Ceremony of Innocence and the Subversion of Interface: A Case Study in Interactive Narrative

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Abstract

There is a potential inconsistency between the experience of story and the process of interaction. Many interactive narratives ask the interactor to switch between an immersive state of immediacy and a hypermediated awareness of process. This oscillation has the potential to disrupt the narrative experience.

The presentation examines the interactive CD-ROM *Ceremony of Innocence* (an adaptation of the *Griffin and Sabine* trilogy) with this disruption in mind. The presentation highlights the design decisions that are used to suture the potential disjuncture.

Two broad strategies are reviewed. The first is the saturation of narrativity throughout the entire work. Analogies are drawn to both expressionism and expressivity in cinema. Expressionist filmmakers used the exaggeration of film craft (such as lighting, set, costume) to portray and elicit emotion and mood. Filmmakers in general rely on a subtler and more hidden use of craft to enhance the medium's expressivity. The careful selection and combination of visual and auditory elements saturates the cinematic experience with a pervasive narrativity. In the same way *Ceremony of Innocence* uses graphics, layout, font choice, sound effects, and music to systematically reflect and amplify narrative concerns such as character, mood, and theme.

The other strategy employed in *Ceremony* is more specific to digital environments. The interface itself is subverted to reflect similar narrative concerns and to enhance the experience of story. In the process the graphic user interface is remediated, and narrativity is situated at the heart of the interactive experience.

The methodology that underlies the argument is a close reading of *Ceremony of Innocence* that combines quantitative data with subjective impressions.

Interaction and Suspension of Disbelief

In 1994 I organized a series of discussions with Vancouver filmmakers about the creative possibilities to be found in the emerging interactive form. My colleagues and I asked each filmmaker to play with current examples of story-based interactive CD-Roms (including *Myst, The Seventh Guest, Under a Killing Moon, Freak Show*). Afterward, we explored their reactions to these works. The filmmakers had many observations about creative possibilities for this interactive medium. However, most felt that there was a basic contradiction between a state of narrative immersion (the classic suspension of disbelief) and the process of interaction.

¹ Jim Bizzocchi, Justine Bizzocchi, *Birth of a Notion*, in WRITE conference proceedings. (University of British Coumbia, 1994)

It is eight years later, and interactive narrative has progressed a long way from those earlier experiences. However, the relationship between interaction and narrative immersion is still problematic, and not just for those in the traditional media. The video game industry has made the incorporation of narrative sensibilities a high priority, yet thoughtful members of the gaming community lament that we have yet to find a video game that can make us cry.²

If we accept that the exercise of overt interaction has the capacity to disrupt some types of narrative experience, what are the implications? In particular, what are the implications for the creators of interactive narrative? Can we identify some strategies for interactive narrative design that help to suture any potential disjunctures?

The interactive CD-Rom *Ceremony of Innocence*. Contains a rich field of design clues to guide the fusion of narrative with and within an interactive environment. The work is an adaptation of a print trilogy: *Griffin and Sabine*. The original trilogy is a unique and multimediated literary experience combining post cards, letters you pull out of envelopes, the intensive use of graphics, and calligraphy. The work looks and feels like a set of "pop-up" books for adults. The story of the protagonists' love affair unfolds - both figuratively and literally - in the fifty-eight post cards and letters collected in the trilogy. The story traces the efforts of the two artist-protagonists to find and engage each other across barriers of space and time. The narrative explores issues of love, death, identity, and sanity in a context of mystery, confusion, mis-direction, and struggle.

Reviewers (including this one) find the experience of the CD-Rom adaptation engaging. The engagement is due in part to the legacy from the print works: the love story, the ebb and flow of the protagonists' encounters, the lush use of graphics. All of these are taken directly from the books. Some credit is also due to the intrinsic interest of the puzzles themselves - they are varied and witty, and each solution is rewarded with a miniature animated set-piece followed by the reading of the next lexia. However, this paper concentrates on a specific view of the CD-Rom experience. How has the design of the work, including the interactive design, bridged any potential disjuncture between the interactive process and the enjoyment of story?

http://www.salon.com/21st/reviews/1998/11/13review.html, November 13, 1998)

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² "Computer and Video Games Come of Age", http://web.mit.edu/cms/games/storytelling.html MIT Games Conference (Cambridge, February 2000)

³ Alex Mayhew (Creative Designer) and Gerry Villon (Producer); *Ceremony of Innocence*; CD-Rom; (Wiltshire, UK; RealWorld Multimedia, 1997)

A Nick Bantock; *Griffin and Sabine* (San Francisco: Chronicle Books, 1991), *Sabine's Notebook* (San Francisco: Chronicle Books, 1992), and *The Golden Mean*. (San Francisco: Chronicle Books, 1993)

⁵ This is not Bantock's first foray into this doubly mixed medium of adult pop-up. He worked on *Jabberwocky*, a graphic and physically interactive retelling of Lewis Carroll's poem (1991, Viking Books). It presages his collaboration with Real World multimedia on *Ceremony of Innocence*.

⁶ Daniel Canty; "The In Between Book of In Between Desire", (http://www.horizonzero.ca, to be published August 2002). J.C. Herz "Bringing Extra Passion to a Fine Romance". (*New York Times*. http://www.nytimes.com/library/tech/98/08/circuits/game-theory/20game.html, August 20, 1998). Scott Rosenberg, "Griffin and Sabine's Letters Go Digital", (*Salon*.

Design Strategy: Narrative Texture

In broad terms, my readings of *Ceremony of Innocence* revealed two strategies that mitigate against a disconnection of narrative experience in the interactive environment. The first is an infusion of narrativity throughout the work. There are analogies to classic expressionist cinema, and to a more widespread expressive cinema. The classic expressionist filmmakers exaggerated craft in order to portray emotion. In the words of Thompson and Bordwell: "Expressionism... reacted against realism and turned toward extreme distortion to express an inner emotional reality rather than surface appearances". The expressionists were noted for their use of set, lighting, costume, makeup, and props. The later filmmakers that worked in the expressionist tradition added music and sound effects to the list. All of these craft variables were used by the expressionists to show and to elicit emotion.

This use of film craft to express emotion is a narrative function. These tools are used to support the emotional context within which the narrative plays out, and as such they resonate with character, theme, and story. This use of craft can be aesthetically ubiquitous. The heart of the narrative is embedded in cinema's core creative concerns: editing, directing, scripting, acting, shooting. However, any opportunity to use film's component crafts will be utilized. Narrative sensibility is distributed throughout an expressionist work.

Most filmmakers use a similar tactic, although it is applied with some restraint within a more moderated expressivity. The expressive infusion of narrative throughout a film's craft begins with the same recognition of cinema's multi-modal capability. Film contains many component crafts, and all can be used expressively, that is to build the aesthetic goals of the entire work. For narrative works, this means systematically modifying craft decisions to resonate with emotion, character and story themes. Unlike the expressionists, not all filmmakers exaggerate craft in order to reflect these narrative concerns. However, most accomplished filmmakers use craft in order to do so. A Hollywood starlet in a romantic scene is filmed with soft lighting and a nylon over the lens. The look enhances the mood, defines character and builds the story experience. The same production logic will lead a documentary videographer to shoot a university professor with her bookshelf in the background. This craft decision also enhances mood, defines character and builds the story experience. Music is perhaps the most powerful single example. Whatever other purpose it plays in the film, music directly affects the emotional flavor of a scene. Music signifies and supports both character and ambience.

This process describes the development of a narrative texture – a broad infusion of story throughout the cinematic experience. Emotion, character and story themes can be

⁸ Kristin Thompson and David Bordwell; 111. "In expressionist films the expressivity associated with the human figure extends into every aspect of the mise-en-scene. During the 1920's descriptions of expressionist films often referred to the sets as 'acting' or as blending in with the actors' movements."

⁷ Kristin Thompson and David Bordwell; *Film History: an Introduction*, (New York: McGraw-Hill, Inc. 1994) 109

reflected in all of the subsidiary modalities of cinematic craft, distributing narrative across the entire work

The creators of *Ceremony* build a diffused narrative texture in exactly the same way. They draw upon all the components of interactive multimedia both to build the story directly, and to broadly reflect critical narrative sensibilities. The plot is built through the performances and the lexia. Narrative elements are echoed and supported in the font choice, graphics, music, sound effects, animations and the short movies. These component media act as parallel channels for the infusion and reinforcement of narrative concerns.

Character, for example, is amplified through the subsidiary visual craft of the game. The graphics and textual forms (font and calligraphy) reflect the protagonists' personalities, concerns and emotions. These visual modalities are derived from the books, but are remediated in the context of the game. The graphics become animated, as do parts of the text. New moving pictures are added, as are sound effects and music. All of these support and extend character development. Most significantly, the qualities of the performances themselves magnify the effect of the written words. Isabella Rossellini's seductive warmth, Paul McGann's vulnerability and petulance, Ben Kingsley's oily Frolatti and dark Yeats add impact to the formal text.

Iconic transformation of the cursor

One of the most significant visual variables in *Ceremony* is the treatment of the cursor. The cursor is a powerful nexus. As the representation of the user in the game world, it is the vehicle for her volition and agency. This goes beyond the world of gaming - it is a fundamental tenet of the basic graphic user interface. The cursor's look is transformed relatively frequently in *Ceremony*: sixteen cards/letters out of a total of fifty-eight.

This is a powerful location for visual decision-making. The user's attention is focused on the cursor, and therefore on whatever visual form the creators decide to give it. In a narrative work this is an opportunity to support character, mood, and story.

In Sabine's Lizard card¹⁰, the cursor is a butterfly who catalyzes change and flight in the lizard. In one of Griffin's cards¹¹, the cursor is Pierrot, a comic little figure who strives and then self-destructs. These graphic transformations are visually interesting, but more significantly, they also comment on the narrative. For example, the butterfly can be seen as a representation of Sabine, goading her partner to flee. Pierrot's journey and destruction presage Griffin's own fate. These connections represent an expressive use of

11 Ceremony of Innocence; Falcon, Puzzle #18

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⁹ "...by directly manipulating objects and data visually [GUI] users are given a sense of direct engagement and of control, both of which facilitate understanding of the nature of tasks." Geoff Leach, Ghassan Al-Qaimari, Mark Grieve, Noel Jinks, Cameron McKay, *Elements of a Three-dimensional Graphical User Interface*, http://goanna.cs.rmit.edu.au/~gl/research/HCC/interact97.html

¹⁰ Ceremony of Innocence; Falcon, Puzzle #3

the cursor's graphic quality. As such they are analogous to the use of the magnifying glass cursor to enlarge selections of text, or the paint-can cursor to pour color into closed shapes. The cursor's look communicates meaning to the user. *Ceremony's* iconic choices for the look of the cursor are extensions of standard cursor visual functionality (identification of task) into a narrative context (identification with character).

There are definite trends in these visual choices. Griffin's cursor iconography tends to be relatively prosaic: mammals, things, people. Sabine's are less grounded, more otherworldly: birds, bugs, angels, familiars, a ghostly paintbrush. There is a connection with flying in both sets of cursor icons. Griffin has two cards with airplanes. Sabine's connection, however, is slightly stronger. She has two angels, a bird, a butterfly, and two icons that may fly (the stamp bug and the familiar). In addition, her ability to fly is either an organic ability or an other-worldly one. Griffin's two flight icons are mechanical devices - and one of them crashes! There is also a connection with death and sadness in seven of these transformed cursors (two dark angels, a burning man, a burning match, a plane crash, a bad fall, a trapped woman). Five of these seven cursors are on Griffin's cards.

These sixteen puzzles seem to represent an iconic differentiation of character between Griffin and Sabine. The visual transformations of Griffin's cursors project two sensibilities. The first is to the ordinary, the mechanical, the limited. The other connection is to sadness and death. Sabine's visuals speak of an ethereal quality, of flight, of an exotic attraction. She too is connected to death, but her connection is not sad, it is triumphant and beautiful. These graphic representations do not define the characterizations of the protagonists, but they do reflect and support them.

Design strategy: story, gameplay, and the role of the cursor

Not all the transformations of the cursor are <u>visual</u>. The remediation of cursor <u>function</u> is a recurring device in *Ceremony of Innocence*, and these remediations join interaction with narrative. In Wave¹² the tumbling cursor is problematic for the user. The puzzle opens with no visible reaction from mouse rolls or clicks. After a bit of thrashing around by the user, a wave washes over the card, tumbling the cursor to the bottom of the screen. The cursor then becomes responsive, and user agency is restored. It's a trick. The user behavior that seems to bring in the wave is completely superstitious. The wave (and the cursor control) is on timer. This experience is indirect and frustrating, but it is consistent with a general sense of frustration and difficulty associated with Griffin's puzzles. It also mirrors the immediate plot - this card follows Griffin's tale of helplessness, surrender, near drowning and fortuitous rescue by an outside agent.

Another tumbling cursor occurs in Griffin and the Sphinx¹³. This cursor tumble was initiated by the Queen's breath, and could be connected to feelings of Sabine's power over Griffin. In this puzzle there is also another cursor remediation - the swat. The

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¹² Ceremony of Innocence; Gryphon, Puzzle #17

¹³ Ceremony of Innocence; Gryphon, Puzzle #9

cursor gets swatted when it approaches the propeller. Like the tumble, the propeller spin and the swat is impelled by the Queen's breath. Other swats include the cursor flying away upon approaching a spinning apple ("Frankie and Johnny"¹⁴), or a spinning top ¹⁵, and an emphatic flick when the cursor clicks on a Samurai Cat's tail ¹⁶. The swats, like the tumbles, involve a loss of user control, and both serve as dramatic punctuations. The swat, however, is much more emphatic, for two reasons. First, the quality of the move is stronger. The swats are more violent than the relatively gentle tumbles. Second, and more central to the poetics of interaction, the swats always occur during the midst of gameplay. They are a direct reaction to user volition, and their effect is to deny that volition, at least temporarily. Once recovered the user is free to continue the quest. The user seeks salvation in the puzzle's trigger, but, like Griffin, is no longer confident in the normality of the world and its interface.

More troubling for the user is the mis-mapped cursor. In a few of the puzzles, the normal directional conventions of the mouse roll are perverted. In Dark Angel¹⁷ the cursor-angel moves laterally with the mouse roll as we would expect. However an up roll pivots the cursor-angel to face right, and a left roll pivots it to face left. Since the navigation is so limited and straightforward in this puzzle, the effect of this variation from convention is relatively mild. However, the Cemetery¹⁸ puzzle shows that, when distorted sufficiently, a similar remediation can be devastating to the user, replicating the struggles of the protagonists to understand, navigate, and master their worlds.

Cursor function and narrative implications

These puzzles transform the operational characteristics of the cursor, and an analysis of the craft decisions informs the fundamental issue for this paper: the relationship between interactivity and narrative. The cursor is central to the experience of the interface. If narrative is situated at this point, it has penetrated to the heart of the interactive process.

The cursor is not an invariant entity. In ordinary usage the cursor often transforms. Depending on the software and the desired function of the moment, the cursor's manifestations include arrow, I-bar, magnifying glass, paintbrush, and a host of others. The key here is user choice. At any given point, she changes the form of the cursor in accordance with her selection of operational modes. The cursor's functionality - its position, motion, and effect - is under the control of the user. She decides where the cursor goes, and what the cursor does. This is a (perhaps the) fundamental operating tenet of the dominant interface paradigm of personal computing: the XeroxPark/Macintosh/Windows desktop. The user assumes a direct and perfect connection between moving the hand (the mouse) and seeing the cursor move on the

¹⁴ Ceremony of Innocence; Falcon; Puzzle #14

¹⁵ Ceremony of Innocence; Sphynx; Puzzle #7

¹⁶ Ceremony of Innocence; Gryphon; Puzzle #12

¹⁷ Ceremony of Innocence; Sphynx; Puzzle #1 ¹⁸ Ceremony of Innocence; Gryphon; Puzzle #18

¹⁹ Preece, Rogers, Sharp, Benyon, Holland, Carey; *Human-Computer Interaction*; (Addison-Wesley; Harlow, England; 1994) 17-18

screen. The mapping and its conventions must be learned, but they are very consistent. Constant repetitions have moved this learned behavior from the conscious to the autonomic. We no longer think about the relationship between moving our hand/mouse to the right and seeing the cursor move with it - replicating the hand/mouse move on a perfectly responsive electronic tether. This relationship has been constantly reinforced.²⁰ We are so accustomed to this correlation that it is perfectly transparent - we don't think about it, we don't question it, we don't even notice it.

In Murray's terminology, our agency²¹ in this regard is complete and absolute. The hand moves the mouse, and the cursor automatically follows. We are unaware of any intervening mediation. In Bolter and Grusin's scheme we experience a complete immediacy²². (Unless of course, the mouse ball is dirty, in which case we are maddened by the loss of agency and control that a "sticky" mouse entails. At this point we are uncomfortably aware of the hypermediated²³ and flawed relationship of the hand, the mouse, and an errant cursor.)

Transformed cursor functionality in Ceremony of Innocence

This "normal" interactive world is distorted in parts of *Ceremony of Innocence*. The transparent hand-mouse-cursor relationship is manipulated and perverted in various ways. In the section above a number of functional cursor manipulations are described: the tumbling cursor, the swat, the mis-mapped cursor, and the missing cursor. This transformation of cursor functionality is a gaming device that can also be used for narrative effect.

It is interesting to return the subset of the sixteen iconically transformed cursors. Presumably any functional transformation associated with these cards was associated with at least some consideration of the cursor's expressive potential (since the decision was made, presumably thoughfully, to modify the appearance of the cursor).

A review of the set of sixteen iconically transformed cursors reveals an extensive use of functional transformation as well. Further analysis seems to indicate a narrative impact associated with these functional transformations.

²⁰ The reinforcement is not only constant, it is immediate. The latency between the response (moving the mouse) and the reinforcement (seeing the cursor move) is functionally zero. This constant and immediate reinforcement is a very powerful conditioning tool. The functional relationship between hand, mouse, cursor and eye is operantly reinforced each time we use the GUI.

²¹ Janet H. Murray; *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. (New York: The Free Press, 1997)

²² Jay David Bolter and Richard Grusin; *Remediation: Understanding New Media*. (Cambridge: MIT Press, 1999)

²³ Jay David Bolter and Richard Grusin; *Remediation: Understanding New Media*. (Cambridge: MIT Press, 1999)

Four of the sixteen have cursor-figures that are completely free to range the screen. A review of the remaining twelve puzzles reveals the following types of compromised cursor freedom:

- one begins with the cursor restricted, but then becomes relatively free in the course of the game play
- two have the cursor starting free, but then becoming captured and restricted in its movement
- six have a cursor with some degree of spatial freedom, but also subject to a partial restriction (often confined to strictly lateral movement)
- three have their cursors severely restricted spatially able to move an object within tight limits, but unable to move out of their confined position.

A closer look implies a relationship between these functional transformations of the cursor and a narrative concern – the characters of the protagonists. Sabine has 7 of these sixteen cards, Griffin has nine.

The four free cursors are all found on Sabine's cards. None of Griffin's cards has a completely free cursor. The remaining twelve cards have some degree of restriction in the cursor action. Nine of these are Griffin's and only three are Sabine's.²⁴

This is a consistent pattern. Freedom of action tends to be associated with Sabine's cards. Griffin's cards have significantly more restrictions on cursor movement.²⁵ This has implications on two levels. First, there seems to be a counterpoint to actual motion in the plot. Griffin travels far more than Sabine. However, the thematic connection between a restricted cursor and Griffin's character is intuitively sound. Griffin is a much more constrained and tight personality than Sabine. She seems freer, more in touch with her feelings, readier to follow them. Griffin's character struggles with these issues throughout the story. It is hard for him to allow his feelings to range free.

The most significant implication is the effect of Griffin's restricted cursors on user experience. We expect the transparent agency and immediacy of a free cursor. Denial of this expectation is surprising, tricky, and unpleasant. A level of difficulty is consistent with a puzzle game, of course, but this particular difficulty will tend to make Griffin's puzzles more frustrating. We feel trapped –sometimes obviously, sometimes subtlely but trapped in any case. This direct experience mirrors Griffin himself. We associate his cards with visceral feelings of restriction and limitation.

These effects seem to be the results of purposeful aesthetic choices. If this is true, the creators have consciously manipulated the core craft of the interactive experience: the

²⁵ This correlation (between the restricted cursors on Griffin's cards, and the relatively freer cursors on Sabine's cards) holds true for the rest of the CD-ROM, although the relationship is not as strong as it is within our set of sixteen iconically transformed cursor puzzles.

²⁴ The mixed cursors are found on two of Griffin's cards and only one of Sabine's. The cursors with modified freedom to move are found on five of Griffin's cards, and only one of Sabine's. The cursors with severely restricted movement are found on two of Griffin's cards and only one of Sabine's.

²⁵ This correlation (between the restricted cursors on Griffin's cards, and the relatively freer cursors on

design of the interface itself. Even if the design choices were intuitive rather than purposeful, they have nonetheless enhanced the puzzle play of the CD-ROM. More significantly for our analysis, the manipulations also have direct narrative outcomes: the further explication of character and the reinforcement of protagonist perspective.

Conscious or intuitive, these interface decisions begin to define a poetics of interactive narrative. Diegesis and mimesis are augmented with a third narrative mode: that of praxis. Story is developed not just in the telling, or the showing, but also in the doing.