The society of the Spectacle is dead:
Long live the society of the Carnival;
or, a Prehistory of Interactive Television[1]

by
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ABSTRACT

Daniel Dayan's and Elihu Katz's theory of spectacle, ceremony and festival levels of engagement is here applied to the various types of interactive television, from *choice* and *time-shift* types, to hyperserials (as defined by Janet Murray in *Hamlet on the Holodeck*) to the kind of interactive television where viewer/players can alter the content. The closest we have right now to this festival-approach to interactive television are graphic online MUDs such as *Ultima Online* and massive multiplayer games. Console boxes, the first of which was the Sega Dreamcast, offer a festival model of interactive televisual engagement along with a low-cost convergence of television, internet and computer. If we accept that multiplayer console games are a model for the interactive television of the future, we can then start defining an aesthetics of interactive television based on computer games.

KEY WORDS
Interactive television, computer games, videogames, console boxes, hyperserial, spectacle, ceremony, festival.

The idea I wish to explore in this paper is that Game Consoles, among which the Sega Dreamcast was the first to include Internet access and on-line games, are the first true form of interactive television. If we accept this hypothesis then we can look at a variety of other phenomena, from web casting to reality TV to computer games, as precursors to interactive television that have been remediated in the form of interactive television we have now. This perspective can also give us an idea of where interactive television might be headed in terms of delivery systems, narrative forms, and audience engagement.

DEFINITIONS OF INTERACTIVE TELEVISION

Generally, when we speak of interactive television, we mean one of two things by it: c*hoice* and *time-shift*. *Choice* means "you pick the program": viewers have a broad range of channels to choose from. This is why 100 or 500 cable channels on offer is often interpreted, or even advertised as, interactive television, because it is not three or four broadcasters who determine what you see and when you see it, but you. *Time-Shift* means "you pick the time". This is the classic use of the home VCR, to record TV shows that are

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on while you are at work, for viewing at a time that is more convenient for you. Pay-per-view channels capitalize on this development, allowing you to arrange a time with the broadcaster and eliminate the VCR as middle-machine.

But are these two types of Interactive TV really interactive? If by "interactive" we are referring to a two-way flow, then the *choice* and *time shift* versions of interactive television are not really interactive. We only refer to them as interactive right now – and mostly, it is the industry the refers to them as interactive, although a few scholars follow the industry's lead – because our technology, and the televisual apparatus, has not really reached the point where true interactive television, a televisual experience characterized by watching and interacting at the same time, is possible.

In order for true interactive television to be possible, we need to reach a higher degree of convergence. *Convergence* was the term coined by Nicholas Negroponte in his book *Being Digital* to describe the process that of the computer, the television, and the telephone merging into one appliance. The Internet is the quintessential convergence of computer and telephone functionalities; today, the hardware forms of each are also converging, as we can now have telephone conversations using our Internet account on the computer and check our e-mail on our WAP phones.

The process of convergence is taking place not just at the level of appliance but also at the level of the industry. As television goes digital (estimated date for complete changeovers in the US is 2006) and infrastructures like the AOL-Warner merger are established, more possibilities will occur. What will these forms of interactive television look like?

Janet Murray, in her 1997 book *Hamlet on the Holodeck: The Future of Narrative in Cyberspace,* examines the problem from the point of view of the user/spectator. She points out that the activities of watching television and surfing the Internet are also merging, and refers to these mergers as hyperserials. In the pre-history of interactive television, hyperserials are designed to help the industry make the jump from traditional broadcasting to crossmedia broadcasting by marrying the potential of television and the Internet.

 In other words, it is one program or program series that exists simultaneously on two screens, the 'regular television screen' characterized by one-way flow, or spectacle, and the screen that gives us access to the World Wide Web, characterized by its interactivity or reciprocal flow. The screen that gives us access to the Internet can be on our computer or overlayed on our TV screen, as it is in WEBTV systems.

"Hyperserial" can also refer to net casting, an interactive program on the web that primarily employs a televisual aesthetic, where the user is passive until the moment where she chooses to act or is prompted to act, and then picks up the remote or the mouse and begins to click on links built into the screen image.   Although the hyperserial exists only on the Internet, the viewer relies on her experience as a television viewer to know how to navigate it. Examples include Internet broadcasters like pseudo.com which folded in 2001, just a e year after going on-line, and CNN and other news channels have now incorporated a televisual approach into their websites and this practice has spilled over to the news corners of browsers like AOL.

If we assume that eventually television, computer, and telephone apparati will be completely merged, and that the new apparatus -- or apparati -- will need a new name and a new discipline of aesthetic analysis, then we can step back and regard our present

situation, which includes the advent of hyperserials, as a transitional, and probably temporary one. Most of the experts in this field predict that this state of transition will last at least a generation, if not two, so until 2020 or 2040. I believe that this phase, the hyperserial phase of interactive television, is drawing to a close, and a new phase, which we could call the console phase, is coming into its own. My aim in this paper is to describe the various trends that are currently discernible in this early stage of multiple semi-convergences, in other words, to describe the various types of hyperserial interactive television and console-box interactive television that we have seen recently and put them in relation to each other.

It would be a mistake, of course, to assume that TV is linear and the Internet side of hyperserials provides television programs with an interactivity that they normally don't have. In fact, what interactive entertainment forms do is harness some of that creative fan energy in ways determined by the narration, channeling it back into the interactive text.

TYPES OF TELEVISUAL ENGAGEMENT

Daniel Dayan's and Elihu Katz's have classified the way broadcast television invites audience interaction into 'spectacle', 'ceremony', and 'festival' (Dayan and Katz in Blonsky's *On Signs*, 1985).

Spectacles, like cinema, sports or theatre, share a narrowness of focus, a limited set of appropriate responses and… a minimal level of interaction. What there is to see is very clearly exhibited: spectacle implies a distinction between the roles of performer and audience.

In contrast to spectacle, ceremony involves interaction with a clearly focused event, a measured interaction, (reactions such as shouting and applause). There is a definite distinction between performers and respondents – the latter being expected to respond in specific (and usually traditional) ways. Dayan & Katz's article shows that certain events of great public interest such as Diana and Charles's wedding (the same could be said later of Princess Diana's funeral) are televisual ceremonies, with the participation of viewers carefully structured by the televisual narration. The television coverage of our current second war in Iraq on CNN is another example of this approach.

Dayan & Katz's definition of festival also involves a "strong interaction between audience and the event they experience, but this event is a more diffuse one that the highly structured ceremony, appropriate responses may be many and varied, creative responses are encouraged and the roles of performers and spectators are neither fixed nor irreversible"; they give carnivals as the typical example. (Dayan & Katz, p. 16-17)

The recent emergence of interactivity as a cultural practice seems to suggest that we have gone beyond 'the society of the spectacle'. Film is firmly rooted within the society of the spectacle, which is part of our past. My argument here is that hyperserials, which we could define as the pre-history of interactive television, required a ceremonial form of engagement, and forms of interactive digital media that blur the distinction between the original designer/programmers and the subsequent participants need to be conceived along the lines of festivals. With the brief flurry of hyperserials production

winding down, I would argue that we are embarking on the 21st century society of the festival, though of course, spectacle and ceremonial type production is ongoing.

WATCH FIRST, THEN INTERACT
        The type of Hyperserial that has the largest audience base to date are what I would call *ceremony hyperserials*, in other words, they are based on a principle of "watch-first, then interact"(Murray, p. 253-58). This model of hyperserials aims to converge not the technologies in the physical sense, but the audiences: the fans of series like *Twin Peaks*, *The X-Files*, and *Star Trek* that continue their activity long after the initial broadcast of the series is over, (Tulloch and Jenkins**)** for example, are here invited to codify their fan response and fan-community formation right from the beginning. Most television shows try to do this simply by having a non-diegetic website associated with the show where fans can get basic information, meet, and chat.
        Already by the year 2000, audiences gave every indication that they were ready for this type of convergence: the number of visitors to TV station websites increased by 400 percent that year, according to a report (October 2000) by MMXI Europe. In the UK, BBC.co.uk attracted 1.5 million unique visitors in August 2000, an increase of 33 percent from October 1999. Channel4.com's Internet audience for August 2000 stood at 1.3 million, up from 271,000 in March. According to MMXI, TV station websites are popular because they allow people to take part and provide instant feedback on the latest news and programs. TV channels can use their websites as a way to strengthen their brand and provide more value to their audience.
        The real development, however, have been the television shows that incorporate the website into their diegetic narration – in other words, you get more of the story if you check out the website on a regular basis.
        The NBC series HOMICIDE had an on-air narrative developed in conjunction with NBC DIGITAL, which had developed a *Second Shift* version of the show, a digital spin-off of the original on-air show. In 1999 NBC decided to experiment with raising the level of convergence, and did so in an episode involving a serial killer who made digital films of his murders and broadcast them over the web. The first digital "snuff film" was aired on the web, both in the story and in "real life", then the detective of the television episode discovered that it was a hoax; however the second film, involving the same woman, turned out to be real, as her body was discovered soon afterward. The detectives in the digital series then "cooperated" with the detectives on the TV series to solve the murder, and all of the Internet screens visible on the TV show were available for users to surf through on-line. In other words a narrative convergence was designed to match the digital convergence, with the audience/web user invited to step into the role of one of the digital detectives, discuss clues in fan chatrooms, and so on. The success of this experiment was predicated on the fact that actor's images and scenes from the TV series could be shown on the Web. Once the experiment proved successful, both actors and writers understood that the Web was simply another broadcast medium, and the threatened Writer's Guild of America (WGA) and Screen and Actors Guild (SAG) strikes in 2001 were about writers and actors getting their share of Internet residuals. The final strike-averting agreement with each guild makes such two-screen hyperserials much more expensive to produce, a definite drawback when hyperserials still have not come up with a successful way of generating revenue.

As we've seen, television (and cinema) first saw the Web as another promotional vehicle, and any money invested in it was spent on non-diegetic (non-story related) sites. These sites invited fan participation in the form of surveys and chatrooms, but the emphasis was on credits, "breaking news", behind-the-scene stories, and information related to the topic, whether social, historical, or scientific, developed in the series. The patterns of engagement with the audience were usually of the ceremony kind, i.e., the program producers rigidly controlled the forms of interaction available to the users.

Indeed, reality TV shows such as *Big Brother* which have TV and Internet components have basically set the parameters for fan engagement with the program content on the web. Fictional shows which consists of the "close integration of a digital archive, such as a Web site, with a broadcast television program" as Murray describes it (Murray, p.254) are the recent TV series *Attachments*, *Freakylinks* and currently in the U.S., *Push Nevada*.

September 2000 the BBC started a new drama series called *Attachments* (web address http://www.seethru.co.uk/ as of 2001) about a group of people that are entering their 30s while working in the fast and trendy UK dotcom environment. "In a pressurized Internet Start-up, electronic communication leads to scandal and intrigue." The series had a webzine called *Seethru*, which looked like an ordinary site of music, and lifestyle portal, which grew as the series progressed.

Similarly with *Freakylinks* (Fox TV, U.S.). Group of 20-somethings who investigate paranormal activity, mostly hauntings in historical places in the Baltimore area. The places are real, and the website had links to sites built and maintained by such organizations as the Baltimore Historical Society that would give viewers the real history about the real location used in the show. If you registered on the website, the main character would send you personal e-mails describing his inner turmoils and his theories on the paranormal. The series was cancelled after six episodes and even the website is no longer up.

Fictional shows like *Attachments* and *Freakylinks* try to create a complete story world that incorporates non-diegetic elements (such as informational websites) and also engage the spectator/user directly. *Attachments* tried to do this by constructing the spectator as a member of the social group that would use the webzine *Seethru*, as a member of the group that follows that lifestyle.   In other words, *Attachments*   is casting the spectator/user in a particular narrattee position.

Freakylinks went even further in this direction, by sending out e-mails addressed to the viewer (the ones who registered on the *Freaklylinks* website, anyway) as if the viewer were a supernatural character on the show.

Probably the most direct cause of the failure of these two series were problems caused by incomplete convergence. Crises in the industry such as the threatened WGA and SAG strikes (writers and actors demanding a larger share of the residual stream based on the assumption that cable outlets, video/dvd sales and interactive television which were expected to eventually bring in more profits) show the effects of incomplete convergence at the institutional level.

On the aesthetic side the migration of a portion of a TV show's storyworld to a website leads to an eclectic mix of visual styles in the interface design, from plain text to cartoon graphics to 3D graphic rendering of motion capture images and live action or animated movies. This incompatibility of image styles reflects a basic incompatibility of

narrative formats: the episodic, linear format of television and the ergodic, labyrinthian structure of the matching online world that the spectator/player is invited to explore. This becomes a huge challenge for writers.

In the current U.S. show, *Push Nevada*, the degree of engagement is not diagetic – viewers are not meant to imagine themselves as thirty-something dot-commers or as confidante's of the main ghostbuster, as in the previous two examples; rather, they scan the show for clues to a "treasure" – the $1Million reward for the viewer that solves the puzzle. A website provides more clues and opportunities for chat, but no diagetic engagement. (http://abc.abcnews.go.com/primetime/push/how_to_play.html).

Similarly, in the fall of 1999 Endemol (Holland) aired its well known 'real life reality soap' *Big Brother* on Dutch television and launched its corresponding internet site. After this pilot broadcast the format was sold to most other European countries as well as the US. The series continues to be popular in several countries.

In the original format, the television series consisted of daily summaries of what had happened in the *Big Brother* house during the day, and a weekly *Big Brother* 'show' that featured the *Big Brother* candidates, their families and friends and the phenomenon of BB itself including the latest polls of who should be voted out of the house. On the Internet viewers could watch live video streams directly from the house, they could read the latest news updates and they could vote on their favorite candidates.

The level of engagement – watch, then interact – adds the interactivity of the computer to the level of ceremony interaction that stand-alone television already offered. This is an example of an early form of interactive television remediating an earlier form of television, broadcast television. So by adding the internet the institution of television is not developing something new, but building on already existing practices.

However, there are problems with the "watch first, then interact" model of hyperserial. There is no real convergence: viewers must have access to, and skill at using, both television and computer, which remain separate. More importantly, the ceremonial model requires a strong viewer commitment, a strong investment in diegetic narrative and willingness to follow to related narrational strands on two different screens. Broadcast series like *Star Trek* that have built up a committed fan following have had years in which to do so; two-screen hyperserials must accomplish the same within a season. As we've seen in *Push Nevada*, the lack of success has led producers resorting to bribes.

One type of solution to the lack of convergence problem of watch first-then interact is net casting: to design an interactive program on the web with a televisual aesthetic. An example of this was *pseudo.com*, a "life style channel" which folded because it could not generate a revenue stream in the same way TV does, that is, through advertising.

INTERACT WHILE WATCHING

Another problem with the two-screen hyperserial is the commitment required from the viewer to get up from the TV set after the show is over and move to the computer. The second category of hyperserial addresses this problem directly. Murray has described them as "interact while watching", i.e., simultaneous but separate activities. "Interact while watching" hyperserials fall into Dayan and Katz's "festival" model of audience engagement, where the audience takes a more active role in events, though this participation still consist mostly of cheering the actors on from the sidelines.

Big Brother fits into this category to a certain extent, for example, at the moments that viewers call in their votes on the phone while watching the show (combining telephone and television).

Web-television, or Internet enabled television, brings the web to the TV set and allows users to access all the web information from the living room couch. The first generation of WebTV allowed users to browse the web, while the second integrates programming with web pages. This means for instance that icons can be added to television programs, making it possible to access web related pages. Sites carrying statistics on players or teams competing in a sports match, company sites containing further information on the products or services displayed in the current commercial, and, more importantly, giving users an opportunity to buy the product or obtain the service.

One example of this is *Drop the Beat* (Canada) an 'enhanced drama' produced with Microsoft WebTV technology. It consists of adding interactive functions such as program information, marketing operations, etc., to traditional drama by overlaying them onto the video. A 13 part series that "converges TV, Web, CD, virtual radio, streaming video and iTV", according to the company press, it focuses on the world of campus radio and hip-hop culture in Canada. The series premiered in February of 2000 (www.dropthebeat.com)on CBC Television and became the first Canadian broadcaster to offer such an experience to their viewers.

VIEWER CONTROLS CONTENT

Murray's has described a third way of offering viewers the opportunity to watch and interact in the same environment; that is, to change the content of the program while watching it. What she describes is no longer a form of hyperserial with a ceremony model of engagement, but an interactive work that offers opportunities for "procedural authorship". Procedural authorship gives the author – the programmers and designers of the interactive environment, for example – the ability to "specify all the elements of the abstract structure:"

> The author must be able to specify… the primitives of participation (how an interactive moves, acts, converses); the segmentation of the story into themes or morphemes (the kinds of encounters, challenges, etc., that make up the building blocks of the story); and the rules for assembling the plot (when events happen and to whom). The author must also be able to control the particulars of the story: all the substitution elements (instances of character types, dangers, rewards, places, travel experience, etc.) and all the ways in which each instance will vary. (Can we have a violent confrontation in a scene that includes the hero's mother? What kinds of house will each of the possible villains live in?) We have only begun to think about how a writer would go about creating a story world out of such elaborate patterned elements. (Murray, p. 204).

> On the spectator-player end, Murray predicts the following will be possible:

> We would then have to establish clear primitives of participation. For example, the interactor would be able to buy food and drink, walk and take taxis, touch

things and people, and engage in dialogue. We would have some particularly important decisions to make in determining how to use language. There would be a trade-off between the variability of the plot and the extensiveness of the dialogue, since we will want to specifiy the dialogue separately for every possible interaction. If some of the dialogue is in text (words on the screen rather than prerecorded audio), we would have more freedom to vary it for each separate story, since we could assemble combinations on the fly and without having to record each possible combination in advance with the right dramatic inflection. But even if we could find a way to extend the computer-based character's dialogue, we would still have to limit the interactor's input so we could maintain control of the story. (Murray, p. 205).

As an example of this kind of procedural authorship, Murray describes a hypothetical "cyberdrama" based loosely on the film *Casablanca*. The story played out by Bogart and Bergman in the film is embedded in the game, running without need of participation from us. Around these fixed events swirls a whole world of refugees in search of visas, soldiers and spies, black marketeers, and gamblers and bohemians run aground. The player is invited to take on the "form" of one of these characters, or to choose one of these characters as their "avatar", the digital character that represents them in the interactive story world, and play out a plot of their own devising that fits into this world. In the process they will witness some of the events of the embedded plot – the plot of the original film – but cannot alter those events. However, they can live out their own story, based on their game play, and this becomes the story-as-discoursed. This part of the story is different each time the player plays and different for every player.

Numerous experiments with interactive cinema have aimed for this type of interactivity, with varying degrees of success. But computer games have enabled players to watch and interact simultaneously for years. Computer games offer players the ability to influence how a game will continue and end, the ability to alter the visual perspective or point of view of the sequence they are watching, and the possibility to change content. Examples of the first type, an on-line multiplayer experience which allows users to alter the path and outcome of the story, is *Citès Obscures* (*Obscure Cities*, www.urbicande.be) an on-line world based on the Editions Castermans comic book series of the same name. These Belgian producers of the *Obscure Cities* and other websites have designed worlds where players can interact with each other and with characters from Editions Casterman's famous lines of graphic novels. *Obscure Cities* was the first to use the webcam technology with graphic overlay now known as the *Transfiction (*www.transfiction.net) system, which incorporates webcam footage of real locations with online-world imagery.

Also, there have been experiments in Israel as well as in certain parts of Europe where children can play games against each other on the television set, using the TV remote as a console, at a certain time every day.

Many games, especially console games, but also some computer games like *Driver* offer viewer/players to choose which angle of the camera to follow, to freeze a frame, to have an instant replay. In other words, to decide, at least partially, on the montage of what you are watching and preserve a "movie" of your own game edited just as you wish. WebTV and the advent of digital TV in 2006 should make more choice of

montage available to viewers. Already we can freeze-frames and get quick replays if we have the right kind of TV set.

The possibility to change content is offered in both fiction and non-fiction formats of interactive television. A good non-fiction example of this is the *Evolving Documentary* (http://ic.media.mit.edu/icSite/interfaces/indexED.html) format explored by MIT, such as the *Jerome Wiesner* documentary, which invites spectators to make a contribution to the documentary (though this input is filtered through human editors).

In a more indirect way this is possible in on-line multi-player games, like *Quake* and *Unreal*, where players can take the open-source software and build their own levels which then get incorporated into the game, sometimes even being adopted by the game company and packaged into the the next version of the game. Quake games like *Rescue the Flag* were designed originally by players and then added to the commercial offering. And of course, the best examples of collaborative authorship are still MUDs, (multi-user dungeons or domains) both text and graphic, where players can design their own characters, props, and game play space. In games like *Ultima Online*, in which the player joins an already existing community claiming hundreds of thousands of members in 114 countries (http://www.uo.com/visitor/whatisuo.html).

Ultima was unique for some years, but has recently been joined by similar graphic MUDs such as *Everquest*, *Asheron's Call*, and *Lineage*, to mention only a few. Although increasingly popular, graphic MUDs still require expensive computers and usually a hefty monthly subscription fee to play, making this form of interactive television available primarily to technologically-savvy adults in industrialized countries.

This gap is being closed by console boxes like Playstation 2 and Microsoft Xbox. Because I have tried in this paper to give an historical overview of interactive television as well as situating it in a theoretical framework, I will conclude with a case study of the first set-top box to offer on line gaming in storyworlds, in other words, the first to make the most interactive form of interactive television – the form in which users can alter content while watching, in real time – available over an inexpensive combination of console box, Internet connection, and television set. The key question here is, can console games solve problems of of lack of convergence and player commitment and make interactive television a reality? My answer is "probably yes." I will illustrate my argument with a case study of the development of the Sega gaming company from its inception but with a special focus on the history of the Dreamcast. The Dreamcast had the highest records for pre-sales before its release and was one of the first consoles to ship with a built-in modem for use with the world's first massive multiplayer internet console game. Clearly, the Sega Dreamcast was a step towards true interactive television, with its multiplayer game, both online and off, providing a degree of interactivity that traditional television lacks.

In 2001, Sega withdrew from the console market and decided to focus on its strength, providing new games for other consoles such as the Nintendo Gamecube, the Microsoft Xbox and the Playstation 2. Although over ten million Dreamcast owners worldwide were disappointed in this development, the demise of the Dreamcast and the end of Sega consoles gives us an opportunity to step back and reflect on the role that consoles are playing in the development of interactive television. Although Sega's withdrawal from hardware production is partly a response to the current recession, it is also a sign of developments in interactive television. If we see console boxes as another

kind of set-top box – a box that provides true interactivity, i.e., the ability to influence the direction and even add to the televisual content, and compare this to the lesser interactivity of such systems which simply add internet facilities and time-shift (record it now, watch it later) to the traditional television – then we can more clearly understand the role that console boxes are playing in the evolution of interactive television. As the boxes become more alike – by now, MPEG 2 image quality and internet access are considered standard, for example, even if not all boxes include them – what distinguishes each system is the content.

HISTORY OF SEGA

      1951 was the year that two of the console game companies we know today were formed: it was the year that Marufuku, a Japanese playing card company, changed its name to Nintendo, and the year that the U.S. passed some new laws regulating slot machines, which led Marty Bromley, who managed game rooms at military bases in Hawaii, to buy some of the machines that were now not allowed on the continent and open Service Games (SEGA). Around the same time David Rosen, returning from service in the US Air Foce during Korean War, opened a portrait painting business in Japan. By 1954, Rosen had expanded his business to include shipping photo booths from the U.S. to Japan and had renamed his business Rosen Enterprises. In 1956 Rosen began installing coin-operated electro-mechanical games and putting them in the same venues where he had previously installed photo booths. In 1964 Rosen Enterprises, by then Japan's largest amusement company, merged with Sega, which had installed jukeboxes in over 6,000 locations, and became Sega Enterprises. In 1966 Sega released *Periscope*, a game that became such a hit in Japan that US and European companies begin importing it. This is Japan's first amusement game export. Because of the high cost of shipping, US arcade owners charge players $0.25 to play, setting what will eventually become the standard price for playing arcade games. In 1969 Gulf & Western purchases Sega for $28 million, and in 1980Atari started marketing arcade games, beginning with *Space Wars*, as consumer products for the home. In 1983 Yu Suzuki joined Sega, and the company released its first home console in Japan, the SG-1000. In 1984 David Rosen and Isao Okawa purchase Sega Enterprises back from Gulf and Western for $38 million.

       Sega released its first Master System in 1986, and in 1987 unveiled it's 16-bit Mega Drivie game console (Nintendo, or NEC, released the 16-bit/8-bit hybrid pec-engine game console in Japan). The same year Tonka aquired the US distribution rights to the Sega Master System. In 1989 Sega released the Mega Drive in the US as Genesis, and in 1991 the company recreated itself with a new mascot – Sonic the Hedgehog. By 1992, now starting to fall behind Nintendo in sales, Sega shipped a Sega CD peripheral for Genesis game console, whose power was increased to 32x in 1994. That same year Sega released the Saturn in Japan and met new competition in the form of the Sony Playstation. The Saturn and the Playstation were released in the U.S. in 1995, but by 1997 it was clear that the Saturn could not compete: it was too hard to code for and Sega was too slow to release development tools. Finally, the Saturn was discontinued (Kent, pp xi-xvi).

      This history shows that Rosen and others were experimenting with various systems of distribution, from arcades to home systems, while at the same time the games themselves were improving by leaps and bounds. The fact that the Tonka deal did not

work out shows that defining interactive media by its hardware, (the Tonka deal posited console games as toys) was not a productive approach. It was at this point that Dreamworks, Universal and Sega teamed up to form a new line of superarcades called Gameworks. Though Dreamworks is no longer involved, the deal represents a key moment in the history of interactive television, as the combination of Hollywood and game consoles indicates a transition in Hollywood from a spectacle approach to media to a festival approach to audience engagement.

HISTORY OF SEGA DREAMCAST

In 1999 Sega released its Dreamcast game console in US with record pre-release sales. In 2000, the Sega Internet Service for the Dreamcast was added, leading to sales of 10 Million consoles by 2001. The Dreamcast was now leading the industry: it had a one-year jump on the Playstation 2, it started out with some excellent games, most notably *Sonic Adventure* and *Shenmue*, it moved from 16 bit to 32 bit, and the Dreamcast was designed in such a way that it was easy to recode PC games for the Dreamcast. This indicated an expectation that a huge library for the Dreamcast would soon be developed. Clearly, Sega expected players to buy a Dreamcast instead of a computer for online gaming, and take advantage of the well-designed Dream Arena portal and the system's low price. But the system had problems. Developers were hesitant, and preferred to wait for the Playstation 2; the Dream Arena Portal was very nice, but no online games were offered through it during that crucial year before the PS2 was released; and, ironically, in spite of the earlier Tonka deal failure, consumers saw the console as a toy and not as a solution to the convergence problems of interactive television. The result was that in 2001 Sega discontinued the Dreamcast. At the same time Nintendo released the Gamecube in the US and Microsoft released the Xbox worldwide.

Many features of console boxes are now standard, such as 128 bit graphic capability and MPEG 2 Image quality. Most games are multiplayer (for a group of people playing at home) and now the various console box companies are promising massive multiplayer online games to be part of every system: Sony announced in September of 2002 that is would enable up to 400,000 PS2 users to play one another online, Microsoft promised to do the same for Xbox owners by November of the same year, and Nintendo promised it would add one on-line game for the GameCube next year.

What will these games be like? Again, we can look to the Sega Dreamcast as a model, specifically it's hit game, *Shenmue*. *Shenmue* fulfills Janet Murray's prediction that interactive TV would look like an interactive Casablanca, as time passes in the game, characters lead their own lives (in embedded story) even when the player is not interacting with them, players take on role of Ryo and walk through world, alternating sleuthing with fighting, and the whole is packaged with incredibly realistic and beautiful 3D graphics. The first installment of the *Shenmue* game featured three hundred and fifty characters and seventy action sequences or quick-time-events (QTEs). Ryo plays the role of sleuth eager to discover the identity of the man who killed his father and travels from Japan to China in his quest. He engages in hand-to-hand combat, shown in third-person mode.

Shenmue was a huge success and quickly gathered a fan following similar to that of long running TV shows, who would compile the music of the game in order to listen to the score end to end, and did the same with the QTEs, linking them together to make two

feature-length films which were then pirated on the web. An online version of the game appeared, which was discontinued in the Spring of 2002, before this author could study it. *Shenmue II* was also released in Japan and the U.K in 2001, and is now available on the Xbox in the U.S. The new version features more than 1,000 characters and 150 QTEs as well as a first-person fighting mode. A more direct mode of questioning characters has been installed and Ryo has more ways to earn money. It is also possible to play through the game to the end without interviewing every other character as the first game required, though Yu Suzuki, the game's legendary designer, points out that players who take the fast route will miss all the best parts of the game. (Edge Review**).**

In the Spring of 2002 Sega withdrew from the hardware race (PS2 now holds half the market) and is now focusing on developing software for other consoles from the Xbox to the PS2, Gameboy Advance, Nintendo Gamecube, and arcade games. Sega's transition, as many of its earlier transitions have been, is a sign of a sea change in industry, where battle is not over console capability, but content. This can be interpreted as a response to recessive economy, but I see it as an indication of transition a from society of mediated ceremony (the two-screen hyperserials) to a society of festival or carnival.

Sega, whose content development has always been its strength, has recognized this and has withdrawn from the console-box war in order to focus on the real battlefield: the evolution of real interactive television. At the same time, massive multiplayer on-line games that are more accessible to players such as *Sims Online* are coming into being.

We can see then that Murray's formulation of procedural authorship is quickly being realized, even more quickly and in a greater variety of forms than even she predicted. We might feel unprepared to cope with this new media format, but what we know about television and what we know about computer games should help us understand this new medium.

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