Wandering Monsters!
on the problem of coherent hypertext narrative

Mark Bernstein
Eastgate Systems, Inc
134 Main Street
Watertown MA 02472 USA
+1 617 924 9044
Bernstein@eastgate.com

ABSTRACT
In recent years, hypertext researchers have worked hard to find ways to ensure coherence and continuity in hypertext narrative. The difficulty may have been exaggerated.

Categories and Subject Descriptors
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1. INTRODUCTION
A great deal of recent work in hypertext narrative has been motivated by the problem of finding, restoring, or preserving coherence in hypertext narrative. In motivating their Fluid reading project, Zellweger and Mangen [33] speculated that

> *An intriguing issue is whether, why, and to what extent, hypertext writing tools (or even hypertext itself) are incompatible with the telling of typically immersive narratives, as for instance, detective or mystery stories.*

Hargood, Millard, and Weal have studied thematic illustration as a route to maintain and enhance the cohesion of hypertext narrative [14]. Szilas [31] and Cavazza [19] have each explored interactive dramatic worlds in which coherence in the face of interaction is prominent concern. At Hypertext 2011, Chilukuri and Indurkhya [7] explore just how much non-linearity readers will tolerate. In the popular press, Nicholas Carr [6] revives the tendentious studies of Miall [24] to claim that hypertext is inherently incompatible with serious thought.

Is coherence actually difficult?

2. TERMINOLOGY
To begin, let me touch on familiar concepts to establish some terminological conventions.

A *narrative* is an account of some events that unfolded in time. The *story* is what notionally happened, the *plot* selects some of the things that happened and arranges them, and the *presentation* describes the words, sounds, or images used to convey the plot[1].

Transitions among scenes or episode in a hypertext may be divided in four classes: recursus, timeshift, renewal, and annotation[16].

3. WHAT HAPPENS NEXT?
I argued in "On Hypertext Narrative" [1] that hypertextual variation of plot, rather than story, is likely to prove most fruitful and desirable. The arguments I made there seem compelling and I know of no attempt to refute them. Nonetheless, let us contemplate variation in story and its impact on narrative coherence.

In principle, story variation could lead to incoherence. This is especially true in systems in which the reader takes the part of a protagonist[2]:

> *If the reader's point of view is a hero protagonist, for example, the reader is led naturally to test the limits of the possible. That's what heroes do. The drama rapidly devolves into a negotiation between the reader and the world model; the reader asks to do the unexpected, the system typically responds with incomprehension. Ironic detachment makes things worse, not better; the reader-protagonist still wants to test the rules, and detachment invites the frigidity and sophomoric contempt that so often mar computer entertainments.*

At any given moment, many things could happen that resolve, collapse, or redirect the story. If we identify with Antigone and are asked to solve her problems, our Antigone might give up, or leave town, or arrange for enemy soldiers to bury her brother. She might get Creon drunk, or depose him, or hire ninja warriors to assassinate him. Creon might come to his senses. Antigone might disguise herself as a man, bury Polyneices, and arrange an alibi. She might suborn an oracle, summon a god to hide her or to defend her, or find a magic ring that conveys invisibility but has certain drawbacks. Ismene might knock her unconscious with a distaff in order to save her obdurate sister, or she might set fire to the palace to buy time, or she might impersonate the student of a foreign jurist to argue that Creon's interpretation of the law is wrong. The Persian cavalry might appear over the next hill.

Some of these events are improbable, but they need not be incoherent or even difficult for readers to follow. The reader, moreover, will gladly invent intermediate details to explain

transitions. Some of these, to be sure, create faulty dramas in the terms of Lowe's model of Western narrative [18], but a reader-protagonist might reasonably prefer to displease an audience (which does not exist in her frame anyway) to pain and death. Our problem here is not that we don't understand the story or that the story is insufficiently coherent; our problem is that the story that emerged is not as interesting as the story we envisioned.

The difficulty with varying story, rather than plot, is not incoherence but rather Borgesian excess; if we specify that our work must allow significant variation of story, it might soon need to be large enough to contain all stories [4]. The challenge presented by variation of story is not enforcing narrative coherence but rather finding credible narrative constraint.

4. THE WANDERING MONSTER

Might we constrain variation in story to allow meaningful variation without combinatoric explosion?

We might design our story [29] to accommodate changes in predictable ways. In one familiar and excellent class of stories, the hero is separated from the object of desire by a series of obstacles which the hero must overcome. This is the story of Odysseus and Parsifal and *Die Zauberflöte*, of course, but also of Jo March and Mattie Ross, of James T. Kirk and John Smiley. The realization that the Parsifal story remains coherent and entertaining without regard to the sequence or even the precise number and nature of the obstacles was the distinctive (and distinctively hypertextual) step in the development of the role-playing game [13]. Simple algorithms can easily add and modify the perils of these encounters as the story develops, leading to engaging narratives that seem to emerge almost spontaneously. Hypertextual adaptation can easily respond to user profile and to context, adjusting the nature and difficulty of the encounters whilst retaining their essential elements.

Here, again, coherence poses no challenge: a wandering monster might appear at any moment, and that is the point of the quest.

5. NARRATIVIST GAMES

Though early role-playing games offered the promise of collaboratively-generated stories, the ambiguous role of the "game master" led a number of writers to explore game-like systems that generate complex role-playing narratives while reducing or eliminating the role of the master arbiter. In *Stalin's Story,* for example, the dungeon-master is injected into the story in the role of Josef Stalin, an angry arbitrary, and capricious audience and judge of the stories the players (and the algorithm) create [12]. In *Doom and Cookies,* Andrew Peregrine [28] removes the game-master's authority over plot and setting, instead rewarding players for complicating their own story. Jason Morningstar's *Fiasco* [26] eliminates the game master entirely.

The danger of incoherence might be even greater in collaborative storytelling, especially in the context of a game in which each participant might reasonably consider themselves the protagonist. Each of these systems constrains the actor's freedom of action in interesting ways while problematizing the very notion of success. Conspicuous success in pleasing Stalin, for example, is highly undesirable, for every minister and courtier will scheme to purge the new favorite. In *Fiasco,* consistent and spectacular failure is just as desirable as splendid success, while mediocrity leads to misery and despair.

Most notably, complex and coherent narratives emerge in these games from algorithmically-selected fragments and cues. Morningstar, for example, generates complex narrative tension by positing a network of relationships amongst the players and then adding a few inhomogeneous desires, locations, or objects selected from random lists. These lists themselves have a certain lyrical charm (Table 1).

Table 1: Situation table B2 (Toward Love and Enthusiasm) from *Gray Ranks* [25], a role-playing game about teenagers caught in the 1944 Warsaw uprising.

Edmund Telakowski, dashing partisan and liar.
A resourceful grandparent with a gift.
My parents are ashamed.
A notebook crammed with observations of German military movements out of Praga station over four years.
A best friend steps in.
Why can't we talk to each other?
The Bank of Poland in City Center, on family business.
The Marie Curie Cancer Institute in Ochota.
Rags, empty wine bottles, and ten liters of gasoline.
Lacy undergarments.

The serpent that opens *Die Zauberflöte* might instead be a lion or three witches or any wandering monster, but these "situations" the characters in Table 2 hardly appear equivalent or interchangeable. Nonetheless, one of these is randomly selected as a narrative cue for a scene for a character whose past inclines them equally toward falling in love with another character or immersing themselves in the cause.

Montage [9] and cinematic closure [22] lead readers to connect disparate elements in coherent and causal patterns; these can indeed be disrupted by ambiguity or contradiction [8], but to do so conclusively is surprisingly difficult. Juxtaposing arbitrary elements – a wasteland, a boy, a man, and a sandwich – might not seem a likely route to compelling realist fiction. Yet this leads directly to Pip and Magwitch in *Great Expectations,* to Frodo and Gollum in the Dead Marshes, to Harry Potter and Albertus Dumbledore to Satan and Uriel in *Paradise Lost,* and to multitudes of loaves and fishes [30].

6. TELL ME AGAIN

The identification of the reader with the protagonist threatens to explode the story into Borges's library. Classic hypertexts avoid the problem by avoiding variation of story. Parsifal stories retain narrative coherence by breaking the narrative into isolated encounters. Narrativist games attain coherence through cinematic closure. But we can also circumvent the reader's desire to win, and thus avoid the catastrophic focus on the boundaries of the storyworld, by making the outcome evident before the struggle has begun.

In *Gray Ranks,* conventional victory is inconceivable. We know that the Warsaw uprising is doomed, and perhaps the characters know this, too. They do what they can and they do what they must. But so must Hamlet and Rufus T. Firefly.

Seeing a character in a dramatic situation, the audience wants to know what happens next [20]. Our eagerness to see the outcome is not eliminated because we already know it. Children relish hearing the same stories, time and again, but this is not merely a sign of immaturity. Many people see performances of plays they have seen or read before, and a performance of *Don Giovanni* is not less exciting because we know how it ends. It seems likely that everyone in the audience on the night of the premier knew how it would end.

People who enjoy reading almost invariably also enjoy rereading. Though Pauline Kael famously claimed never to have seen a film twice, it is difficult to imagine a literary critic working without rereading. In hypertext fiction, moreover, rereading is not merely a recreational indulgence or a scholarly duty. Because only through rereading can we perceive a hypertext's structure or understand how our choices matter, hypertext reading compels rereading[1; 16].

Historical fiction deserves much closer attention than it has previously received in the hypertext community. Late Modernism deplored historical fiction as an escapist evasion, but historical fiction is increasingly seen as integral to contemporary literature [5] or, perhaps, as the medium of our era [10]. A central attraction of historical fiction is the constraint our knowledge imposes on story; in *Wolf Hall,* we know that Thomas Cromwell is headed to Wolf Hall even though he only decides to go there on the last page of the novel. We also know where he will end up, even though that *dénouement* remains in his (and our) future [21]. We know that Ensign Keith survives the Caine Mutiny [32]; he is telling the story. We know within a few pages that *Jack Maggs* reimagines *Great Expectations* and that *On Beauty* responds to *Howard's End*, and so we can anticipate a great deal of what is to happen.

Writers frequently reveal the outcome of the events they are about to describe, not because they are inept, but to focus attention on how people acted and felt rather than on how things turned out.

Reading a hypertext necessarily demands intervals of deliberation and decision; if the readers does not sometimes pause to choose one link and not another, the work is not a hypertext. The gap between the link's source and destination is a potent source of meaning, but often poses tricky questions of craft and composition. These demands are congruent to the familiar requirements of much historical fiction which frequently (though not always) moves over a broad canvas of place and time. The problems of arrival and departure do not belong to hypertext alone, and its solutions – documentary, epistolary, or artifactual texts, framing stories, rhetorical transitions – find many precedents in historical narrative.

7. WHERE WE WENT WRONG

We are frequently assured that the natural tendency of hypertext fiction is to be confusing, fragmented, distracted, and difficult. I see no reason to believe this claim, and abundant reason – in games, in cinema, in popular contemporary fiction, and in our own experience of writing – to doubt it.

What critics and researchers mean, in practice, is that they have found specific hypertexts – *afternoon* and *Victory Garden* and *Patchwork Girl, 253* and *From Lexia to Perplexia* – confusing, fragmented, distracting, and difficult.

This generalization ignores the context of composition and, most significantly, the economic circumstances of their creators in the emerging new media economy [3]. Early hypertext was often tied to the laboratory, and contemporary writing is pervasively connected to the academy [23]. Naturally, the kinds of writing to which early writers were drawn, and for which they were rewarded, was frequently the sort of writing that was praised by their peers, that received awards, that earned their writers fellowships and professorships.

Table 2. Selected literary awards 1987-1992

	Nobel	PEN/Faulkner	Booker
1987	Joseph Brodsky	Richard Wiley	Penelope Lively
1988	Naguib Mahfouz	T. Coraghessan Boyle	Peter Carey
1989	Camilo José Cela	James Salter	Kazuo Ishiguro
1990	Octavio Paz	E. L. Doctorow	A. S. Byatt
1991	Nadine Gordimer	John Edgar Wideman	Ben Okri
1992	Derek Walcott	Don DeLillo	Michael Ondaatje

In this period, the Cannes *Palme d'Or* was won by Maurice Pialat, Bille August (twice), Steven Soderbergh, David Lynch, and the Coen brothers. None of these films won (or was nominated for) an Academy Award for either best picture or best director. This was not, in short, an era where "typically immersive narratives, as for instance, detective or mystery stories" [33] were a reliable route to academic acclaim.

> *But Amy [Tan] was right: nobody ever asks about the language. They ask the DeLillos and the Updikes and the Styrons, but they don't ask popular novelists. Yes many of us proles also care about the language, in our humble way, and care passionately about the art and craft of telling stories on paper.* – Stephen King [17].

Conversely, though Joyce and Bolter [15] may not have demonstrated the role of hypertext narrative in enacting the perfluent dream [11] of Holodeck Hamlet [27], *Harry the Ape* – the story written to demonstrate fluid reading – may not have been the ideal vehicle for refutation.

We should be careful to distinguish as well between the supposed problems of coherence in hypertext fiction and the challenges presented in generative storytelling – in producing narratives from comprehensive but abstract representations of story worlds. The immediate aim of such research is not to create excellent, memorable, or compelling stories, but rather to evaluate and use the underlying representational models and, in so doing, develop new understanding of representation and language. Coherence was indeed a challenge here, especially in the 1980s when planning was poorly understood and natural language generation was entirely novel. But the point of the stories of Winograd and Schank is literally to probe the nature and role of story in thought, not to make us think.

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