time limit but, defeating enemies usually unlocks a door, or otherwise progresses the story, and is therefore necessary for progress. Furthermore, some sequences require the player to stop enemies from triggering an alarm and calling additional troops, requiring careful, but quick consideration of the space and enemy placement.

The game takes place over a very short time, one night. There are rarely jumps in time while playing the game and this enhances the sense of space. Lacking jumps in time, the player gets a better sense of the size and scope of the space, as all areas are

traversed in real time. The space is fully explorable and the exploration feels more meaningful with complete access to the island. Places that seem impassable almost never are, and after sufficient play time the player realizes this, and exploration becomes more rewarding.

There are, however, a few sequences where Batman is thrust into drug induced hallucinatory versions of his past. The lack of time jumps and the completeness of the normal game space make these sequences all the more jarring as they often happen while backtracking, so previously familiar places suddenly become surreal and altered before shifting into completely alien areas. These sequences often feature impossible architecture, indoor and outdoor scenes combined as one or places from Bruce Wayne's past combined with places in Arkham Asylum. Most of these sequences also feature a monstrously sized version of the Scarecrow, the villain behind the hallucinations, lending an even more alien feel to the sequences. These scenes explore Batman's past and question aspects of his personality, giving backstory to players not familiar with the Batman mythos. They also contrast with the cut and dry morality of the rest of the game, questioning Batman's motives and abilities. One particularly jarring scene replays the introductory game sequence, where Batman delivers the captured Joker to the Arkham Asylum facility, but has the Joker delivering a captured Batman. About half way through the scene the game emulates very convincing graphical glitches, as though the player's PC is malfunctioning. This is in stark contrast to the wholeness of the game world and is appropriately jarring to the player (I actually reset my game, thinking there were real hardware problems).

Player/Game Interaction

Considering a game's media history and the chronotope featured in the game allows a critic to pick apart and analyze many genre elements that make up a game. Media history allows the critic to unpack a game's generic influences while the chronotope helps in describing a game's particular time-space, but neither of these focus on the interactive nature of a game, the one element of the medium that critics, especially Wolf and Apperley deem most important. Before delving further into interactivity in the context of my framework, it will be helpful to examine interactivity itself, since it is so crucial to the medium.

Lev Manovich (2001) is, in *The Language of New Media*, highly critical of interactivity in computer applications, saying that modern computer interaction is by nature interactive, so representing an object in a computer automatically makes it interactive. In this way, he states that, "to call computer media interactive is meaningless -- it simply means stating the most basic fact about computers" (p. 71). Manovich has a point. Directly applying the concept of interactivity to video games is too broad. Any kind of activity within a game is interaction, be it using menus, or actually playing the game. Looking to interactive communication, however, gives a better model to which video game interactivity can be linked. Sheizaf Rafaeli (1988) describes what makes communication interactive,

> Interactivity requires that communicants respond to each other. But the content of response may have one of two forms: regular response—reaction to previous messages—or response—which, itself, acknowledges prior responses. The conditions for full interactivity are fulfilled when later states in a message sequence

> depend on the reaction in earlier transactions, as well as on the content exchanged. (p. 119)

So, take the communication of a player with a game; interaction between the two is a series of messages, each containing content, and each reliant on earlier transactions, just as Rafaeli says. Player/game interaction plays into both the media history and the chronotope, but neither explicitly consider the nature of that interactivity, in the context of the game. With that in mind I suggest considering interaction as its own category, apart from the other two. This interaction is best viewed as Rafaeli views interactive communication, and not as Manovich views computer interaction. It covers all the ways a player interacts with a game; control methods, perspective, interface and anything else that could be seen as related to interaction. Analysis of interaction between the player and the game covers aspects not covered in the latter and former categories, though it cannot function on its own, just as neither the chronotope nor the media history paint a complete picture of a game.

Interaction with a game is performed from a specific perspective. Games may use multiple perspectives, but rarely simultaneously. See Table 2 for perspective examples. *Half-Life 2* (2004), for example builds the main character as a shell for the player to fill. That character, Gordon Freeman, is never shown on screen and never speaks, but characters frequently speak directly to him. This builds "Gordon Freeman" up as the player playing the game, because no personality traits are imposed upon him. This is in contrast to third person games like *Max Payne* (2001) or *Tomb Raider*, where the player controls a character with a defined personality. These characters have personalities, voices, moods and attitudes that all come

through in gameplay and cutscenes, unlike Gordon Freeman. Neither approach is better but each results in a different interactive experience.

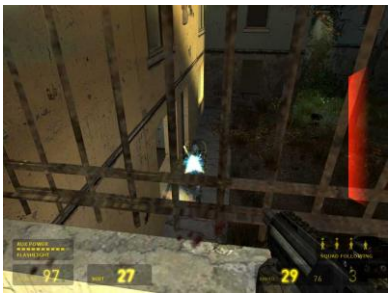 **Figure 22 Half-Life 2**	**First Person** In first person perspective the player sees from the character's point of view. Normally relevant game information is relayed on a heads up display (HUD).
 **Figure 23 Max Payne**	**Third Person** In third person perspective the player views the action from over the character's shoulder. Extra information is also relayed via a HUD.
 **Figure 24 Starcraft II: Wings of Liberty**	**Overhead/Isometric** An overhead perspective places the player's viewpoint much farther away than in third person allowing a large view of the game world and the option to control multiple characters simultaneously.
 **Figure 25 Super Mario Bros.**	**Two Dimensional Side View** This 2D perspective eliminates depth altogether. Originally a technological constraint it has seen renewed popularity as a deliberate gameplay choice.

Table 2 Video Game Perspectives

Strategy games most often employ some kind of overhead, godlike perspective since they generally require the player to be able to quickly view and control numerous different units. This method employs less direct control than the first and third person perspectives with players giving directions to semi-automated characters, rather than directly controlling one character at a time. Within strategy games there is another level to the interaction as play can take place in real-time or be turn-based. Turn-based strategy draws from board games like risk, where each player moves during his/her turn and no other players may make moves simultaneously. In real-time strategy all players move simultaneously and characters and units will continue to work while the player interacts with other units. This requires different player planning than turn-based games as players must quickly jump between units and maintain constant control over their forces.

Game perspectives were originally limited by hardware, as three dimensional games were not possible. Action and Platformer games, like *Super Mario Bros.*, employed a completely 2D perspective, viewing the game world from the side, with no depth while other games, like *Metal Gear* (1987), used rudimentary elements of linear perspective to give some depth to the experience. Later games like *Diablo* (1996) and *Fallout* (1997) employed isometric projection, a technique used in technical and engineering drawings, to create a more convincing illusion of three dimensions. The isometric perspective continues to be employed in Strategy games, albeit with fully 3D worlds, as in *Starcraft II: Wings of Liberty* (2010), while 2D side perspective fell into disuse in favour of fully 3D worlds, and the third person perspective. Recently, however, 2D sidescrollers have seen renewed popularity, some with vastly improved visuals and some with deliberately retro graphics. The 2D view offers a deliberate and sometimes desirable constraint, lack of depth. This simplifies the

navigation of the game world allowing the focus to be elsewhere. 2D Platformers often feature extremely difficult jumping puzzles that could not function in a 3D game as the lack of true depth perception renders them too difficult to reliably perform.

Recently games have begun to employ specialized controllers and motion controls, allowing players to be closer to the physical actions performed onscreen. Games like *Guitar Hero* and *Rock Band* employ controllers shaped like musical instruments with controls similar to the actions required to play those instruments. The result are games that feel like playing an actual musical instrument but require less practice than actually doing so, much like arcade racing and flight games. Motion controls function the same way, but rather than specialized physical controllers, use general purpose controllers that can be moved to control the game. In *Wii Sports* and *Wii Sports Resort* (2009) players use the Wii remote (shaped like a television remote) and emulate the movements of sports like bowling and golf to play virtual versions of these sports. Like the instrument controllers, the motion controls bring the game closer to the real life activity but maintain arcade unrealism, so the games remain games, instead of closely simulating real activities.

Consider *Batman: Arkham Asylum* once again; this time the interaction of a player with the game. Arkham Asylum uses the third person perspective. This is effective as the player is controlling an established character, Batman. The player directly controls Batman, but constantly sees Batman, reinforcing the idea of being Batman, not being himself/herself playing as Batman (as in Half-Life 2, where Gordon Freeman possesses no personality of his own). The Batman character is iconic and presenting the game in third person allows the developer to use this iconography. Batman has certain iconic movements like leaping from high places with arms

outspread, cape trailing behind, to glide down and pounce on enemies, or hanging upside down from a gargoyle to ensnare an unsuspecting foe and leave him dangling from the gargoyle. Moves like these are immensely satisfying, all the more so because of the accompanying visuals, controlling Batman through trademark moves.

The game cut-scenes reinforce the Batman character. Batman has extensive conversations with various characters in the game and control is taken from the player to facilitate this. This method of exposition tends to work best from a third person perspective, as it is less jarring than taking control from the player and showing the player's character in a normally first person game.

The third person perspective also helps with visibility in the game. When engaged in a brawl, because of the perspective, the player can see enemies approaching and is better able to control Batman. Many of Batman's movements during combat are very fast, including jumping around and dodging foes. This would be visually confusing to attempt in first person, so the combat, overall, benefits from the perspective choice. Non-combat gameplay also benefits from the perspective as the player can rotate the view to peek around corners, without exposing Batman to enemies' fields of vision. This cheats the game somewhat, as the player can see more than Batman actually could, however it helps the gameplay and can therefore be acceptable suspension of disbelief.

Arkham Asylum gives the player two distinct methods of viewing the game, the normal view and "detective mode". The normal view simply presents a realistic view of the world. Detective mode overlays the normal view with numerous features to enhance player comprehension of the world, but at the expense of clarity; Detective mode colours everything blue or red and makes the picture grainy. In Detective

mode, enemies show through walls and special areas Batman can interact with to open secret paths are highlighted. This is useful for exploration as it helps the player navigate the world completely, but it obscures other details of the level, making it harder to discern geographic and architectural features. Detective mode is toggled by the player, so players have to decide which viewing method is most desirable at any given point, forcing the player to choose how to view the game, rather than the game choosing for the player.

As noted in the Chronotope section, there are some sequences in *Arkham Asylum* that deliberately and drastically alter the gameplay. Most of the game draws from the gritty, realistic depictions of Batman making the surreal Scarecrow sequences all the more jarring. A number of the Scarecrow sequences also shift the perspective and change the method of interaction. In these scenes ta giant scarecrow lies in wait, encircled by an improbable architecture. In these scenes the perspective shifts to a 2D sidescroller with the player slowly working through the obstacles while avoiding the Scarecrow's deadly gaze. These scenes reverse Batman's role, he becomes prey instead of predator. During normal game sequences Batman always has a large degree of freedom and control in approaching situations, but this is stripped away due to the sidescroller perspective and the need to avoid the Scarecrow's gaze. These scenes tell stories of vulnerability from Bruce Wayne's past and the gameplay changes are effective in adding to the feeling of vulnerability.

Conclusion

Research into video game journalism, game design literature and game studies literature shows lack of unity in discussions surrounding genres, despite genre often being cited as an important, well established and easily understood concept. Game journalism taxonomies have evolved organically from the categorization of games, similar to punctuated equilibrium. This evolution shows numerous new genres appearing then eventually stabilizing into hybrid genres around 2007. The large number of critically acclaimed games released that year is also of note. Other game journalism sites show similar taxonomies evolving in similar ways, but none of the taxonomies line up exactly. Conversely, the ESA's taxonomies are created from sales figures, not game reviews. They show almost no evolution of genres and change very little over the same time that the IGN taxonomy undergoes extensive changes. In addition to introducing genre evolution, these taxonomies problematize the notion of genre being universally understood or accepted in any way. The small differences in taxonomies between journalism sites and the huge discrepancies between them and the ESA's findings show that genre findings vary greatly, despite the perception that genres are easy to understand and discuss.

Sources from game design are also mostly content to outline taxonomies of genres or treat the genre concept as simple and universally understood. Many of these authors outline other, differing taxonomies and encourage would-be designers to choose a genre, and then design a game. Some warn that genres can be constraining but none detail why and all treat genres as an important, easily understood concept. Some authors avoid taxonomies, acknowledge that genres are changeable, and urge designers to consider that, but none discuss genre evolution in any detail.

Early game studies literature approach the medium very broadly, devising frameworks for analyzing interactive media and games. These start to get at many important aspects of genre, though without actually acknowledging it. Authors then began categorizing and devising taxonomies before starting to consider genres more generally, though not delving into genre evolution in detail. Select authors point towards the importance of interactivity when considering game genres, but fail to fully develop the idea into a workable critical framework.

Considering genre in literary theory reveals many parallels to the video game genre confusion, but game studies theorists have not discussed them. Literary genre underwent similar changes as it went from never changing to evolving with changes in society and literature. Russian Formalism and Mikhael Bakhtin's work on the novel shows particular parallels to video games leading to useful pieces missing from previous analysis frameworks.

Games are evolving and this evolution is changing games for the better, despite the genre confusion it causes. That being the case, it is important to push through the genre muddle and properly examine the issue and the artifacts to allow critical analysis of game without getting unduly stuck on genre. Combining aspects of game studies and literary theory treatments of genres allows a theoretical framework for analyzing games to emerge.

Using the Media History/Chronotope/Interaction analysis framework to talk about games helps to discuss games without getting caught up in genres. Each aspect of the framework allows genres to be referenced but is descriptive instead of categorical. In this way all the nuances of genre can be described but games can continue to evolve and be critically analyzed, without the need to devote time to

taxonomies and genre characterization that invariably changes as the medium itself changes.

Genres are not just problematic when analyzing games, as the section on game design literature shows; they can be just as problematic when designing a game. This framework can be equally used when building a game, rather than deconstructing it. Game designers can, before or in addition to storyboards and design documents, outline their game's proposed media history, chronotope and interaction. This will help designers acknowledge and incorporate game genres and aspects of previous games without forcing them to commit to one genre or a combination of genres, thereby freeing the design from the constraints of genres but allowing it to embrace the positive aspects of genre; structures and norms for gameplay that can be useful to players.

The analysis framework is less useful, in and of itself, for mainstream use. It is not feasible for consumers to stop and read a detailed breakdown of a game's component parts instead of a single word genre. It is however feasible for cut and dry genres to recede into the background in favour of well-made games. If critics and designers free themselves from genres and continue to make great games, combining existing genre elements and introducing wholly new ones, consumers are not going to care about genres.

This begs the question, what's to be done about genre in mainstream gaming? In the realm of critical analysis it is helpful to present a framework to wade through the genre muddle, but when it comes down to it, critics are free to talk about genre. In mainstream gaming, though, the genre confusion is obscuring a mechanism that is meant to help buyers easily understand what they are purchasing, but a three tiered

framework is not the answer to that. An answer is needed, though, and an in-depth look at video game genres, as presented here, is a way forward.

While I feel the analysis framework and the research that got me there is sound, more research in many aspects of this work would be beneficial and interesting. Game journalism taxonomies show themselves to be both different from each other as well as different from the ESA's Essential Fact documents. I theorized that the game journalism taxonomies evolved from organizing reviews and reviewers addressing changing genres, while the ESA's lists come from sales. It would be useful to contact these organizations to discuss how, exactly, they devised their taxonomies. Knowing the methods to deal with genres used by game mainstream gaming press and literary theorists might shed more light on the whole idea of genre.

It would also have been helpful to have used complete archives of genre lists from game journalism sites. IGN's archives were good, but incomplete and Gamespot and Gamespy's archives were lacking. Having has a complete archive might have shown a different view of genre evolution, instead of Punctuated Equilibrium, the conclusion I came to from the research I was able to do.

Perhaps these are research avenues I will eventually take, but for now I hope video genres and their evolution will pique someone's interest enough to do their own research. Genre evolution is in full swing and as the popularity of games increases, hopefully they will continue to evolve and eventually these questions will absolutely need to be addressed, when your local game shop gives you an Action-Card-Simulation-Music-Strategy-RPG-Puzzle game.

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