ANIMATED INTERACTIVE NARRATIVES:

An exploration

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Abstract:

Animated interactive narratives are video games and other media story-telling endeavors. When participants take place in and therefore help to shape animated interactive narratives, a type of storytelling seen no where else occurs. This form of storytelling is nothing new at its core, for it is comparable to the features of 'play' and 'games', which have always existed. People yearn to tell stories and be told stories. Animated interactive narratives facilitate this desire, by vast numbers, in today's day and age. Technology and design concepts will continue to improve with time, and animated interactive narratives will become more accessible to all types of participant-storytellers.

Introduction:

'Story' is the communication of perception. Because all people have senses and are capable of some form of communication, all people have stories. When story is presented in an organized fashion, allowing for events to be arranged and meaning to unfold from the order and substance of those events, then 'narrative' is made. Thus, a narrative is the perceived organization of thought, for thought is worldview. Nevertheless, the terms narrative and story are used interchangeably herein, because of the 'interactive' distinction of the concept presented: the 'animated interactive narrative'. Interactive narrative implies meaning is generated with immediacy, or in the way life unfolds with every moment, stimulus and response. Story is self-awareness. Story is thought. Digitize this happenstance, and one gives birth to the animated interactive narrative.

So, an animated interactive narrative is a story that is interactive, and that is also comprised of animated images, interfaces, or text. Such narratives exist primarily in the electronic. Though this mode is the perennial form, the central design of the animated interactive narrative is equal to the classic design of all types of narrative. This has always been the case throughout the entire electronic storytelling era. That design is this: The play was the thing, is the thing, and will remain the thing whether it is standard narrative or animated interactive narrative.

The center of the animated interactive narrative is narrative. Narrative, or story-telling, has existed throughout human history. With the passing of years and the invention of new storytelling mediums, narrative has remained despite its being derived in newer and newer forms. For example, legends once passed orally from generation to generation were eventually painted upon cave walls, etched upon stone, and so forth, in all parts of the ancient world. The writings of tablets were later captured by the quill and thereafter the printing press. Regardless of these evolving methods of presentation, these oral legends generally remained true, from the first telling to the last.

Narrative has become increasingly more visual. Near the turn of the twentieth century, with the invention of the cinema, stage performances were captured on film. Though the audience was witnessing a performance projected in light on a flat surface, it was still the original performance, only now captured in time. Thus, while the means of storytelling or story consumption have changed, story itself has not. Though there are boundless ways to tell a story, and different ways stories can be told have come about with newer forms, specifically technological, narrative is still narrative.

Electronic technological storytelling forms are under scrutiny here. Technology has made possible the two classifications 'animated' and 'interactive', which are ascribed to the term 'animated interactive narratives'.

Animation allows those cave-paintings, some of the first visual narratives, to come to life. In animation, figures are represented sequentially to develop the illusion of movement. It differs from standard cinema, in that it directly manipulates the image. Animation has become a part of everyday life, thanks in part to the personal computer (see Cybulski and Valentine "Timeline"). In widest consumption, animation's primary design is that of storytelling. Herein animation is treated as a technological as well as artistic narratological form. It is viewed in a primarily technological sense when discussing video games. However, when discussing web cartoons and animation it is handled from an artistic vantage point. In total, this report is dealing with animated stories that can be acted upon by users, thus deploying new artistic possibilities via technological means.

Interactivity is the foundation of a type of narrative known as 'play', or games. 'Play' is the interaction of one or more storytellers with given story elements. This interaction composes a narrative (Murray). Whether this narrative is achieved by a fixed or improvised performance of a previously composed subscription to a broadly or narrowly set paradigm, or it is conducted within a formal system of rules with no predetermined outcome[1], competitive game play exists upon interaction. The term 'play' is appropriated by this author for use in describing narrative construction in electronic media.

[1] Theater is the former, games are the latter.

When the term “interactive” is uttered, it often calls to mind catch phrases like “interactive media” or “interactive electronics”. This sales-point use of the term “interactive” is partly to be blamed on a consumer electronics industry bent on using buzzwords. However, for purposes here: the example of some children having a footrace outside, whether hundreds of years ago or today, is just as interactive an experience as is children competing with each other in *MarioKart*, a popular go-cart racing videogame (Nintendo). Buzzwords are not the discussion here.

Little about play, at its very definition, has changed with the coming of technological forms, only perhaps how play happens, and certainly what play looks like. With the creation of the first American-made video game in 1958 (“The First Video Game”), historically traditional play forms have been transposed upon various titles, types, and genres developed for the medium. The medium of electronic games, and their various dependent computer technologies, has become a part of society (Monroe). This lends the primary reason for the widespread use of the term ‘interactive’, since all of these interactive creations, the medium of electronic gaming in whole, are all interactive to begin with. Now, play is narrative (Zimmerman), and this underlines the point; that while the method of storytelling has altered, ‘story’, viewed as a separate concept, has not undergone any fundamental change, even if it is labeled “interactive”.

Without advances and innovations in electronic animation and graphics, the electronic game could not have taken on the popularity it has gained over the past decades. Storytelling is, at its heart, a visual art form. Whenever story is experienced a mental image is generated in the mind of the audience. Therefore, when specifically sharing stories in a visual form, instead of textually or aurally, visual stories often

supplant the tendency to self-generate the mental image. This tendency subverts the mental visualization process. Despite this, the popularity of film, television, and video games overshadows traditional textual and aural presentations of narratives today.

Children are a primary target for game developers in the electronic entertainment world (Miller II). This is true of developers in other media, such as television and film ("Kids in the Crosshairs"). Presumably, visual storytelling captures the imagination of the child, which translates into sales, and a lifelong customer with an affinity for the product/story consumed. Young children are experiencing first-time exposure to the medium and are developing expectations based upon this exposure (Wiig 1). Then, with each new interactive gaming experience, over time a maturing child innately requires that the bar be set higher to satisfy previously implanted perceptions coming from their previous exposure. Inevitably, each experience must top the last, and the outcome must be rewarding (Hazuki). The interactive envelope is continually pushed, in terms of three factors: the visual standards set by growing artistic achievements made in the confines of advancing software and hardware capabilities, innovations in game play styles and mechanics, and video gaming accessibility across the populace.

Desirably, interactive participants need to be convinced that they are, as game players, viable story elements within the interactive experience by a convincing overall experience (Ward). Many times gamers must be convinced of this solely on the photo-realism (Woodhouse) (defined in part as imagery so realistic to the eye that it avoids being noticed for its digital origins) of the experience, or interest might begin to wane (Cold). However, this still underlies the importance of mental imagery, because reality cannot be completely duplicated. Imagination, in this regard, helps maintain the

popularity of some previous graphical creations, or older games. Most players usually lose interest in older titles because of new graphical representations (Wong). Notwithstanding the primacy of the mental image, even if people have read the book, they still go see the movie. Thus, it can be surmised that innovations in computer graphics have propelled the medium of electronic gaming. The movement of those graphics, computer animation, and its constant advancement towards photo-realism, has become standard.

The word 'video', in the digital age, has come to mean any imagery which is generated by graphics processing technology and software inside of computers and other devices and then emulated on a screen for viewing ("2 entries found for video"). Whereas, in the past the term 'video' was more specific in meaning, it now incorporates anything a person sees on any screen, be it televisions, electronic gaming consoles, computers, or other types of image emulators (ibid). For example, one might be overheard asking "How's the video?" when discussing a digital image on a computer, whereas in the past, they might have asked, "How's the picture?" This is applicable to the word 'sound' in the digital sphere, too, in that the word 'audio' has taken upon the former word's meaning. A video game has about as many incarnations as there are uses for the term 'video'. One might also generally call the animated interactive narrative the 'video game'. Nevertheless, various forms and types of animated interactive narratives must be delineated, because not all can safely be categorized as merely 'video games'.

Video games make up the bulk of animated interactive narratives. As the electronic, or video, game evolved from its inception, with new types and forms of interplay, many storytelling techniques were and are being infused into the medium

(Osbourne). Ideally, the purpose of this is to develop creative interactive stories for a new interactive medium ("Drama, Fiction, Poetry, Storytelling & Machine Writing"). All games and play (video or not) naturally develop narratives, or plots, with winners, losers, all the entailed dramatics, and humor, both as designed in the formal system of the game, but also external to the game (meaning, amongst the real participants outside of the designated game set-up – such as an argument that develops between two video game players sitting in their living room, which is a story in and of itself). From this natural occurrence of narrative, it has become practice to craft better stories to go along with the increasingly complex formal structures of games (Wilson), formal structures that are narrative makers by default (Zoomba). This has been achieved over the years with varying degrees of success.

Unknowingly or knowingly relying upon the natural narratives that derive out of games' systematic structures of play, many popular titles have altogether sidestepped the 'story' as an element. The irony in these decisions to omit 'story' is that, as indicated by Murray, games are stories no matter what (Murray). Nevertheless, examples of these types of games include board and card games. They leave a game's formal system and participants to be the lone storytellers. The story is found born from the system and the interaction of real participants, like other non-electronic games that ignore obvious storytelling elements. Mental imagery becomes vital, as does social interaction. Thus, all types of games are narratives (Jackson 7). For example, ask a friend to recount the story of how he or she won or lost their last game of checkers. That is narrative.

Without going so far as to outright claim that a television game show is an animated interactive narrative, stretching the definition that far helps one see the entire

range of possibilities under the term. Television shows often employ a great deal of animation to supplement their programming. When a television game show utilizes animation, and the show participants appear performing as though they are interacting with that animation, whatever it may be, one could conceivably label the show an animated interactive narrative. They are games, requiring interaction, and, hopefully, they have no fixed outcome. Though game shows are not the issue at hand, it helps one see how other electronic forms are also arenas for animated interactive narratives, to varying degrees.

Interactive narratives of great concern here are found on, or often directly because of, the internet. The basic upload-download functionality of the internet has opened many pathways for interactivity between separate internet users. The exchanging of information and the increasingly rapid availability of this information between parties has given rise to many animated interactive narrative forms. Some of those addressed herein will not be entirely "animated" in the traditional sense. To wit, the basic graphical interface of the personal computer and the internet browser is an animated one, even when a source on the internet is totally computer text-based, because the animation is limited to alphanumeric characters forming on the monitor by user input or download. Regardless, many, many games are played over the internet, primarily through web browsers. These games are created in programming codes such as the FLASH, HTML, and Java internet languages ("Web browser based games"). Yet, not all games utilize the web, or even a personal computer, to function over the internet and other networks. The framework of the internet has allotted the establishment of many smaller networks that connect possessors of specialized software or hardware and games that do not need the

web or typical internet user interfaces to be used. XBOX *Live* is an example of this ("About Xbox *Live*"). Gamers connect online to play each other ("Top 10 Reasons to Get Xbox *Live*"). XBOX games are generally more immersive graphical experiences for a user than are web games.

Of great significance to the animated interactive narrative is the growth of emergent gameplay (meaning things, first unnoticed, unfold before the player's eyes as the game's artificial intelligence responds to the player) (Smith slide 9) and immersive (meaning the user is meant to feel as though he or she is deeply involved) (Carini 1) three-dimensional environments in on-line and other games. These 3-D experiences allow for greater virtual immersion in to interactive story settings for gamers. In true interactive form, players are actors in real-time narratives, as long as the situation is "believable" (Hughes and Stapleton 3, 5-6). But, not only as actors; they write the story as they play with each game play decision made. Many of these games offer player perspective 'on screen' from a first person point-of-view, maximizing virtual personal immersion. These environments are often labeled "massive multi-player on-line games", or MMOGs.

Not only generic games are played over the internet. Computer text-based, keyboard-type driven animated interactive narratives are found on the internet. Examples of these include the numberless chat rooms found on-line through various services. This avenue of narrative form is not limited to word exchange. Certain types of game playing are also prevalent throughout. Role playing games or stories may be experienced in chat arenas. The possibilities are as varied as the imaginations of the participants. Multiple users interactively generate stories on-line with one another in text-based fashion.

Occasionally, users might provide audio or visual supplements to their stories, even animation. Examples of this range from "emoticons" to websites set apart for presenting interactive texts ("The Interactive Story Web Ring").

Exchanging stories represents one of the many pathways animated interactive narratives have found a place on the net. Exchanges, or postings, are as wide in variety as there are types of stories and characters out there to share. One might look to 'Star Trek' fan fiction, where fans of 'Trek' write their own stories, appropriating the popular TV series' characters and other elements (Star Trek Fan Fiction). Other types include entirely new fictions, where users submit the next "chapters" one after the other ("HeroQuest Stories").

Then, there are MUDs, or "multi-user dungeons" or "dialogues" (Cowan and Smith). In these "dungeons", though they are not always exactly dungeons, but any number of fantastic settings, users chat and play within a formal setup. This allows a narrative to be followed as a role-playing game takes place. MUDs themselves are the digital offspring of paper-based role playing games, or RPGs, such as Dungeons and Dragons (Arneson and Gygax), the first pen-and-paper-based RPG ("History of Dungeons and Dragons"). Players create characters and follow a written scenario as it guides them on an adventure. Story continuation is based on the workings of a formal system of rules that rests on the random roll of dice, like many board games (see Berlinger for thoughts). Computer algorithms now facilitate this random roll in electronic RPGs.

The legacy of role playing games like Dungeons and Dragons does not end with MUDs, but many other story-driven video games, on-line games, and other pop culture

products have been influenced of it (Schorow). The genre of the RPG is one of the most well-known and established in the gaming world ("Computer role-playing game"). In an RPG, a basic story world and story elements are established. Then situations requiring decisions that are inevitably decided randomly, or mathematically, form the basic structure of game play, as explained above. Many animated interactive narratives operate in the same manner, especially in the video game format. A narrative is built out of random computations.

What better place than on-line, where a computer network can connect multiple users for MUDs and other types of animated interactive narratives to thrive? The net presents a forum for animated narratives that is seen nowhere else.

Web animation can be another form of animated interactive narrative. Many websites present animation created on special software allowing users to interact with the animation itself, in addition to simple passive viewing. Many games are built around this approach. Some postings of on-line fiction are also comprised of sequential art. One might find some degree of animation in this sequential art, depending on the website. Some web comics and web cartoons fit in to the definition of animated interactive narratives. Generally, if there is a story being told, it fits the working definition well.

Main Examination:

To iterate 'animated interactive narrative': it is any narrative form that requires interaction from users via input which happens as user activated or generated animation that ultimately tells some kind of story. This animation can range from the input of textual characters on a video screen to the drawing and manipulation of complex

characters in heavily coded software. It can range from live performance animation in motion-capture devices to simply e-mailing additions to a database narrative.

While storytelling has been modified in its approaches and has changed dramatically with the advent of animated interactive narratives during the electronic era – bolstered by an increasingly widespread participation in said narratives by countless people with access to electronic media – storytelling itself has not actually undergone any sort of evolution. Instead, the stage has expanded and the cast has grown in numbers never before seen. These players have been empowered by new technology to construct narratives. However, the final outcome is not different in comparison to narrative before the electronic era, despite the amazing array of storytelling implements now available. Storytelling has gone from Shakespeare's Globe Theater to Star Trek's Holodeck, and then all the way back (see Cantino for Holodeck information). Perhaps the only difference is that improvisation has become much more the norm. With a video game, anyone can be their own sort of bard.

Storytelling is a natural part of life (Osbourne). It has been said that narrative is found in everything, and everything has a narrative (Bernstein). The meaning of the term 'narratology' is that with everything that is done, a story or meaning is being made because of instinctual rules that humans follow (Prince). This is related to common sociological perspectives espousing on how all human behavior is performance. People act out what individual personal representations they have learned from others, and chosen for themselves through their own self-perception, by drawing upon these representations learned and observed, stored in their minds from previous life experience

(R. Anderson C-3). They construct these life performances from the databases of their minds.

Narratology and performance are closely related. On Marsha Kinder's theories about 'database narratives', Steve Anderson wrote:

> Marsha Kinder reminds us that virtually all stories – like language itself – derive from combinations of narrative elements within a given set of parameters. "Database narrative refers to narratives whose structure exposes or thematizes the dual processes of selection and combination that lie at the heart of all stories", Kinder explains, "particular data – characters, images, sounds, events – are selected from a series of databases or paradigms, which are then combined to generate specific tales" (S. Anderson).

Extrapolating on this, everything that a person does in daily existence comes from the information stored in their 'mental database'. This information is used to construct the on-the-spot, interactive, and living story of their life. Often these stories are then recounted subjectively from the manner in which the person, as his or her own storyteller, constructed that narrative, as based upon their database selections.

A process of database selection and story construction takes place in interactive media, as Kinder notes above. With animated interactive narratives, in terms of input, narrative elements, and, therefore, stories, are derived from selections that users make from items in an electronic database. Users are empowered with storytelling tools through these selections as presented to them in a database narrative. For example, a gamer, faced with an enemy, could chose from a wide variety of weapons (database

elements) to defeat the opponent. This is also related to the concept of 'branching narratives'. In a branching narrative, users decide which branch of the story to follow ("Branching Narrative"). Interactive storytelling in the database narrative implies that the user is the storyteller in real-time, deciding the outcome of the narrative on the fly.

It is now established that narratives are constructed and performed out of selections in a database. In animated interactive narratives, play and games work in the same way. Participants in any type of play, from simple childhood pretending, to formally structured competitive games, make selections from databases comprised of available information and the rules of play. Sometimes these rules of play shift on the fly, as they do during childhood playtime. Nevertheless, the concept remains the same with all database narratives. Decisions are made within an established but evolving structure amidst available story components. These decisions build the story.

When a soccer player is preparing to take his or her penalty kick, he or she calls upon all learned and perceived kicking scenarios, tactics and options. They then make a selection from these possibilities (database items), kicking the ball whichever way and style he or she decides. Participants in all forms of play, games, human performance, and all animated interactive narratives, knowingly or unknowingly, create a story. They actively function within database narratives. After the story is finished being constructed, whenever it is recounted, it then becomes not only a story, but a history.

All the information in the game is computer data. It is the primary focus in this report to examine electronically assisted narratives, as opposed to those constructed in corporeal play amid games and performances of physical activity. Nonetheless, there are many elements found, for instance in a soccer game's story (or in other words, found

shaped in its formal rule structure), like that seen in all sports, that can be drawn from and specifically designed out of, or simulated, into an electronic version (Kemper). Sport simulations are some of the most common animated interactive narratives ("Sports"). Stop into a local video game retailer and one is bound to see a selection of titles that represent real-life physical games and sports. There is an interactive formal story structure inherently, automatically observed within sport. There are winners, losers, and ever twisting plots with every point that goes on the scoreboard. A soccer match, because of its rules of play and what things could transpire within the duration of the game, as in any other sport, makes it an interactive narrative in full. Many popular sports in the world are examples of sweat and blood, real world narratives. These real world types of play are widely replicated, or simulated, electronically, because of their natural interactive narrative structures (e.g. rules of play). Electronic interactive simulations of real world narratives, such as sports, form a springboard for many new electronic animated interactive narratives. As a sports game is created, aspects of the sport are written in game code as data. Sport then becomes database narrative.

One of the first electronic games, or video games, was *Pong* ("Nolan Bushnell"). *Pong* is a crude simulacrum of the sport of table tennis, often called Ping Pong. Ping Pong is played in real life between two people at opposite ends of what amounts to being a miniature replica of a tennis court on a table. Then, with a paddle, players hit a ball back and forth over a small net at the middle of the table, much like in a tennis match. The irony is, in many ways table tennis is a simulacrum of true tennis, making Pong a simulacrum of a simulacrum. In *Pong*, a white dot on the screen, representing a ball, moves from one left or right side of the screen to the other. The dot is animated as if it

were crossing a white line, which represents the net, appearing as though it is 'bouncing' between two smaller lines representing paddles. Users control the two paddles at either side of the screen. Herein one sees the basic rules of tennis or Ping Pong recreated electronically. *Pong* is one of the first electronic simulations of, originally, a real world interaction.

As technological capabilities and electronic programming techniques and approaches have advanced from the initial *Pong* state, so have the means of "realistically" depicting simulated sports and other real life human performances and human play. When once a Commodore 64 computer ("C 64") (one of the original home personal computers) could initiate a football simulacrum requisite on user input and interaction, or in other nomenclature: a football video game, wherein just a few faintly distinguishable pixels, appearing to have the shape of football players, tossed around a brown dot purporting itself to be a ball, some twenty years ago, entitled *'4th and Inches'* (Whitehead), every year the Electronic Arts company publishes an extremely high selling simulation of an interactive football game, entitled *Madden NFL Football* (EA Sports), on a variety of gaming consoles such as Sony's PlayStation 2, that stand light years ahead of such decades old machines like the Commodore. *Madden* is the surname/brand name of a storied football coach and play-by-play television announcer, John Madden. Pre-recorded motion capture performance animation ("Motion Capture - Recording vs. Real-time") is used to supplement photo-realistically rendered images of near "television" quality figures of football players. The game is set in an immersive three-dimensional playfield environment. Camera and perspective changes are akin to football on television. The computer calculations in *Madden NFL Football 2004* would take the

aforementioned Commodore 64 eons to calculate, due to advances in processor speeds (Wilfong). This illustrates the gaming industry and consumer fueled push for more and more powerful hardware and software capabilities that can create more and more "realistic" or graphically intense and immersive experiences for a participant-storyteller in video game animated interactive narratives.

The key benefit of this push, aside from greater artistic license now being afforded game designers, is that the drive to make the interactive experience as heightened and entertaining as possible is coincidently widening the field of gaming possibilities (Ward). Though simulating sports and other human performances into electronic form began some of the popularity of games, the imaginative limit of animated interactive narratives in the video game format has not been limited to sports alone. Instead, it has exhibited limitless imagination. Countless examples of stories in games exist, as evidenced by the hundreds of game advertisements available on-line, which indicate this fact (Gametrailers.com). Who would have thought that the story of a racially stereotyped Italian plumber who goes on a quest to save a princess from a giant, anthropomorphic fire spitting turtle, as in *Super Mario Bros.* (Miyamoto), would be commonly regarded by the public as among the classics of all published video games since the medium's inception ("Game popularity")?

Many genres of video game animated interactive narratives exist. One such notable genre, in terms of measuring the technological extents of the medium, is that of the 'first person shooter' or FPS ("First-person shooter"). FPS's do not always have to include 'shooting', but this is the common attribution because of the usual presence of shooting from some variety of weaponry during the game. Here one might find some of

the most critical evaluations of immersive/emergent environments. Perhaps analyses could be most critical because the player is supposed to be "looking" through his or her own eyes, on screen, as he or she explores the setting and world designed in the given game. It is, supposedly, more immersive an experience than are many other game types, and is equated as if the players were there.

There are two titles that launched the ongoing popularity of the FPS genre when it came into being in the 1990s, *Wolfenstein 3-D* (id Software) and *Doom* (ibid). In the first title, one navigates a nefarious Nazi castle, shooting Nazi soldiers. *Wolfenstein 3-D*'s violent imagery and immersive quality spurred high sales and created controversy. This controversy, as to the appropriateness of some personal computer and video games for youth, came at a time when no ratings body for the medium existed ("About ESRB"). In the wildly more popular and infinitely more controversial title *Doom* (there was a supposed connection between the 1999 Columbine High School killers' deadly real-life school shooting and their playing of *Doom* at home (Varanini)), the player fought off legions of evil creatures from Hell, with blood-splattering results. The father of these games' software engines, John Carmack, by creating *Wolfenstein 3-D* and *Doom*, propelled the standards by which many games to follow are now held (Kushner). In many ways these games pointed the video game industry in a direction towards more fully immersing players in graphically photo-realistic narrative settings, as represented in the recent release of *Doom 3* (ibid).

One direction of the animated interactive narrative in the video game format is that of technological determinism. The mantra is: more lines of code in the program, more database selections, more animations, more immersion, more speed, more "cinema

experience"-quality games, and so forth. That mantra does not negate from continuing an exploration of those formats of animated interactive narratives that choose to not let technology alone determine their content. It is noted that not all video games are technologically deterministic. But, as is the case in the film industry, films with the "most" and latest special effects techniques, which rely on technological innovations over innovative storylines and characters, particularly since the coming of George Lucas' Star Wars and its massive popularity in 1977, make up the bulk of that industry's yearly revenues (Hill). One might then view *Doom*, with its high revenues, as a financial "Star Wars" of the video game industry (Snider).

In observing the other types of animated interactive narratives outside of video games, no Star Wars or *Super Mario Bros.* or *Doom* easily comes to the forefront of thought. Those particular intellectual properties do arise, being that they are franchises seeped into many retail and commercial avenues aside from their creative origins. But, what rises to mind is the 'Internet' as a whole creative landscape. Meaning, most other animated interactive narratives would not exist if it were not for the world's largest computer network. Some of the particular avenues of artistic expression that generate animated interactive narratives have been described already. These include web-based animation, web comics, MUDs, fan fictions; and there are many more types.

The possibilities are endless when it comes to animated interactive narratives on-line. One does not always need a highly immersive 3-D experience; just participate in these narratives as they are being constructed. Often, the experiences made possible by games played on-line, particularly MMOGs, suffer from certain strictures because of the orderliness in which the interactive experience plays out. Database choices are not

limitless, though the timing and method of choices can be as random as the players involved. This is where, in this strict sense, the interactive narrative is handcuffed by its own structure. However, there can be an unlimited aspect to choices found in other types of net based narratives. Their database components can vary greatly in structure. For example, there are fan fictions that implement the writers' imagination as an infinite-possibility database. Then there are many web-based FLASH animation sites that encourage user interaction ("Best Flash Sites Vote"). What users do with the animated characters is variable. To attempt to cover all the possible animated interactive narratives that exist, due to the web, would be far too exhaustive.

The internet is a vast storytelling terrain. The web site HomestarRunner.com (Chapman) is a web based animated interactive narrative installation with a pioneering spirit (Dean). Prior to the year 1999, as the internet increased its reach in to more and more peoples' home computers, the speed and amount of information able to be transferred had begun to reach a point where web sites could be fully animated. This was made possible by varying kinds of scripting software, such as *Macromedia Director*, and by many talented new artists. Longer and increasingly more detailed video files could be posted and viewed with little delay. Internet speeds have only increased since. With this boom in broadband, animators such as the self-labeled "Brothers Chaps", creators of HomestarRunner ("Email – It's maybe just for email againymore"), could present on-line material that they had previously been seeking, unsuccessfully, to publish by more traditional means. With disregard for traditional internet revenue streams, such as advertising banners and 'pop-up' ads, they sell apparel regarding the site for support (Dean). The Brothers use flash-based animation to tell the stories of some unique cartoon

characters that they had originally attempted to introduce to the world in print as a children's book, yet had ultimately failed to do so. Some storylines in the various cartoons posted on the site, such as "Strong Bad E-mails", are influenced and partially dictated by the input of visitors to the site ("Denny's Menu"). Via e-mail, visitors can send messages to one of the characters, a bully by the name of 'Strong Bad'. Through this, HomestarRunner.com is developing an open-ended creative dialogue with its fans. HomestarRunner.com is one of the more unique animated interactive narratives.

Some fan fictions on-line are animated interactive narratives. Fan fictions are unofficial, storytelling initiatives brought on by a fan writer's love for certain narrative materials already in existence. Some of the most prominent fan fiction is found in the fan-induced appropriation of many of the late twentieth century's most popular science fiction and fantasy franchises, such as Star Trek (Star Trek Fan Fiction) or The Lord of the Rings ("LOTR Fan Fiction"). In this author's opinion, when a certain narrative world takes upon itself a kind of life of its own, due to fan fiction, apart from the initial material created by the original author or authors, it has a tendency to become franchised into many storytelling and merchandising avenues so the legal owners can capitalize on the popularity of the material, selling authorized products to satiate fans. Legal ownership licenses for the original materials contained in the story franchise are established to monitor and control the spread of the material into many incarnations (Oakley II-F-2). For instance, Star Wars, originally just a single film in 1977, is now found in so many incarnations and derivations that have been spun out of the material that it is now a financial "story" empire ("Expanded Universe"). This might be likened to the fictional empire that ruled the galaxy in the original film. Like the rebellion in the movie that rose

up to battle the empire, so to have rebellious fans of the material risen up (Fan Film Forum) to forgo any legally licensed use of the material. They spin their own tales based upon some of their favorite elements from the original or franchised work.

How fan fiction relates to animated interactive narrative is that what is seen is the selective use of materials to build new narrative from the existing "database" of the original franchise. Fan writers pick and chose what they wish to use to create their own storylines. Some fans have even gone so far as to make fan films (Fan Film Xchange). In one case, a shot-for-shot remake of an original film, Raiders of the Lost Ark (Spielberg), was made (Knowles). At first, these endeavors might have attracted the attention of lawyers, but now they attract the attention of the original artists and gain praise for their respect for the material ("Raiders of the Lost Ark The Adaptation – Press Archives –").

A specific type of fan fiction as animated interactive narrative is found when fan writers generate selections of work and then post them to databases, where other fans can read them and then build upon them, such as the aforementioned HeroQuest site. This is similar to what MUDs are, in that there is a multi-user exchange of imagination. The key difference between these fiction boards and MUDs is that MUDs are role-playing games where the participants pretend to be certain personas or characters in real time, whereas, in most fan fiction, the participants do not have to cast themselves into the stories they author if they do not wish to. The interactive element comes in the response to the submission, in some cases, where other authors continue the storyline. For animation's sake, then, to round out this explanation, if it is on the electronic screen, right as the text appears, graphically, it is a form of computer animation.

If that definition is unsatisfactory, consider the web comic. Sequential art is the basis of all comic books and comic strips ("Sequential art"). They are as movie storyboards, which, conceivably, await, only to be fused together through the skills of animators or filmmakers, though that is not necessarily their purpose. The web comic and the web comic strip have been established as a type of sequential art on-line (WebComics). Some web comics attract specified audiences and are not always intended to be as universally appealing as those strips found in syndicated print (Bugajsky). Flash animations and the animated graphic file, or animated .GIF ("Free Animated GIFs"), have made possible even another type of animated interactive narrative. Some fan fiction comes on-line in the form of an animated web comic, sometimes with a web link to games or an entire game already to be found within their comic frames. In this case, fan fiction enters the definition of animated interactive narrative without argument. There is a wide slate of interactive animation similar to the interactive cartoons of HomestarRunner.com which are built around the premise of animated web comics found on-line. Orbit Comics.com is just one of countless examples of interactive comic creations to be found (Orbit Comics).

Every website is its own database narrative waiting to happen, deliberately or not. As users navigate through web pages, they are selecting the portions of the site that they wish to get their "story" from. But, the general design of an animated interactive narrative lies within the type of website which is specifically made for entertainment purposes. Whether it is a collection of web comics, a chronologue of fan fiction, a listing of animated movies to watch, or a site with small Flash-animated games to click through and play, they are all encompassed in the definition of an animated interactive narrative.

Some are more obvious narratives than others. Websites directly featuring interactive animation are the best examples, where the site displays animations that are controlled by or work in response to the user's input. On one site, a user must control a stick man and hit keys on the keyboard in order to activate the stick man through a series of animations which depict him fighting off other attacking stick men in violent fashion (Zhu). This is pure animated interactive narrative, because the animated narrative does not work without the user first participating in a manner that directly influences the animated characters. Other sites let one pick story elements and then watch them play out in an animated story after the selections are made (Make-A-Story).

The video game as interactive narrative and the net-based interactive narrative come together in MMOGs like LucasArts' *Star Wars Galaxies*. A franchise such as Star Wars, that takes upon itself a separate life apart from the original movie, is driven by fan interest. Some fans look for a way to satisfy their desire to take Star Wars into their own creative hands. LucasArts possibly sought to find a way to excite fans that are so engaged with the story that they want a way to immerse themselves in the Star Wars story world. *Galaxies* addresses this fan desire. The game gives the user the opportunity to become a part of an animated interactive narrative on-line that involves the Star Wars universe. In this role-playing game they create and control their own Star Wars characters in a fully immersive 3-D environment. Such restrictions like limited data and functionality hinder the video game, and all MMOG-types of animated interactive narratives, and prevent them from being fully interactive with totally random possibilities, as found in other types of animated interactive narratives on-line. But, other characters encountered are human users, adding the unpredictability of real-time narrative

being woven on the fly. MMOGs, like *Star Wars Galaxies*, are gigantic improvisational shows, and all participants are on stage.

Sometimes the stage is populated by artificial intelligence, and the real people call the shots from back stage. 'Neopets', a website where people can chose and raise a digital pet, which they can check back on with the same sort of regularity that they check e-mail, has become a popular form of animated interactive narrative (Neopets). Owning a Neopet and providing for its interests falls in the same vein as on-line interactive animations and games. Neopets.com, aimed at children, is supported by immersive advertising that has been fused in to the narrative settings (for example, one might take their Neopet to a web page showing a map, where it can virtually go shopping at brand name clothing or fast food establishments, among others) ("Company Background").

Neopets give us another tier of animated interactive narrative. Unlike the sorts of postings found in web fictions, comics and animations, a first tier that is non-real-time, or in MMOGs and MUDs, a second tier that puts the users in as star, with a Neopet, the user becomes "director" of artificial life. Storytelling responsibilities are split with the computer. Most video games already do this, but the difference here is that a general narrative path is not already laid out, awaiting the user to casually follow along. Choices are much more varied, because the narrative is constructed much more randomly. In narrative based video games, with the exception of some sports and puzzle-type games, the story is constructed in a way that the story is merely waiting for the user to make the right selections in order to get from the beginning to the end, like in a branching narrative. So, Neopets falls much more in line with puzzle and other types of sports or

strategy narratives, where a formal system of rules is going to eventually dictate the story mathematically or systematically.

Conclusion:

What is the future of the animated interactive narrative? One can ask the optimistic artist. Or one can ask the profit-driven company which distributes the work of that artist. They are most interested in profiting on the popularity of interactive media. Nevertheless, a fusion of art and commercial interests logically arises. It is comparable to the widely consumed entertainment in other mediums. But, popularly, electronic gaming and the animated interactive narrative have yet to find themselves appreciated in the same way. There has yet to come an animated interactive narrative that is not only widely critically appreciated for its artistic and formal merits, but is also widely consumed, on a level comparable to the most successful of cinema and television. If in recent years the video game industry has surpassed the film industry in total receipts (Vincent), a staggering notion behind that is then observed, in the audience breakdown of the two separate media. Consuming in the video games industry comes almost completely from one demographic, labeled "the core" (males approximately 12-24)[2]. By comparison, one should observe that the variety of movies coming from the film industry seem to strive to appeal to more than one audience type, unlike games. If games can pull in more money than film from primarily just one type of audience, what might the games landscape look like when games start to not just appeal to the other demographics, and not just cater to their interests as they have been doing somewhat limitedly, but when new games actually

[2] Knowledge acquired by Matthew Stringer, the author, from employment at major game company. Non-disclosure agreement with said employer prevents referencing company name.

obtain the same consumption levels that those non-"core" segments of the population already generally give to other media? In other words, what will happen when games successfully, fully, and completely reach out of their niche, and how might this happen?

Guys, to borrow the slang, are the primary players of games. A wise games industry will not seek to alienate their primary audience by allocating too many resources to experimental forms that do not attract guys' dollars. Trying to claim the non-core demographic is not sound business, particularly when the return from the core is substantial and lasting. However, some efforts are made on the fringes[3], but the core is the group that they seek to satisfy; where the majority of the billions in cash come from. Nevertheless, a general push is being made that is showing that many females of the same age range as the male core are coming over to the same side and consuming many of the same games ("Girl Gamers Tackle Male Field"). If she, the girl gamer, cannot get them, the game industry, to make properties that address her interests, yet she is generally interested in gaming, why not go and join the boys? Studies also show that there is an increasing amount of women over the age of forty that are now taking up many online games (Greenspan). Inevitably, the industry, already making billions off the core, and seeing the non-core audience beginning to come to their wares, regardless of to whom their games are aimed at, feels no real desperate need for change. It would be beneficial to all to see a greater expansion to other areas of the market, but it is not the highest priority.

What this means is that animated interactive narratives, on a mainstream scale, remain consistent with current norms, which is to say, male-oriented and male dominant.

[3] Ibid, re: previous, see footnote 2.

For now, those who seek to participate in interactive narrative building outside of the mainstream will cling to the internet and its many avenues of creative endeavor.

On the other hand, analyzing some of the above information and sources, this author, and certainly many other people, predicts that artistry and experimentation can help overcome the corporate-driven standards of a male-dominated market. Video games will be developed that counter those animated interactive narratives now found on-line and in other mediums. Games must be created that focus on the needs of areas in the gaming market that have yet to be fully explored. More research and innovation must be done. For example, the gaming market for the middle-aged and elderly must be examined because eventually gamers will grow older. The question is posed: what subjects and type of entertainment would intrigue unexplored audiences? Are properties yet to be developed that can capture the imaginations of all audiences? The automotive industry does not make only compact, affordable cars for just one type of lifestyle. Instead, they cater to all walks of life. The film industry strives to do the same, and please many audiences. As better technology is developed, games eventually will satisfy the across-the-board needs of all users. However, technological standardization is one factor in this. Currently, there are many different platforms on which animated interactive narratives can be experienced. Perhaps a consolidation and standardization of the types of machines and input devices available will need to be achieved, in order to grant complete accessibility to all ages and personality types. Technological devices used to interact with these storytelling experiences will have to evolve in the same way. The dream of having just one set-top box, or one machine that can handle television, internet, video games and other home video formats, imagined many years ago, has yet to

come to fruition ("Is XBox 2 the Rumored "Microsoft Home Station": Specifications Leaked"). For example, a hypothetical database of WWII fiction, derived from veterans interested in the topic, might not be the best material for a Sony Playstation 2, and so it would be found on-line. It will take the ingenuity of many artists and inventors to craft the next generations of animated interactive narratives. Nevertheless, there will have to be a market-driven incentive to bring more experimental forms to the mainstream.

Conceivably, the games industry will find those universally appealing forms and allow highly talented persons to craft engaging narratives. These animated interactive narratives will give interactors great freedom to create story content on their own, within the artist's framework. Interactors will become true co-authors of these works. Products will have to be widely appealing and critically hailed, like some of the most successful film and television series are, to compete in the entertainment media market. This will occur on a level not seen yet in the video game and on-line gaming industry. While there are highly selling games and other animated interactive narratives that many millions of persons participate in, there has yet to come along an E.T.: The Extra-terrestrial (Spielberg) or Star Wars or Titanic (Cameron) or Roots (Margulies) or M*A*S*H (Gelbart) of games, in terms of the amount of cross-demographic appeal found in those productions. One can argue that these examples of widely consumed film and television selections were each initially geared at specific audiences. Nonetheless, their individual universal appeal is not easily questioned when the viewer-ship numbers are presented. In summary, when games which kids and grandparents equally appreciate are released and coincidentally consumed, then that label of 'universal appeal' will have been finally achieved for the medium. It is the opinion of this author that that has yet to happen. That

day will then allow for a greater level of diversity in animated interactive narratives. It will indicate that all walks of life show similar film- and television- levels of interest in gaming.

One of the problems that hand-cuffs video games and animated interactive narratives from yet reaching this artistic and commercial pinnacle is the fact that the existence of the medium and its various formats has been significantly shorter than the mediums of film and television. Whereas those two mediums had initial universal appeal during the eras in which they were introduced, be it the late 19th century or the early portion of the 20th, where much attention was showered upon such budding novelties, they have gone through many historical stages of artistry and creativity, as seen generally in most artistic forms. These stages are comparable to those from the history of cinema: pre-classical, classical, post-classical or experimental, modernist, and finally post-modernist (Casper). If video games have gone through these stages, it has been in a hurried manner over approximately 25 years, whereas the other art forms have existed much longer in time. This has caused a great deal of retardation in the creative growth of games. It is better to examine the history and determine where along the artistic growth-path interactive media currently lies. In that case, this author would place it in the post-classical period. On the other hand, if in fact the stages have been passed-through quickly, and video games, because of their similarities with cinema and television and other visual storytelling forms and the arts, have seen themselves rushed on through and placed amidst the post-modernist deluge of items that consumers are currently faced with in mass entertainment media, this situation is dire.

Video games exist in a separate creative era now, called 'adulteration' and 'bastardization'. Adulteration shall be the label of the creative period after post-modernism. Inferiority and impureness stifle artistry in video games because they are looked upon as consumer products[4]. While most non-game pop culture and media are still in the throes of the post-modernist era, interactive media has surpassed post-modernism and entered into pure adulteration.

Consider the following information, as acquired during this author's experiences working in both quality assurance and concept development for different gamemakers[5]. The words 'bastardization' and 'adulteration' are used because the creative works established in video games and other animated interactive narratives are culturally unaccountable and go un-credited artistically. Most interactive media creations are treated purely as product – software – merchandise, to be shipped to the masses. Little room exists for purely independent and artistically motivated creations, because corporate schedules must be adhered to and release dates must be met. Many large entertainment empires bought already established, or just opened anew, game development companies during the 1990s[6]. Of course, this is the case as seen in a great deal of other entertainment products over the years. Everyone wants to cash in. However, the key difference, in terms of video games, is that very little artistic credit is properly applied for creators of animated interactive narratives. At least this is the issue, because they are not credited in an obvious and prominent manner, such as in other artistic fields. Inevitably, games and other interactive narrative concoctions are seen more as toys or other types of imaginative, but formulaic, commodities – but not seen as art.

[4] Ibid, re: previous, see footnote 2.
[5] Ibid, re: previous, see footnote 2.
[6] Information acquired while working for a video game quality assurance house; cannot be named due to non-disclosure agreement.

For an example of how games are treated as just products, adult or mature scenarios are often added to games purely for selling points, as indicated by game ratings, and the way media advertising for 'M'-rated games is directed at the core and other youth ("Kids in the Crosshairs"). It can be determined from this that most sex and violence -filled games are hawked directly at children. Thus, games are mostly viewed by their distributors from a harsh, commercial merchandising, light, as the statistics delineate. But, the striking irony is just how much creativity and artistic excellence is found in so many interactive creations, despite or even because of their corporate and formulaic ingredients. Some artists find new and inspired ways to heighten player experiences within the allotted design indicated by their employers. It is not denied that credit is often proudly labeled on many games for more well known designers. But, many artists, concept developers, programmers, concept developers, game testers, musicians, and other talented persons are left out of the attention-giving. Thus, most games are illegitimate or impurely motivated commercial products, culturally and artistically. Unfortunately, the almighty dollar reigns over any artistry involved, and sometimes the victims reach beyond the scope of just gamemakers losing their credit, as shown in how exposure is leveled at kids.

Now, the other side of the term 'adulteration', or the other meaning being ascribed here, is that many animated interactive narratives have sought to mirror or emulate film and television viewing experiences. This is only deliberate pastiche of those artistic creations and stories that are already out there. Some of the highest selling interactive titles are often just considered merchandise from larger media franchises, like the aforementioned Star Wars or *Madden NFL Football* games.

Truly original and independent creative material is most often found on-line. It is not always as widely consumed as commercial games are. HomestarRunner.com is an example of this on-line independence. It is popular on-line, but cannot achieve exposure levels comparable to those made possible for commercial gaming. Nevertheless, something as creative and unique as HomestarRunner is so pop-culturally referential, with its many in-jokes about 1980s pop culture that it merely becomes another post-modernist art entry. Still, it does not suffer from corporate adulteration. Consider that there is now a trend, similar to that witnessed in filmdom, of remaking older video game titles. These games are made in to newer versions with more sophisticated graphics and sounds, but maintain similarities in playability to their predecessors. The corporate intention of any potential remakes of the classic arcade games *Frogger* (Konami) or *Pac-Man* (Iwatani) is highly suspect; because it seems less an artistic experiment as it does a financial opportunity, attracting fans of the original games. A movie remake of Hitchcock's Psycho, where the persons behind that endeavor might argue that it had been almost forty years since the original appeared, perhaps had greater artistic motivation to do a remake, as compared to a remake of any videogame (Van Sant). Nevertheless, even film remakes are certainly ploys at gathering extra cash for a studio, but this author feels they are more warranted artistically than are game remakes.

Ultimately, it is concluded that video games have been through the same artistic eras as have some of the other arts, like film. They began in the initial, experimental, 'dawn-of-a-new-technology' stage, with games like Bushnell's *Pong* and others during the early 1970s, and gradually through the 1970s. Then games moved through a period of rapid consumer purchasing of home units and the wide explosion of the video arcade.

Items like the Atari 2600 video game system of the 1980s, created to play these new games, and the first major video games, like *Pac-Man*, came in to being and thrived in a period we might label "classical" in nature. Then, in the 1980s the industry sputtered and the popularity of the video game console fluctuated (Rich). But with the growing use and popularity of the personal computer, as indicated, plus with the coming of the Nintendo Entertainment System, one saw a revitalization of animated interactive narratives (Liedholm). This development marked a post-classical or experimental period where many independent game designers took advantage of the programming capabilities of the home PC to make and share their own games, also known as shareware games ("Examples"). The height of this experimental period might be seen in the release and subsequent success of games like *Wolfenstein 3-D* and *Doom*. The genre of the first person shooter, and many other genres of animated interactive narrative began to develop and thrive. But, then, the games being made began to show heavy signs of pastiche, as older titles were re-released and remade. Also, other stories from other media, now in game version, began to appear and become widely available on the market. Larger media companies began to start or purchase game developers and publishers. The modernist period might be seen in the forthcoming of more advanced gaming machines, consoles like the Sony Playstation or Nintendo 64. These systems came into prominence in the middle and late 1990s. Modernism and post-modernism in games began to blend almost immediately, because of the onslaught of consumer demand for new games and the heavy sequelizing of popular titles to satisfy the market (Krpata). These issues remain to this day. Because most video games are treated as merchandise, it is argued that the bastardization and adulteration age is now the period games have actually been under.

Thus, the video game as an art has been rushed through the artistic periods that other mediums took a minimal of a hundred years or more to go through.

In video games and other animated interactive narratives, artistry is second to technology, because game artistry is dependent on technology. Therefore, the idea of 'technological determinism', or using a technology in an artistic forum purely for the sake of doing it (e.g. better graphics, sounds, 3-D immersion, play options and other means of player input) is almost completely rule-of-thumb in the interactive media industry. This dependency makes stories secondary to advancing technological form. However, these are still "just games". Interesting and engaging formal systems of playability are always important. Those productions which have the simplest but the most "fun" playability will be the most successful. To revisit: why else would the story of a small, stereotyped, Italian plumber who collects mushrooms that make him double in size while evading killer turtles as he tries to rescue a princess be so popular? The answer is in the game play: *Super Mario* is just plain fun.

Still, many video games are adulterations; rehashed versions of original games, creative simulations of stories from other media. That they are intentionally treated by developers of such games as only merchandise, and not artistic expressions, underlines the entire message of this thesis. Perhaps there are so few new stories to be told in the medium. They have already all been crafted. How many football games or sci-fi games or fantasy games with some origins in other stories in other mediums can there possibly be? Adulteration has significantly stifled storytelling ingenuity in video games and other animated interactive narratives that draw upon all things except "the new" for imagination. Think of fan fictions, for instance. Despite all of this, they are enormously

successful in terms of units sold. This fact actually supports the thesis more specifically; for if lesser material still sells, it is simply the interactive experience – the idea that the user is becoming one of the storytellers – which makes some of the least original animated interactive narratives actually fun and engaging.

While many people have yet to discover animated interactive narratives because of the supposed financial goals (to keep selling to the core) in the businesses producing animated interactive narratives, talented writers and storytellers emerge outside of the mainstream, typically on-line. In conjunction with those many talents who are behind the software and other technologies that make the games possible, they move the animated interactive narrative progressively forward as an art. All of them will be responsible for elevating the medium to the same sort of respectability and notoriety given to film, television, music, and the other arts. Greatness is always the answer.

The remaining impression drawn from the advent of the animated interactive narrative, considering things like the bastardization and adulteration of the art form, the industry's drive for technological determinism and their financial motivations, and the art form's overall popularity, is that people want to tell and experience stories. They sit in front of these interactive narratives for great lengths of time, enjoying the experience of creating a narrative from selections in a database and their own imagination. They long to be a part of a larger story, even if the elements of that story have been seen a thousand times over, even if what they are participating in is merely a bastardized version of games from the past. Bastardization is a sign that little about game stories or storytelling has fundamentally changed. Yet, the animated interactive narrative thrives.

There is a reason for the lasting success of narrative through history. The same stories are shared and spun and told again and again, from the paintings on cave walls to the plays of Shakespeare in the Globe Theater, to the stomping and jumping of *Super Mario*, and back again. Perhaps the Holodeck, that fictive place from TV's *Star Trek: The Next Generation* (Roddenberry), where one could walk in to a virtually real, tangible, breathing, recreation of a story-setting, like Hamlet, and participate in Hamlet with all of the senses, as imagined, may one day be invented. Technology, innovation, and increasing realism and immersive qualities in animated interactive narratives may avail this. Despite all of this innovation, story stays the same. Hamlet will always be Hamlet. Even if greater minds prevail and new types of stories are envisioned, there is no fundamental difference between animated interactive narrative and narrative as a stand-alone principal. Storytelling has not evolved. Only the stages have changed. Thankfully, there are more storytellers than ever, and almost anyone can participate. This is the great benefit of the animated interactive narrative. Every time an XBOX is powered on or someone signs into the latest MMOG, a new story is being crafted. Certainly, Shakespeare could never have imagined this.

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