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Emergent authorship: the next interactive revolution<sup>☆</sup>

Celia Pearce\*

*Celia Pearce & Friends, P.O. Box 690, Venice, CA 90294, USA***1. Introduction: the imminent demise of the narrative hegemony**

Since the invention of the Gutenberg Press, the infrastructure of content creation has been built on an industrial model, which has culminated in the current broadcast media narrative hegemony. This model of “mass media” is based on the notion that there is a centralized producer who distributes a large quantity of identical content “products” to a large, mass audience. This structure is built in a foundation of two fundamental principles: “authorship” and “ownership”. Authorship is a measure of the value of content, and ownership determines the recipient of that value. Ironically, these are almost never the same entity, although in very rare cases, the author receives some small percentage of the value he/she creates. In this context, content is controlled by a small and elite minority. Not unlike the so-called “Dark Ages” of Europe, when virtually all content was owned, controlled and held under close guard by the Catholic Church, today’s content hegemony has absolute power over what is made and distributed. This system is very reliant on the dynamic of a producer/consumer relationship. Until now, the entertainment and media “industries”, in general, have worked on this model.

The computer and the Internet pose some very real challenges to this system because, unlike the media hegemony, which is centralized and controlled, the Internet is a highly decentralized, uncontrolled, peer-to-peer environment. As such, it creates a physical infrastructure that poses a real and present threat to the media hegemony. A great example is Napster, the Internet music trading software that allowed users to

freely share their private music files with others on the system. This decentralized, open system, although it was never used to generate a profit on anyone’s part (including Napster’s) was perceived as a huge threat to the hegemonistic copyright/ownership equation, above. As a result, the music industry used its considerable legal infrastructure to eventually shut it down. The result has been an explosion in copycat software. Now there are more “napsters” than there were before, and the situation becomes even harder to control. The story of Napster is a sort of modern-day David and Goliath story. Or perhaps, more aptly, it can be described as a Trojan Horse. Like the old video game Centipede, where each time you shoot the vile creature, he splits into half and becomes *two* Centipedes, the revolution started by Napster has not become a groundswell. This is only the beginning.

In the following pages, we will look specifically at two new entertainment genres, which are generally being described as hybrid narrative/games. They are revolutionary because they not only represent the emergence of new forms that are unique to the computer medium (although, as we will see, they both have their roots in non-computer forms), they also reframe the producer/consumer relationship. Both genres challenge fundamental notions of authorship and create a new consumer-producer hybrid, inviting the player to become a co-author in the narrative. I believe that these forms will challenge the narrative hegemony, and fundamentally change the way we both experience and create narrative content.

**2. A brief history of interactive narrative genres**

It is ironic that, although a virtual parade of literary theorists (Barthes, Foucault, Derrida, L’Dieux, et al.) have spent four decades proclaiming the death of the author, it is not authors but game designers who have been able to innovate most boldly in the author-creator control negotiation. The reasons for this will be made

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\*Tel.: +1-310-390-8014 <http://www.cpandfriends.com>.

E-mail address: [celia@cpandfriends.com](mailto:celia@cpandfriends.com) (C. Pearce).

1 more clear as we take a deeper look at the culture of  
game creation.

3 These new trends in gaming have not arisen overnight.  
Rather, they represent a somewhat logical and perhaps  
5 inevitable evolution from earlier non-digital genres.  
They are part of a continuum of augmentations,  
7 mutations and evolutionary steps, from which arguably  
compelling and certainly addictive forms of interactive  
9 entertainment have emerged.

11 As these genres have emerged, it seems pretty clear  
that they have usurped the cinema-derived concept of  
“interactive movies”, which appears to have (mostly)  
13 failed. This genre was in high fashion in the first part of  
the 1990s (primarily pre-web), and continued into the  
15 mid-90s, with a few last gasps in '98 and '99. The fact  
that you can probably not call to mind even a half-dozen  
17 of these offerings should be an indicator of their lasting  
cultural impact. Both in the desktop environment (CD-  
19 ROMs such as *Johnny Mnemonic*), on the set-top (CDI  
titles *Burn Cycle* and *Voyeur*) and even in movie  
21 Theaters (Interfilm's *I'm Your Man* and *Mr. Payback*),  
the so-called interactive movie seemed to lack the  
23 strengths of both movies—script, quality acting, direc-  
ting—and games—fun, challenge—leaving us with a  
25 singularly unsatisfying experience that never fulfilled its  
promise. The interactive novel has also yielded dis-  
27 appointing results. With the exception of a few isolated  
works that have met high critical acclaim from a notably  
29 small audience, the interactive novel has not thus far  
emerged as a robust fictional form.

31 More effective were narrative-derived experiences of  
the '90s, which moved the story more into the terrain of  
33 games. Particularly successful were adventure genres  
such as LucasArts' top-selling *Indiana Jones* series,  
35 Westwood Studios' *Blade Runner* game, and of course  
the wildly original and equally wildly successful *Myst*,  
37 which is still among the all-time best-selling CD-ROM  
titles. In each case, the game designers found a corollary  
39 between a player goal and a character objective to build  
an interactive adventure around, immersing the player in  
41 a process of discovery to uncover and/or drive the  
narrative. Unlike the media vending machine model of  
43 so-called interactive cinema, the player was more  
engaged in a game-like experience which became a  
45 technique for creating dynamic drama.

47 It is clear that some fictional genres lend themselves to  
interactivity better than others. The key to success seems  
to be the appropriate pairing of story genre with play  
49 mechanic. It is important to remember that the central  
activity of a game, that is, a goal-oriented structure for  
51 spontaneous play, is play. Thus, the play mechanic, or  
interaction quality of the experience, is crucial in  
53 creating the ever-evasive quality of “fun”, the defining  
characteristic of a good game.

55 Let us talk for a moment about this notion of play  
mechanic. Play is at the center of all game experiences.

57 But what exactly is play? The idea of a game is that  
people are engaged in some activity in which they make  
59 a palpable and discernable contribution to the outcome.  
This is done through a process of spontaneous  
61 improvisation, exploration, discovery, deduction, intui-  
tion, etc. A game generally can be described as a goal-  
63 oriented experience (which may include sub-goals), with  
a certain configuration of obstacles, resources, rewards  
65 and penalties, and various types of information that the  
players can use in forwarding their objectives. Each of  
67 these elements can actually be very effectively mapped to  
a narrative structure, *if* they are seen as dynamic, rather  
69 than static elements. In other words, it is rather than a  
“non-linear” narrative in which the player is trying to  
71 understand the goals of a character, make the character  
goal and the player goal synonymous, and motivate the  
73 player to move forward the character's agenda, even  
while discovering what it is.

75 The interactive narrative experiences which have met  
with the most critical and popular success to-date have  
77 tended to be those which build their narrative around an  
interesting and compelling play mechanic, one which  
79 supports the narrative, and vice versa. In the ideal case,  
the play mechanic is synonymous with the narrative  
81 structure; the two cannot be separated because each is  
really a product of the other.

83 The roleplay/adventure genre puts the player in the  
role of a character moving forward a pre-structured  
85 story, and this model has proven extremely successful in  
a variety of desktop computer and console games.  
Recent examples are *Deus Ex*, the *Final Fantasy* and  
87 *Zelda* series, *Resident Evil* and numerous others.  
Although these games allow an immersive narrative  
89 experience to unfold for the player, and may even allow  
the player to influence the outcome through his/her  
91 actions, they do not allow the player to generate his or  
her own characters or story elements. For the remainder  
93 of this paper, we will focus on games that put the player  
in a co-authorial role within the narrative, thereby  
95 challenging the traditional concept of “author”.

### 3. The Hobbit on the Holodeck: massively multi-player online role playing games 99

101 The first genre we will look at is the massively multi-  
user online role playing game, or MMORPG. Games  
103 that fit into this genre include *Ultima Online*, *EverQuest*,  
*Asheron's Call*, and *Diablo*, as well as a number of  
105 others. These games arise from a long lineage that  
predates computer games. They can, for the most part,  
107 be traced back to a book that has probably had more  
influence on the game industry than any other single  
109 text. I refer of course to J.R.R. Tolkien's *The Hobbit* [1],  
published in 1937. Also influential was its subsequent  
111 sequel, *Lord of the Rings* [2], published in 1955. Both

1 books have combined worldwide sales of over 85 million  
3 copies, making them the most widely read fiction books  
in the world.

5 It is interesting to note that both books were written  
7 primarily as a means for Tolkien, a scholar of Old  
9 English, to explain a complex language and elaborate an  
11 imaginary world of his own invention. By his own  
admission, the story was merely written as a means of  
exploring the world. As such, it makes perfect sense that  
this book should become the foundation for the  
evolutionary process leading to today's computer games.

13 This evolutionary arc began with the *Dungeons and*  
15 *Dragons* role-playing game, first introduced by TSR in  
the 1970s. The notion was to create a kind of hybrid  
game/interactive story. Each person was meant to create  
his own character by selecting from a character genre  
with certain archetypal traits, which could then be  
developed into a personalized character. Each of these  
traits is given a numerical value. During the game play,  
the outcome of various scenarios is determined by  
rolling one of a number of multi-faceted dice with as  
many as twelve sides. The game is generally played in  
groups of about five or six, often for many hours, and  
over long-periods in a serialized or episodic fashion.  
Groups tend to get together on a regular basis, playing  
the same ongoing story or a series of interrelated  
adventures with the same characters for months and  
even years. "Hardcore" players often do illustrations of  
their characters or purchase figurines (some of which  
can be painted with custom colors) of their characters.  
The individual game session is generally overseen by a  
Dungeon Master, whose job it is to set up the narrative  
framework and scenarios for each instalment, often in  
response to what occurred in the previous session.  
During the game, the Dungeon Master responds  
dynamically to the players' actions, having mapped  
out, in advance, the terrain of the game (usually an  
actual map is drawn), various choices and their  
consequences. The unique style of the Dungeon Master  
is instrumental to the success of the game. One of the  
keys to the success of a Dungeon Master is an  
understanding of how to manipulate the narrative  
closure. Creating a satisfying and ongoing experience  
requires a carefully choreographed interplay between  
bringing closure to narrative threads while at the same  
time leaving others open, and opening up new ones.  
Unlike novels and films, which rely heavily on closure  
for a sense of satisfaction, these games thrive on lack of  
closure, which leaves ongoing opportunities for game  
play. The same is true of TV series or any other  
serialized form—even if conflicts are resolved, others  
must remain unresolved in order to continue the story.

53 On the computer, *D&D* evolved into the online text,  
55 Multi-User Dungeons (MUDs), text-based environ-  
ments that simulated the *D&D* experience, and Multi-  
User Object-Oriented (MOOs), other non-*D&D*-themed

57 forms of multi-user text-based narratives. Although they  
59 lack the dynamism and graphical sexiness of contem-  
porary MMORPGs, these games still have a small and  
adamant following. The game might be moved forward  
by a live Dungeon Master/facilitator, or by a pre-  
61 programmed narrative challenge generated by the  
63 computer. In either case, the players are actively engaged  
in the story. In some cases, autonomous text-based  
65 characters are created to add additional narrative  
elements, create conflicts, or assist players as guides in  
67 the game. It is interesting that, though most of these  
experiences are text-based, they tend to be framed in  
69 terms of navigational interactions. A scene will often  
begin with a description of the physical space, followed  
71 by options for directional navigation. Text conversa-  
tions are also possible, either through pre-programmed  
73 interactions (with text-based agents) or live interactions  
with other players.

75 The modern day MMORPG is a graphical (virtual  
77 reality) version of the MUD and MOO that is based on  
navigation through a three-dimensional graphical space.  
In this case, a very large virtual world has been created  
79 that, literally, thousands of people can co-inhabit  
simultaneously. A kit of character parts is provided,  
again offering an archetypal framework for players to  
81 start with. Usually, numerical values are applied to each,  
some of which are dynamic (such as Health or Strength),  
83 based on what has occurred in the game. They then  
venture forth into the fictional world on various  
85 missions and adventures, some propelled by the game  
and its objectives, others by their own desire for  
87 adventures, skills, goods or status. In the typical  
MMORPG, players can acquire: skills, through such  
89 devices as apprenticeship, money, through the use of  
skills or more nefarious means, property, usually with  
91 money but sometimes through battle; and, of course,  
reputations, probably the most important currency of  
93 these types of games.

95 In many ways, these games parallel the culture of such  
"live fantasy" environments as the Renaissance Faire or  
97 a *Star Trek* convention. Large groups of people come  
together, don virtual "costumes", and live for a time in a  
99 fantasy world. This is a play pattern that of course we  
have all experienced at some point or other in child-  
101 hood: dress-up, fantasy role-play, etc. For some, it  
evolves into a more grown-up form of fantasy en-  
103 tertainment—deep immersion and role-play in a highly  
sophisticated fictional context.

105 That these sorts of experiences have migrated onto the  
computer should not be a surprise. They are, in fact,  
107 optimally realized in the context of interactive computer  
entertainment. The computer is an ideal place to  
109 manifest a fantasy world. It allows for a wide variety  
of effects that cannot happen in real life: here, magic is  
111 simply a matter of coming up with the right algorithm.  
Also, while it allows the imagination a wide swath, it

1 also creates the possibility of a more controlled  
 2 environment. Game designers can automate story  
 3 features and characters, they can also introduce  
 4 narrative elements at-will. On-line game masters (which  
 5 most of these games employ at various levels) can  
 6 monitor the game, assuring that the story is running  
 7 smoothly, enforcing game rules and assisting new and  
 8 struggling players.

9 To-date, virtually all MMORPGs have been the  
 10 derivatives of *Hobbit/Dungeons and Dragons* themes.  
 11 They all exist in fantasy medieval environments, replete  
 12 with knights, wizards, elves, various gnome-like crea-  
 13 tures, magical spells and what have you. These worlds  
 14 are interesting culturally because they tend to exist on  
 15 the cusp of paganism and Christianity. They exist in a  
 16 fantastical version of a historical period where perhaps  
 17 magic and technology were beginning to vie for position.

18 Although somewhat narrow in its focus and its  
 19 audience, it is interesting to ponder why the medieval  
 20 fantasy genre is so popular. Eddo Stern, a game artist  
 21 and theorist, examines this phenomenon in his in-  
 22 progress film project, *A Touch of Medieval*. The  
 23 medieval fantasy genre has some interesting layers in  
 24 terms of its relation to high-tech culture. On the one  
 25 hand, it provides a potent antidote to the high-tech of  
 26 our daily lives. Although science fiction worlds are on  
 27 the horizon, in the past, these games have not tended in  
 28 a high-tech direction. Instead, they combine a kind of  
 29 nostalgia for a low-tech period, with an environment  
 30 where nature and magic are integrally intertwined.  
 31 Oddly, MMORPGs have a certain back-to-nature  
 32 aspect, even though their naturalistic worlds are, in fact,  
 33 synthetic. Pagan culture is prevalent and may even be  
 34 adopted by some gamers in their daily lives. Yet, at the  
 35 same time, the magic and somewhat dangerous qualities  
 36 of nature also provide an interesting metaphor for the  
 37 computer itself—a mysterious realm of darkness which  
 38 seldom behaves as anticipated, even while we try to  
 39 harness and control it. Perhaps the “nature” of  
 40 computers is well represented through these magical  
 41 worlds of mystery. *Myst* used the living book as a  
 42 metaphor for the computer, a construct in which the  
 43 central character creates entire worlds just by writing.  
 44 Perhaps these fantasy environments are a way to  
 45 understand, manage and control the mystery of the  
 46 computer itself.

47 Another aspect of the MMORPG, which is frequently  
 48 overlooked, is its theatrical aspect. This genre shares  
 49 much in common with improvisational theater and the  
 50 theater games of Viola Spolin. These games were  
 51 designed to teach professional actors, the techniques of  
 52 improvisation and authenticity. With MMORPG  
 53 games, the player becomes the central actor in the  
 54 drama. It is a highly social form of collaborative fiction.

55 There are peculiar properties to the culture of game  
 production that I think are responsible for making it a

57 caldron, so to speak, for the creation of some of the  
 58 bolder experiments in contemporary fictional entertain-  
 59 ment. In particular, game designers are predisposed to  
 60 breaking the mold of the author/audience hierarchy,  
 61 because it is inherent to their craft that the success of a  
 62 product is a measure of audience participation.

63 From a process point of view, game design is usually  
 64 (though not always), a team sport, so to speak. At its  
 65 very conception, each game usually begins with a level of  
 66 social engagement, which sets the tone for collaboration  
 67 with an audience. Although many game teams have a  
 68 strong singular creative lead, there is less of an ethos of  
 69 “auteurship” than in other media. Therefore, social play  
 70 “begins at home”, and translates into a social product.

71 In addition, the craft of game design is very much  
 72 about challenging the player’s creativity and intelligence.  
 73 It has long been a tradition of gamers try and outsmart  
 74 games and therefore game designers. The politics of this  
 75 engagement goes back to the roots of computer games.  
 76 The culture of games is about how good you are, how  
 77 smart you are, and whether you can “beat” the game. As  
 78 a result, game designers are programmed, in a sense, to  
 79 respond to player challenges. Each game must be more  
 80 challenging and “smarter” than the last. Therefore, the  
 81 game designer is always engaged in a battle of wits with  
 82 the player, even from the inception of a new game  
 83 concept, a sequel, or even a new game level.

84 Game design is highly user-centric. In fact, the most  
 85 common entry-level position in game companies is a  
 86 play-tester. Also, because of the battle of wits between  
 87 designers and players, game designers know more about  
 88 their users than producers of any other entertainment  
 89 medium, or, for that matter, any other computer  
 90 medium. If designers of word processors knew as much  
 91 about writers, as game designers knew about players, the  
 92 world of software would be a much better place. There is  
 93 a major shortcoming to this approach however: game  
 94 designers are notorious for designing games for them-  
 95 selves. Although the game market has grown and  
 96 broadened substantially, the game industry is still  
 97 dominated by male game designers with a decidedly  
 98 monotheistic doctrine of “fun”. The startling lack of  
 99 women in the game industry is a self-fulfilling prophesy  
 100 that only a few astute individuals have been able to  
 101 crack. The *Catch 22*: games are not designed for women  
 102 because women do not play games. Nonetheless, the few  
 103 popular games that have had appeal to females have  
 104 consistently topped the sales. Namco’s *Pac-Man*,  
 105 originally released in 1977, remains the top-selling  
 106 arcade game of all time. Toru Iwantani, the game’s  
 107 designer, said in a 1979 interview that although the game  
 108 was not openly targeted as a women’s game, he “was  
 109 interested in developing a game for the female game  
 110 enthusiast” ... “I started out with the concept of eating  
 111 and focused on the word ‘taberu’, which means ‘to eat.’”  
 (GameSpy [3]). This formula was so successful that

1 Namco subsequently released *Ms. Pac-Man*, which was  
 2 targeted specifically at women [4]. *Myst*, still the top-  
 3 selling CD-ROM game of all time (at roughly \$5.5  
 4 million sales and still climbing) had the largest  
 5 percentage of female players of any of the top-selling  
 6 games of its time. *The Sims*, which is currently the top-  
 7 selling CD-ROM game, is also estimated to have  
 8 between 40% and 50% female players. Also, let us not  
 9 forget the girls-only smash hit *Barbie Fashion Designer*,  
 10 which made record Christmas sales when it was first  
 11 released. MMORPG's with their emphasis on story,  
 12 social interaction, and fantasy have also proved to be  
 13 popular genres with girls and women [5].

14 Another aspect of game culture that predisposes it to  
 15 an open authorship model is the "Open Source"  
 16 movement, which invites players to go "under the  
 17 hood" and soup up their own games. Many games  
 18 include level-builders which allow players to create their  
 19 own game environments, and character building kits  
 20 that let them do the same with player avatars. Some  
 21 games allow you to transport 3D models in from other  
 22 authoring systems, and some even let you into the code  
 23 or scripting language to build your own game "mods".  
 24 This is a kind of high-tech hobby culture not unlike the  
 25 model train culture of the 1950s and 1960s. Interestingly,  
 26 many early model train hobbyists were electrical  
 27 engineers during World War 2, who used the hobby as  
 28 an outlet for technological, creative, and sometimes,  
 29 social expression.

30 The Open Source movement has been particularly  
 31 strong in the First Person Shooter game genre, or FPS.  
 32 First Person Shooter games tend to contain highly  
 33 marginal narrative content, but where they are of  
 34 interest is in that they have been at the forefront of  
 35 engaging player creativity. This phenomenon reached a  
 36 watershed at the March 2001 Computer Game Develop-  
 37 ers Conference when the Best Rookie Studio Award  
 38 was awarded to *Counter-Strike*, a first-person shooter  
 39 game created entirely by players using the level-builders  
 40 in the *Half-Life* game engine. The creators of Counter-  
 41 Strike were not professional game designers, but just  
 42 Open-Sourcers, who wanted to develop their own game  
 43 environment. It was made available as freeware on the  
 44 web and quickly became the most popular Online First  
 45 Person Shooter Game.

46 What is telling about this story is the radically  
 47 different response the game industry has to audience  
 48 members hijacking its technology and content. To the  
 49 rest of the entertainment industry, this sort of behavior  
 50 is looked at as criminal, and is met with an army of  
 51 lawyers, not an Academy Award. Try to imagine the  
 52 inventors of Napster receiving a Grammy and you will  
 53 understand the profound cultural difference between the  
 54 "mainstream" entertainment industry and the game  
 55 industry. While the traditional entertainment industry is  
 frantically trying to thwart the Tsunami with teaspoons,

the game industry embraces and even awards audience  
 creativity. To them, this sort of audience usurpation of  
 authority is the ultimate sign of success.

56 There have been other circumstances in which game  
 57 companies were not so enthusiastic about emergent  
 58 player-generated trends. Much controversy has arisen  
 59 around the selling game characters and objects. An  
 60 *Ultima Online* player made the newspapers when he  
 61 garnered \$1500 for a character put up for auction on E-  
 62 Bay. The emergent economies of game worlds took on  
 63 still more interesting proportions when people started  
 64 selling virtual game money—for real money. A few  
 65 small companies have been formed to sell *Ultima*,  
 66 *EverQuest* and other forms of virtual gold in exchange  
 67 for "real" cash (using a credit card, of course, its own  
 68 form of virtual currency.) This is tantamount to selling  
 69 Monopoly money for dollars, bringing new meaning to  
 70 the concept of "throwing good money after bad". A few  
 71 gamers have put up virtual currency exchange rates on  
 72 their web sites, another interesting metaphor for  
 73 contemporary economics, which is based largely on the  
 74 exchange of synthetic currencies in the forms of stocks  
 75 and bonds.

76 An interesting study can be made of the ways in which  
 77 MMORPG game companies respond to these player  
 78 usurpations. *Diablo* responded by creating D-Bay, its  
 79 own internal game auction feature. Rather than thwart-  
 80 ing this new economy, the *Diablo* team figured that  
 81 everyone could benefit from it, so long as they got their  
 82 piece of the action. *EverQuest*, on the other hand,  
 83 explicitly forbids the transfer of characters between  
 84 players. Many believe their impetus for this to be  
 85 economic, but in fact, quite the opposite is true.  
 86 Although they do not mind the practice in principle,  
 87 they found that it had an adverse affect on game play.  
 88 An unskilled player playing at a high-level, not unlike an  
 89 unlicensed driver in an automobile, can become a  
 90 menace to other players since they do not have the skill  
 91 required to operate the character properly. In a sense, it  
 92 is a form of cheating. You get ahead in the game without  
 93 really earning your status or position, and without really  
 94 having the skill to be in an advanced stage of game play.  
 95 On top of that, an unskilled player playing at high levels  
 96 can be a menace to himself as well. One anecdote  
 97 chronicled a teenage boy whose parents bought him a  
 98 high-level character for his birthday—at a four-digit  
 99 figure. While many games employ various reincarnation  
 100 schemes to reanimate player characters who have been  
 101 killed, *EverQuest* practices what is known in game  
 102 circles as "perma-death". Once a character dies, he  
 103 is...well...dead. The young man almost instantly got  
 104 the character killed due to the fact that he was more or  
 105 less "out of his league" with other players at the same  
 106 level. The parents raised a ruckus, trying to hold the  
 107 company accountable for the loss of their investment.  
 108 To avoid this sort of problem, *EverQuest* prefers to

1 force players to play within the rules: you may only play  
2 the character you build yourself. This assures that you  
3 are playing at the appropriate skill level. From a  
4 behavioral standpoint, it also assures that you are  
5 playing by the rules, and that players are operating with  
6 a proper sense of reward, penalty and accountability.

7 One of the most interesting aspects of MMORPG  
8 culture is the behind-the-scenes infrastructure and  
9 culture that supports them. Again, participation is part  
10 of the production processes. Companies like EverQuest  
11 now view themselves in a service role. Therefore, they  
12 view the ongoing creative and game play maintenance as  
13 a critical part of their business. They are mostly  
14 subscription-based and so their business is based on  
15 the ability to keep players coming back month after  
16 month. To keep the game fresh and exciting and to  
17 encourage repeat play, the game is adapted as it is  
18 played in direct response to player actions. Thus, the  
19 staff becomes a mix between an improvisational theater  
20 company and, say, the writing team for a television  
21 series. They are constantly creating new story lines to  
22 accommodate their players, and they keep a number of  
23 staffers “in-game” at all times to both move the  
24 narrative ahead and also to suss out the trends so  
25 that the game designers, story creators and rule  
26 enforcers can respond accordingly. As always, game  
27 designers must engage in an ongoing dialogue with  
28 players in order to constantly raise the bar on excitement  
29 and challenge.

#### 31 4. God plays dice with the universe: Sims and God Games

33 Having explored the culture of MMORPG’s, we are  
34 now going to move into a different genre, the so-called  
35 “God Game”, or “Sim”, and its variants. Although this  
36 genre has been around in various forms for over a  
37 decade, this genre is currently in the midst of an  
38 evolutionary leap, largely driven by both creative and  
39 technical innovations. On the creative side, the notion of  
40 “procedural narrative” has started to emerge as a viable  
41 form. In addition, progress in the use of artificial  
42 intelligence (AI) in games has also enhanced the ability  
43 to create games with more variety. “Sims” games are not  
44 to be confused with first-person flight or tank simula-  
45 tions, which are derived from military training VR  
46 systems. Sims in this sense are simulations, or dynamic  
47 models, of complex systems, with object-oriented  
48 programs that interact in a vast web of interdependent,  
49 algorithmically generated events.

51 Sim or God Games put the player in a God-like role  
52 of manipulating variables in a large world. In the past,  
53 these games have focused on the modeling of large-scale  
54 systems. They have some narrative context, but tend not  
55 to have as strongly developed story framework as the  
56 MMORPG games. Rather, they create a rather generic

57 scenario by creating procedural computer models of  
58 large-scale systems.

59 Simulation as a practice also pre-dates computers and  
60 was initially developed in the 1960s and 1970s for the  
61 academic study of social science and economics, as well  
62 as ecology. Originally done with paper and pencil, these  
63 simulations were an integral part of the systems-theory.  
64 The idea was to model a range of interrelated variables,  
65 then play out various scenarios of what would occur  
66 were the variables changed. Needless to say, computers  
67 made this process much easier.

68 *Age of Empires*, *SimCity* and Sid Meier’s *Civilization*  
69 are some early examples of this model. In these single-  
70 player games, the player has a God-like overview,  
71 manipulating events in a variety of direct and indirect  
72 ways. The characters tend to operate on a more  
73 demographic, rather than individual model, using  
74 techniques of flocking (group behaviors) rather than  
75 AI. In *SimCity*, people are dealt with more on the level  
76 of demographics. When a factory is built, roads are  
77 required to allow workers to get there, then housing is  
78 needed to contain them. Too much industrial or  
79 commuter pollution creates problems, not enough roads  
80 create traffic, etc. Various disasters can be introduced to  
81 model how the city services, such as police, rescue or fire  
82 departments, will respond. In the game *Roller Coaster*  
83 *Tycoon*, players take on the role of a theme park  
84 operator. They must design rides from various kits, and  
85 assure that guests have ample facilities, such as toilets  
86 and food concessions, and that they are having enough  
87 fun to justify the admission price. Players can see a  
88 balance sheet of current expenditures vs. profits, can see  
89 a head-count of park visitors, as well as individual ride  
90 visitation. They can even read the minds of individual  
91 visitors to gauge their needs. If a visitor’s thought  
92 bubble says, “This park is dirty”, then it is time to hire  
93 some more janitorial staff. If they are hungry, then a hot  
94 dog stand is in order. As the worlds become larger and  
95 more complex, emergent behaviors create a natural  
96 increase in challenge. A bigger world is by definition  
97 more challenging to play with, thus creating a self-  
98 evolving skill level.

99 In these games, a drama emerges, but it tends to be  
100 more, as was mentioned earlier, a drama of demo-  
101 graphics, rather than a character-driven story. In  
102 *Civilization*, conflicts happen between tribes and villages,  
103 not individuals. The group tends to operate as a unit.  
104 Advances in both game design and technology have now  
105 lead to what can only be described as “higher resolu-  
106 tion” genres of Sim and God games. Ironically, it is  
107 much easier for a computer to model the movements of  
108 groups using flocking behaviors than it is to create an  
109 individual character. Flocking behaviors apply a small  
110 number of rules to fairly generic characters, who then  
111 behave accordingly en masse. In this context, they do  
112 not possess highly articulated individual personalities.

1 The new genres of God and Sim games are employing  
 3 more and more sophisticated levels of AI, which allow  
 5 for more complex and cumulative behavior of individual  
 7 characters. Admittedly, character behaviors are still  
 9 somewhat simplistic and cartoon-like, but they are able  
 11 to engage with each other in new and delightful ways.

13 *Black & White* provides one extreme for this. In this  
 15 game, you are responsible for rearing a godlike creature  
 17 within a small island culture. The story and its essential  
 19 conflicts are fairly well structured, but it is the player's  
 21 job to, in a sense, "raise" this all-powerful creature to be  
 23 either a Good God or a Bad God. Depending on what  
 25 you do to it, it will be kind or cruel, malicious or  
 27 merciful, malignant or helpful to its "loyal" subjects. No  
 29 doubt this game provides an intriguing metaphor for  
 31 child-rearing. Antecedents to this type of game include  
 33 the virtual pets *Tamagotchi* (the popular Japanese  
 35 keychain toy), *Petz* and *Creatures*. In each of these,  
 37 you have a more individual relationship with the  
 39 characters, but they are operating at the level of an  
 41 animal or a small child. With *Black & White*, a specific  
 43 and highly articulated personality emerges as you raise  
 45 your Godlike being, who then interacts with a less-  
 47 individuated populace, who function on more of a  
 49 flocking model.

51 The biggest success to date in the God Game/Sims  
 53 genre is the best-selling PC game, *The Sims*. Almost  
 55 entirely without a narrative agenda, let alone an  
 ideology, this game has been described by Janet Murray  
 as "the yuppie game", by myself as "the IKEA game"  
 and "Big Brother, the game", and by its creator, Will  
 Wright, as a "virtual dollhouse." *The Sims* is a sort of  
 narrative Lego, a kind of domestic drama kit that allows  
 the player to project his or her own experience on to the  
 semi-autonomous characters she or he (sort of) controls.  
*The Sims* has a generic quality that leaves its narrative  
 outcome open-ended. In it, you are responsible for the  
 well-being of a family unit of some kind, which you can  
 either adopt from a list of pre-existing families, or create  
 from your own custom-built characters. You can chose  
 from some key personality traits, such as neatness or  
 playfulness, or just let the system automatically generate  
 a personality by choosing an astrological sign. The game  
 provides three basic play modes: Live, Build and Buy. In  
 the Live mode, you must guide your characters through  
 their day. If you leave them alone, they will sort of do  
 their own thing, but, especially at the beginning, they  
 will need you to attend to their needs. Well-being  
 monitors tell you more or less what their need state is in  
 a variety of categories, form the sublime (social,  
 comfort), to the mundane (hunger, bladder.) If you do  
 not urge them along, calamity can occur. If a Sim does  
 not make it to the carpool, she misses work and  
 therefore income. If a child Sim misses school too many  
 times, she will get sent to the military academy. A  
 hungry Sim too long unfed will die of starvation, a

57 sleepy Sim can collapse in a heap if not put to bed when  
 59 tired, and a full bladder unattended to can result in...  
 well, I am sure you can imagine.

61 These characters also have social needs, including the  
 63 need for love. Some characters tend to need love more  
 65 than others, and it is not at all uncommon for a Sim to  
 67 have a tantrum, waving his or her fists at you and yelling  
 69 in "Simmish", a combination of gibberish and cartoon  
 bubble symbols. If a Sim is yelling and you see a picture  
 of two people kissing over his head, that means he wants  
 a girlfriend. If you see a television, he is longing for some  
 entertainment. A hamburger indicates hunger, and a  
 picture of a bed means it is time for sleep.

71 Over time, the Sims develop relationships with each  
 73 other, some positive, some negative. Depending on the  
 75 nature of the relationship, certain actions become  
 77 available. If you have a high love factor between two  
 79 characters, they can talk affectionately with each other,  
 give each other back rubs and gifts, and eventually they  
 can kiss. But if you try to kiss or even compliment a  
 character that you do not get along with, he or she will  
 become irritated with you and you may even lose  
 favorability points.

81 One of the consistent qualities of Maxis games,  
 83 especially true in *The Sims*, is the detail with which  
 85 consequences are played out. In particular, failure states  
 87 become a source of great humor, or in some cases,  
 89 tragedy. A badly tended populace in *SimCity* will  
 91 eventually riot. In *The Sims*, children can be taken  
 93 away by social services, characters can lose their jobs,  
 95 and even die. It has long been a criticism of video games  
 (not to mention many films) that death has no  
 consequences. In many games, as discussed earlier,  
 reincarnation is the norm; even with games that employ  
 "perma-death", the consequences of death are still not  
 really dealt with in any kind of depth. In *The Sims*, when  
 characters die, other characters have to bury and mourn  
 them. A mourning spouse might become depressed and  
 unable to work for a time.

97 While the game itself is quite compelling, even in its  
 99 mundanity—it is really more or less a sitcom or a  
 101 domestic drama of sorts—what is even more interesting  
 103 is the relationship of Maxis to its audience and its strong  
 105 ideology about user participation. Months before the  
 game was released in stores, a web site was set up to  
 allow players to Beta Test it. Thus, in some respects,  
 players got in "on the ground floor" to really engage in  
 the design itself. By the time the game hit the shelves,  
*The Sims* already had a strong and adamant fan base.

107 In addition, almost immediately, players started to  
 109 engage in very creative uses of the game. Like most of  
 111 these interactive narrative games, *The Sims* features a  
 screen capture mode that allows players to take pictures  
 of their game in-progress and create an album. Highly  
 creative players began to use the game for content  
 creation, essentially a storyboarding tool, to make up

1 their own narratives. Some of these narratives became  
 3 quite popular with other users and are now viewed by  
 5 thousands of players daily on The Sims web site. In  
 7 addition, the game allows you to upload a game-in-  
 9 progress onto the site so that other players can continue  
 11 where you left off. This means there might be a variety  
 13 of variations on a particular family based on the  
 15 different directions taken by different players.

17 The Sims also allows for various forms of what is  
 19 known as “skinning”, essentially adding textures to  
 21 characters in order to customize them. An early example  
 23 of this is a player who built a Star Trek Enterprise in the  
 25 game, completely with crew uniforms. In response to  
 27 this, Maxis had produced a number of expansion packs,  
 29 including *The Sims Living Large* and *House Party*, both  
 31 of which allow for a wider variety of options. Currently,  
 33 they are developing The Sims online, which will create  
 35 an online Sims community where people can build  
 37 families in a shared neighborhood. This new hybrid  
 39 brings together aspects of the God/Sim game with  
 41 MMORPGs to create a social version of what is now  
 43 more or less a single-player game with a web-supported  
 45 fan community.

## 5. Conclusion

27 From a cultural perspective, the ramifications of these  
 29 new forms of entertainment is nothing short of revolu-  
 31 tionary. Through these experiences, the consumer is thus  
 33 transformed into consumer/producer and consumption  
 35 itself becomes an act of production. Where previously  
 37 there was a clear boundary between producer and  
 39 consumer of content, this boundary continues to become  
 41 more blurry. The role of the “author” in this context is,  
 43 rather than creating content, to create context. This then  
 45 invites the audience to create or co-create the content, in  
 47 essence, to entertain each other with their unique way of  
 49 “playing the story”. Karl Marx said “seize the means of  
 51 production”. What is interesting here is that not that  
 53 users are seizing the means of production, but that in a  
 55 sense, capitalism has found a sort of compromise in the  
 production/consumption hybrid.

From a socio-political standpoint, this fundamentally  
 undermines the very fabric of the broadcast media— $\ominus$   
 where there is a fixed and hierarchical relationship  
 between the content creator/owner and the audience.  
 Sims designer Will Wright has a vision for user-created  
 content. If 10% of the players are highly skilled content  
 creators—people who build their own character skins  
 and create their own objects—he posits, then for every  
 million players, 100,000 of them will be content-creation  
 experts. The result is that the game becomes its own  
 system for self-generating content.

The next step is building some kind of economy  
 around this self-generating content model. Wright is

57 currently thinking about ways to reward expert players/  
 59 content generators, possibly with cash, or perhaps with  
 61 game coupons, such as free games and subscriptions. In  
 63 this way, he envisions a new scheme for content  
 65 creation, where players co-create and self-generate their  
 67 own content, and are rewarded for how well they  
 69 entertain each other.

This model is also moving beyond the game area.  
 There are already some systems in development by  
 groups such as Canada’s Bitcasters,<sup>1</sup> who are creating  
 new schemes for a producer/consumer model. Their  
 system provides a subscription-based tool kit, which  
 feeds into a distribution system. You “rent” their tools,  
 create content, then feed it back into the site for public  
 distribution. You can charge for your content, opt to  
 “sell” ad space by selecting from a list of available  
 sponsors, or simply make it available for free. The  
 income you generate goes back into the system as credit  
 towards your tool use, and so on. However, the  
 experience of the content is still passive, so in that  
 sense, the system still has a broadcast model as its basis.

Inversely, the game experience unites production and  
 consumption into a single act. In the future, I think the  
 content bases (such as game themes) will be expanded to  
 appeal to a wider audience. The MMORPG genre is  
 already branching into other areas. Verant, the makers  
 of *EverQuest*, are underway creating a *Star Wars*  
*Galaxies*, and many other companies are working on  
 new story genres within this game play paradigm. As the  
 themes become less narrow, we will see new audiences  
 embrace these games. What is always exciting about this  
 is that these new players will continue to surprise us by  
 reinventing the very games they are playing. This is  
 probably the most interesting thing about game culture:  
 in the end, the outcome is always a surprise.

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[6]

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