Patches of Peace: Tiny Signs of Agency in Digital Games

Cindy Poremba

Simon Fraser University 2400 Central City, 10153 King George Highway Surrey, British Columbia, Canada V3T 2W1 604 268 7532 poremba@sfu.ca

ABSTRACT

One of the more interesting and distinct aspects of digital games is the proliferation of player produced artifacts. The reworking of original game materials is an integral part of game culture that cannot be ignored in the study of these games. This paper explores player authorship in digital games through the rhetoric of select peace-themed game modifications.

Keywords

Modification, participatory culture, protest, player-author, authorship, agency.

INTRODUCTION

The online response to terrorist attacks within the United States on September 11, 2001, was rapid and extensive. Weblogs exploded with personal accounts and responses to the events. Small online games appeared almost immediately: some allowing you to kill, maim and generally terrorize Osama bin Laden and other terrorist representations, some providing critical commentary on US foreign policy and response to these attacks (such as Gonzalo Frasca's *Kabul Kaboom*). Players gathered for candlelight vigils in Persistent World games such as *Ultima Online* and the *There.com* beta test [6]. Over a short period of time, response to the events could be seen in a number of game modifications and other player created artifacts. These artifacts became a mode of expression that allowed players to voice their views on the tragedy and its aftermath. At a time when many felt powerless in the context of global events, the internet provided an outlet for creation and interpretation: whether it was through an online diary of their personal loss, or in a small Flash game that allowed them to take aim at a "terrorist."

This paper examines this issue of player authorship in the context of anti-war and anti-violence protest artifacts that sprung up post September 11th in online games/game communities. Two distinctive player artifacts are examined: *Tiny Signs of Hope*¹, a collection of peace posters in the Sims; and *Velvet-Strike*², a

¹ Formerly at http://www.downloadpeace.com/tiny/

² As of August 2003 available at http://www.opensorcery.net/velvet-strike/

selection of protest tags for a *Counter-Strike* graffiti modification called *Counterspray*. These artifacts demonstrate implicit themes in the social construction of the player-author; including opposition and/or extension of core games, tactics in public space, and the secondary agency of the artifact. These themes demonstrate how the artifacts both reflect and reinforce the agency of the player-author: a necessary pre-condition in the use of game artifacts as an independent mode of authorship.

Online games provide a networked media environment in which players have the opportunity to reshape, recontextualize, and remediate a game's message at the levels of narrative, gameplay and/or cultural space. Players take up the challenge of creating both permanent and ephemeral artifacts in games and game systems— artifacts that are not explicitly part of, and often subvert, initial game design(s). While a relative minority of players participate in game modification, their contribution to the overall game community ensures a constant, vibrant flow of new game modes, contexts, and content into the play arena. Current interest in both player-created content (from a positive perspective) and player subversion (from a negative perspective) calls for a deeper exploration of player agency— not exclusively within the game experience, but additionally in the realm of player created game artifacts. This paper attempts to reveal some of the underlying currents that feed the playerauthor phenomenon, in the context of peace-themed game artifacts.

PLAYER PRODUCTION IN GAMES

In recent years, digital games have become a prominent part of the cultural landscape, challenging the film and television industries in terms of revenue and attracting the attention of mainstream media, lawmakers, and the (non-gaming) public. Players enjoy unprecedented access to their games—designers participate in player discussions, implement player suggestions in existing games, and even openly provide players with tools to facilitate the production of player content. When they don't, players still find ways to use games to their own ends. Players hack and alter game code and graphics, play in new and undetermined contexts, and occasionally cross over the divide to produce their own games. In other words, they not only use the digital game as a mediated experience, but often as a medium in and of itself.

The prolific creation and dissemination culture of the computer game is rivaled only by electronic music's DJ artists. In certain game genres (notably the firstperson shooter, or FPS), few popular games exist without sites devoted to exchanging tips and tricks, tools and modifications. Player production ranges from meta-gaming collectives to recombinant performances; from player-toplayer design tools to game modifications (*mods*). It is estimated 10 to 20% of "hard-core gamers" participate in the creation and download of game modifications³ [2]. According to researchers Salen and Zimmerman, player production expands both *modes* of play (providing new ways of playing), and *contexts* available for the exchange of meaning. This production may operate from the outside in (bringing new elements into the game) or from the inside

³ This data largely reflects First Person Shooter (FPS) mod makers that exist in the socalled "hard-core" gaming community [2]. I would suspect the wider community of mod makers and users is much larger, particularly when low-level modifications such as Sims mods are included. This is certainly an area where accurate research data is needed.

out (using in-game elements for extra-game purposes)[15]. For example, players in Persistent World⁴ games such as *Ultima Online* and *Everquest* have held ingame weddings, created a virtual prostitute service [10], held online protests [6], gathered for 9-11 candlelight vigils [19], held naked siege to virtual towns⁵, created seasonal events (including a Santa Claus character)[9], and enacted rituals [4], all without (explicit) support or encouragement from the game creators, and often without the addition of new digital elements to the existing game. Players have remediated cinema in the form of *machinema*— the use of game engines to create and present movie-like scenarios. In some cases, entire games are used as part of a larger meta-game⁶, as is the case with collectives such as player guilds, which maintain their own rules and structures and may move nomadically from game to game.

Computer games rely on digital components that increase the opportunity for reconfiguration— as "code worlds" they are relatively mutable. Online games, in particular, allow for a social network that affords the use of games as media. The online environment also facilitates distribution networks, allows for the dissemination of instructions and advice, and lets players form impromptu project working groups. Even single player games, such as Maxis' *The Sims*, have the opportunity to become de facto multi-player games through the communities that spring up around them. According to Erikki Huhtamao, digital games have become "an internalized model for an interactive relationship with the media, influencing other forms of computerized and computer-mediated communication" [8]. Part of this model lies in a participatory culture that encourages and enables players' drive for agency through game elements of their own making.

The Player-Author and Agency

The search for the well-played game is what holds the community together. But the freedom to change the game is what gives the community its power.

- Bernie De Koven [5].

Game creators maintain a distributed agency, in game, subsequently instantiated by the game player. This can create a relationship between creator and game similar to that of the composer/performance, creating the capacity for the occurrence of an experience (that is subsequently "performed" by a secondary agent). The role of the author in this setting is, to paraphrase Celia Pearce, creating context, rather than content⁷. The player is invited to bring the

⁴ Also called MMOG or MMORPG games, these games may or may not involve roleplaying activity, and may or may not be considered "massive."

⁵ Personal account, inflicted on the players of Microsoft's Asheron's Call, in 2001.

⁶ Meta-game: Extra-game activities that surround core gameplay. Meta-game activities may none-the-less be integral to the game itself, for example, the collecting and ordering of cards in a (non-digital) collectable card game. Player authorship throws into question the concept of the meta-game: if players can remake and play an existing game, is meta-gaming activity truly external to said game, or simply an expanded component thereof?

⁷ Although this context may maintain ideological constraints that may still influence the direction of player authorship.

game into being, in essence, to "[play] the story" [13]. However, this potential for agency also extends to the game player, through the creation of game artifacts. These artifacts then carry the agency of the game player⁸, rather than the designer, and as such, demonstrate authorship. Player-authors create independent artifacts that rely on a previous work (although not necessarily an original work) as material for the assertion of their own agency in producing a cultural product. As a manifestation of player agency, this mode of authorship does not include works that are merely instantiations of another author's agency⁹.

As Espen Aarseth has stated, authorship depends on the recognition of authorship: that it is a social, rather than technological construct [1]. Examples of secondary or derivative authorship in the wider mediated environment include both parasitic and tactical works, such as fan fiction, music sampling, and some forms of graffiti. In game cultures, players create derivative artifacts that make diverse use of the primary object. This may include virtual performance (particularly popular in Persistent Worlds such as Ultima Online and *Everquest*), meta-gaming (such as puzzle-solving collectives and intergame guilds), crafting (popular in *The Sims*), even creating new games from old (as in *Counter-Strike*, a modification of the game *Half-Life*). Derivative or secondary authorship has experienced a cultural insurgence, due perhaps to the popularity of remediation and self-referential, ironic cultural criticism that tears away at the reverence of the primary author. However, we can credit, in part, the practices of the primary authors that attempt to distance the primary work from the expression of their own agency. For example, when John Carmack (*Doom*) chose to tailor his primary game production to assist further secondary production, he described the open game as a "new canvas" for the game player. Carmack's isolating of the core game engine, making it easier to add new sound, graphic and level elements, has been described as "an ideological gesture that empowered players" [11]. Players are not bound to instantiate Carmack's agency through the production of new cultural products in order to play the game-however, they do gain easier access to the elements required to author new game artifacts.

What interestingly emerges in the rhetoric of player artifacts is not only a picture of these artifacts as media, carrying the messages of an independent player-author, but a deep structure that presents the argument for agency through the work itself. This agency (of the player-author) is an acknowledged part of the game community, validating the continuing production of game modifications, collectives, tools and performances that rework the existing game (or games). This reveals a relationship between the primary and secondary author, in which the latter presents a social reality in which their agency lies in authorship. If we accept agency as a socially defined and attributed phenomenon, and authorship as the demonstrated agency of the game player, then we can show player authorship as an additional mode of digital game authorship. Authorship in digital games can adopt a conversational (over a broadcast) model, representing a cultural interaction

⁸ Albeit a secondary agency.

⁹ For example, crafting an item as a permissible action within a game context would instantiate the agency of the primary author, rather than express player agency. This may none-the-less result in significant player efficacy and aesthetic satisfaction.

between authors that may be distinguished more accurately on a temporal level than a hierarchal one.

GAMERS RESPOND TO 9-11

Players were quick to adapt their favorite games to reflect the changing cultural landscape following the September 11th attacks—from the initial attacks, through to the declared "War on Terrorism" and the attack on Iraq. Osama bin Laden, Saddam Hussein, and even "Chemical Ali" and other terrorist and military skins¹⁰ began to appear in games as diverse as *Quake, Unreal* [17] and *The Sims*, with players unleashing their anger on these characters like virtual voodoo dolls. In less than a year, the *Desert Combat* mod was released for Digital Illusions' *Battlefield 1942*, replacing the game's initial WWII content to reflect desert warfare in Iraq. Mod makers could turn around a cultural product based on current events far in advance of any possible industry response.



Figure 1: Screen capture from Desert Combat, Battlefield 1942 modification.

Anne-Marie Schleiner notes more sinister manifestations of this boom in player authorship:

The most disturbing Osama mod I saw was on display in October 2001 at a commercial game industry exhibit in Barcelona called Arte Futura ...In this mod, Osama is represented as an Arab corner grocery story owner, as is common in many tough inner city neighborhoods in North America. The goal of the mod is to enter the corner liquor grocery store and kill the Arab owner. (At the time I saw this I had just gotten an email from my sister in Seattle describing how she and other college students were taking turns guarding mosques from vandalists [*sic*].) [17].

Concerned with the narrow logic of the new game "realism," and what Schleiner saw as the binary logic of the first-person shooter genre being recreated on a global scale, Schleiner (along with fellow artists Brody Condon and Joan Leandre) conceived *Velvet-Strike*. *Velvet-Strike* is a set of peacethemed/anti-violence sprays for a *Counter-Strike* graffiti patch called *Counterspray*. These sprays are publicly available for download off the *Velvet-Strike* website. A player would use the sprays in conjunction with *Counterspray*

¹⁰ A *skin* is an adjustment of the current graphic appearance of an in-game object. Skins are often easier to create than other modifications, as they involve no programming to change and the original graphics files on which they are based are often easily extracted and modified.

to introduce new graphic "graffiti" elements onto surfaces within a multi-player *Counter-Strike* game session. The *Velvet-Strike* sprays contain oppositional themes, most commonly directed against the Bush government's "War on Terrorism," the war on Iraq, and the logic of FPS "realism." The group invites the submission of sprays in keeping with this agenda. The *Velvet-Strike* message is carried not only through the sprays themselves, but through the accompanying website, which includes a manifesto, the display of support messages and flames¹¹, and the showcase of exemplary sprays, as well as instructions on how to implement the sprays using the necessary *Counterspray* components.

At around the same time, a group called downloadpeace was creating a similar response to world events—a series of minute peace posters to be introduced into Maxis' *The Sims* game environment. The poster/graphic collection was called "Tiny Signs of Hope." ¹² The site's introduction began:

Welcome, dear friend, to tiny signs of hope, publishers of powerful, but very small protest tools for the Sim community. Our aim is to help your Sims build a just and peaceful world, one downloadable object at a time.

The Tiny Signs posters are predominantly modeled after real-world protest stickers and slogans— in fact, many were reproductions of posters used at the time (for example: "Protest sign bearing the official logo of Britain's "Stop The War" Coalition, carried by 400,000 protesters in the march from the Embankment to Hyde Park, London, on 28 September 2002.") or made famous during the 60's. Unlike Velvet-Strike, Tiny Signs does not solicit posters from site visitors—instead, it sets itself up as a publisher of poster packages.

TINY SIGNS OF AGENCY

The approach of Tiny Signs and *Velvet-Strike* are similar: both present graphic elements that can be brought into an existing game, displaying anti-war and/or anti-violence messages. Unlike many examples of player-created artifacts, these modifications present an overt political message, both in their content and their implementation. However, like most artifacts, these examples speak to the legitimacy of their creators in the introduction of new meaning into existing game environments. They reflect and reinforce the play community's social construction and validation of a player-author.

If we are to view agency as a socially attributed and recognized category, it is important for the player-author to establish this claim for the legitimacy of their authorship. Often this argument is implicit, and directed towards both the primary game author (the most likely source for challenge) and indirectly to the game community that will ultimately attribute agency. At the heart of the argument is the assertion that the player-author has presented a valid claim for agency in the creation of a new game element. As such, they are seen as the owner of a resulting independent artifact.

¹¹ A *flame* is any intentionally inflammatory or derogatory posting, usually intended to provoke an argument.

¹² The "Tiny Signs of Hope" website has since been taken down, and download peace has appeared to disappear from the online landscape—underscoring the ephemeral nature of player authorship.

Velvet-Strike: Taking on the First-Person Shooter

Ironically, the creators of *Velvet-Strike* benefit from a perceived *illegitimacy* of their position implicit in the construction of their subversive character. As subversives, they can flaunt the criticism directed their way, they can disrupt the standard game experience that they oppose, and gain tactical advantage with the activist/artistic community by incurring the disapproval of the "establishment" and the non-reflective player/modder. States Schleiner:

[...] even the negative feedback I consider a success because it forced people to define their positions and also forced some strange people to come out of the woodwork (the sorts of people you see in Michael Moore's "Bowling for Columbine").

-- Anne-Marie Schleiner, interview for SonarOnline [18]

Although this illegitimacy works for them in one context, they must still court the player community for legitimacy if they are to be recognized as playerauthors. Velvet-Strike attempts to achieve this legitimacy through the establishment of a sanctioning "gamer" persona. The establishment of gamer credentials can be seen in the assertion that the creators of Velvet-Strike do play games, enjoy shooters (in terms of acceptable values: social, complexity, and aesthetics), understand game production and technical structure (as in a response to the size of character meshes), have historical knowledge of the genre, and do not necessarily oppose violence (an issue that continually plagues the game community). There are also nods to hacker culture in the use of copyleft (in the Manifesto and on the site) and the opposition to censorship. To be legitimate player-producers, at least in the FPS mod community that surrounds games such as Counter-Strike, the Velvet-Strike team must be seen first as gamers. By gaining recognition from the play community as legitimate authors in this genre, they build a stronger tactical position from which to argue their message to this community. However, it is also important to underscore that while Velvet-Strike does attempt to legitimize itself within the FPS game community, its primary audience is a largely external community of artists and activists. The Velvet-Strike sprays maintain an overt political message that does not address the game community directly, but instead appeals to outside groups—it is in some ways, both outsider and insider.

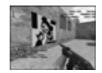


Figure 2: Screen from Counter-Strike (with Velvet-Strike graffiti spray).

The protest action of *Velvet-Strike* borrows heavily from off-line models, reframing the virtual space as a public forum in which they are claiming a voice. The resistance encouraged by the site may disrupt the game experience (the graffiti sprays less physically then psychologically), or mimic real life forms of protest (such as sit-ins and martyrdom). The site's inclusion of both supporting and opposing voices targeted at their patches further models an

offline protest model. Rather than using *Counter-Strike* as a game space, *Velvet-Strike* uses it as a setting for protest-themed performance art; less as persuasion in the context of the game itself (despite indications of this intention in the Manifesto), but (intentionally or unintentionally) as an appeal to an external art/activist community.

As Velvet-Strike attracts a fair amount of resistance from what may be considered a core gaming audience, it is also interesting to see how their status as an oppositional artifact is received in this community. The most prevalent player counter-argument directed towards the modification is "this is just a game": rebutting the use of the game as a forum for political protest and resisting the reframing of the multi-player environment, indicating support for the original game design. Other critiques of the *Velvet-Strike* patches as technically simplistic and graphically poor demonstrate an expectation of game extension (i.e. improving or extending the core game) that disregards the Velvet-Strike team's opposition. However, this expectation of extension, rather than opposition, may also reflect the community's relationship with the tradition of modification that traces back to the parent game, Half-Life. The support for the modification community shown by the primary authors may vest potential secondary authors in a FPS modification tradition, encouraging extensions and creating a resistance to oppositional artifacts such as Velvet-Strike.

Tiny Signs of Hope: Sim Protest

Tiny Signs' protest message appears to find a more welcoming home in the Sims mod community. Although "Tiny Signs of Hope" does not explicitly showcase opposition or support, the relationship of the collection to the community would suggest acceptance in a more open environment for personal (or even political) artifacts. Most of the rhetoric of legitimacy in the Sims player-producer community focuses externally, to supporting the agency of Sims players as creators in their own right. Because of the openness of players to new creators, and also in part to the game demographics, there is a large base of technically simple game modifications, notably skins for characters and objects. Technical wizardry is less important than aesthetics: items that are attractive receive a great deal of social validation. There is a wider range of differentiation in terms of roles for the player-producer: one can skin walls, floors, and characters exclusively, recolour objects, create new objects, change behaviours, build tools etc., although the producer base thins dramatically as the artifacts increase in technical sophistication. Player advocacy for user production demonstrates a rhetorical vision in the Sims creator community of open access for players to take the role of game author. Producers are driven by credit and acknowledgement of their contributions, not only within the mod community itself, but in terms of players' relationship with the primary author, Maxis¹³. As legitimate co-creators, the difference between player-artifacts and the core game become blurred, from a basic level in adopting "Sim-words" ("Persimmon Grove," "My Funny Simmentine," "Versimilitude") to a more aggressive demand for testing the core game with user-objects and backward compatibility for these objects in Sims expansion packs.

¹³ Actually, Maxis is usually portrayed as the primary author of *The Sims* when the playerauthor community relates unfavorable experiences and anecdotes—when the primary author is presented favorably, he is seen as Will Wright.

The use of *The Sims* to model/recreate personal environments is one of the more popular ways players appropriate the mechanics of the game to create their own meaning. In using the Sims peace posters, these Sim scenarios can mirror (suggested) real-life model behaviour, in the form of protest. Tiny Signs not only uses the graphic elements on the posters themselves as a means of expression, but also includes descriptive tags beneath the items for persuasive communication ("Your Sims are sure to agree that war on Iraq would be wasteful, stupid and cruel."). These descriptive tags demonstrate a fanciful, light tone that dominates Sims mod sites and establishes an open, non-threatening atmosphere for potential player-authors.

The meta-game of trading and collecting Sims items does not necessarily dictate any in-game use of these items—the creation and dissemination becomes a goal unto itself. Indeed, this creation and dissemination is what is validated by the game community , primarily through the encouragement of novice skin makers, the showcasing and praise of unique, new and attractive additions to the artifact pool, and the proliferation of tools to assist players in the creation and packaging/distribution of new game artifacts. The actual use of the posters in re-creations contrasts with the public nature of the trading and offering of the posters— while the meta-game is external (operating in the vast network of Sims modders, traders and toolmakers), the actual use of the posters is an internal (single-player) activity. Players may find a self-satisfaction in the ownership of items that speak to their beliefs, or become involved in the recounting/display of creative scenarios involving the items. The Tiny Signs site does solicit email accounts from players involving these items.



Figure 3: "Tiny Signs of Hope" (anti-war) posters in The Sims. Figure by author.

Mod makers in *The Sims* community experience a unique cultural space surrounding their authorship. *The Sims* largely appeals to a different target demographic than the multi-player shooter genre that is surrounded by much intensive player-production. There is perhaps less precedence for Sims mods (despite their proliferation in recent years), that would help build expectations of what a player artifact should be. As a result, the Sims community faces less of an internal challenge to their legitimacy. On the contrary, player-production surrounding *The Sims* tends to be extremely supportive of new developers and an extensive array of tools and community sites exist to encourage modifying the game. As such, "Tiny Signs of Hope" would not appear as "contentious" an artifact in terms of the play community—on the contrary, it fits right in with the type of expressive, creative elements that are common in player-authored Sims artifacts. Furthermore, in not framing the use of the tiny posters as an act of public protest, the initiative works towards the player created meta-game of collection and distribution that represents the focus of most Sims gameplay today. This meta-game may be very empowering for Sims authors, as it is almost exclusively player initiated and supported¹⁴.

CONCLUSION

There are several rhetorical visions that persist in player subcultures. These views are comprised of themes that envision the game as a canvas for creative expression (themes that dominate *The Sims* production), themes that are appropriated from art/activist rhetoric (as are prevalent in Velvet-Strike), and, although not dominant in these particular examples, themes that spiral around technical sophistication and status (themes that dominate the first person shooter mod community, although the game enhancement thread can be picked up in cross-game guilds and collectives as well). Even within distinct worldviews, an embedded vision emerges from these artifacts: a basic social reality that includes the player as a potential agent in authorship. This is a fundamental argument that validates these artifacts as independent from the primary games with which they are associated. By creating game artifacts, players are recognized as authors of new objects and contexts that are significant, expressive and instantiate their agency. In terms of rhetorical communication, this provides a solid basis on which to ground further argument (as political/conceptual artifacts such as Velvet-Strike and Tiny Signs illustrate) or on which to engage in personal expression. This was clearly demonstrated in the proliferation of player created artifacts post September 11th. Player-authors used existing games as a platform to express their own views and ideas in the changing cultural landscape-these games became a participatory media channel for the creation of independent, player-produced meaning. In a cultural environment in which many felt a loss of control, players were able to manifest agency in the creation of game artifacts, validated by the play community.

Digital games are emerging as a significant modern day cultural channel. The opportunity for games to act as media has just scratched the surface: their potential to act as an interactive, participatory medium carries with it tremendous potential for cultural exchange. That players can demonstrate agency through the authoring of game artifacts represents a shift in access to the means of cultural production, opening up the digital game as a means of expression. The rhetoric of the game community already demonstrates the player-author is a reality. What remains to be seen is the implications of this mode of authorship, on the evolution of the digital game and in the wider sphere of cultural exchange.

ADDITIONAL NOTES

This paper is based, in part, on a thesis accepted as part of the requirements for the Master of Applied Science degree in Interactive Arts, Simon Fraser

¹⁴ Although *The Sims* does maintain a relatively simple file structure that encourages the introduction of new game elements, the Sims mod community has frequently expressed disappointment in the lack of support for player content from Maxis. This is despite Will Wright's open support of this mod community [14].

University, in August 2003. This thesis is entitled: *Player as Author: Digital Games and Agency*.

REFERENCES

- 1. Aarseth, E.J. *Cybertext : Perspectives on Ergodic Literature.* Johns Hopkins University Press, Baltimore MD, 1997.
- 2. Au, W. J. *Triumph of the Mod.* April 16, 2002. Salon.com. Available at http://www.salon.com/tech/feature/2002/04/16/modding/. May 22, 2003.
- 3. Certeau, M. de. *The Practice of Everyday Life*. University of California Press, Berkeley CA, 1984.
- 4. Condon, B. *Worship, 2001: Online Game Performance.* 2001. Website. Available: http://www.tmpspace.com/worship_1. May 22, 2003.
- 5. De Koven, B. *The Well-Played Game : A Player's Philosophy.* 1st Anchor books ed. Anchor Press, Garden City N.Y., 1978.
- Dodson, S. "I'll Meet You There." February 27, 2003. *The Guardian*. Available: http://www.guardian.co.uk/Print/0,3858,4613727,00.html. July 17, 2003.
- 7. Herz, J. C. "Harnessing the Hive: How Computer Games Drive Network Innovation." *Release 1.0.* 20.9 (2002).
- 8. Huhtamo, E. "Game Patch, Son of Scratch?" 1999. *CRACKING THE MAZE: Game Plug-ins and Patches as Hacker Art.* Available: http://switch.sjsu.edu/CrackingtheMaze/erkki.html. April 30, 2003.
- 9. King, B. "Make Love, Not War Games." June 8. 2002. *Wired News*. Available: http://www.wired.com/news/games/0,2101,52894,00.html. May 22, 2003.
- 10. Kolbert, E. "Pimps and Dragons: How an Online World Survived a Social Breakdown." *The New Yorker* May 28, 2001.
- Kushner, D. "The Mod Squad." October 1, 2002. *Popular Science* (*Online*). Available: http://www.popsci.com/popsci/computers/article/0,12543,281377-1,00.html. May 22, 2003.
- LaFarge, A. Winside Out: An Introduction to the Convergence of Computers, Games, and Art. 2000. Essay. Beall Center, University of California, Irvine. Available: http://beallcenter.uci.edu/shift/essays/lafarge.html. May 22, 2003.
- 13. Pearce, C. "Emergent Authorship: The Next Interactive Revolution." *Computer & Graphics.* Winter (2002).
- 14. Poremba, C. *Player as Author: Digital Games and Agency*. Masters Thesis. Computing Arts and Design Sciences, Simon Fraser University, Burnaby, B.C. August 2003.
- 15. Salen, K., and Zimmerman, E. *Game + Design: Fundamentals of Meaningful Play.* Final Manuscript. 2003.
- Schleiner, A.. Cracking the Maze: Game Plug-Ins and Patches as Hacker Art. 1998. Curatorial Notes. Available: http://www.opensorcery.net/note.html. May 5, 2003.
- 17. Schleiner, A.. "Velvet-Strike Manifesto." Available: http://www.opensorcery.net/velvet-strike/about.html. August 31, 2003.

- Soler, P. "Anne-Marie Schleiner Interviewed by Pedro Soler for SonarOnline." SonarOnline, January 2003. Available: http://www.sonar.es/portal/eng/online.cfm?id_sonaronline=10. August 31, 2003.
- 19. Wadhams, N. "Computer Games Increasingly a Place for Protest, Social Activism." Associated Press, New York NY, 2003.

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