# A Festival of Narrative Automata

Mark Bernstein Eastgate Systems, Inc. 134 Main Street Watertown MA 02472 +1.617.924.9044 Bernstein@eastgate.com

# ABSTRACT

Hypertext research has been deeply interested a narrative, and literary hypertext fiction has enjoyed a long and happy relationship to this conference. The literature of Critical Theory, on the other hand, is famously opaque, and our Balkanized technical literature on new media storytelling has grown provincial.

Daring yet accessible experiments in non-sequential interactive narrative have appeared in unexpected places – in theaters, in experimental novels, and especially in narrativist role-playing games. *Narrative automata* exhibit considerable sophistication in the frame of simple models of computation. Much of this work is a lot of fun while demonstrating remarkable theoretical depth. In contrast to the cheery hero journeys through depopulated landscapes that long dominated computer games, this work is notably dark, emotionally complex, and introspective.

# **CCS** Concepts

#### CCS Concepts

• Software and its engineering→Software creation and management→Designing Software • Applied Computing→ Computers in other domains.

#### Keywords

Narrative automata, hypertext, hypermedia, literature, fiction, education, design, implementation, support, history of computing, maps, links, games.

## 1. INTRODUCTION.

Starting in the early 20<sup>th</sup> century, a number of people have become interested in exploring how machinery can tell stories, either alone or in conjunction with one or many people. Some of these machines are computer programs, others are rules and procedures that people are to follow, more or less mechanically. I call all of these "narrative automata."

The great surprise of the first thirty years of hypertext research has been that writing hypertext is hard. The challenge of building hypertext reading environments was not difficult to overcome, and the resistance we expected to face from readers accustomed to the world of print failed to materialize (though see [1][2]). The economics of building a world-wide web, something that only recently seemed fantastic, turned out to be trivial.

Yet writing well with links has proven surprisingly hard. The link is the most important new textual element since the medieval invention of the comma, yet few Web writers use links in any but the most mundane and conventional way. Links can go

*Tutorial at Hypertext'17, Prague, Czech Republic, July 2017* Copyright held by the author(s). anywhere, but most of the time they carry us to the home page or to clickbait listicles.

Even in our unfrequented academic backwaters, we have few guides to light the linked path or to explain what writers have attempted and to demonstrate how they have succeeded or failed. Hypertext's friends and critics alike assume, for example, that hypertext is incapable of narrative coherence[3], though this is demonstrably untrue[4].

## 2. CRITICAL THEORY FOR FUN

A widespread assumption among software engineers holds that writing is a sort of information transfer protocol. Suppose I have an idea in mind; perhaps I have discovered a new algorithm, and I want you to know about it. You are not here, so I write it down on the page, encoding it, and I mail you the text. You read the text, decode it, and that reading recreates a mental state or representation that corresponds to what I wanted to explain.

Every year, I read student papers motivated by this model. It underpins much of our rhetoric and almost all of our evaluations. It is fundamentally wrong.[5]

Many rewarding and fruitful ideas developed by Critical and Literary Theory in the late 20th century [20] have found their way into an odd literary backwater situated on the fringes of literary publishing, commercial publishing, and the game industry. These works have received almost no attention beyond their immediate community, and indeed have seldom sought a wider audience. Most are published by very small presses, and their concerns often appear esoteric or even childish. Yet, in these works we find embodied the key results of Critical Theory of greatest interest to hypertext writers and to designers of hypertext systems and tools. These works are themselves hypertext narratives or, rather, hypertextual engines for generating narratives. Some of these are frivolous, some somber. Many are capable of surprising range and subtlety.

#### **3. THE DEATH OF THE AUTHOR**

As late as the early 20th century, people who thought about literature were confident that stories and plays meant something, and that meaning could be found in the text. History had meaning, too, and again close study of the evidence by a reasonable observer would reveal the right interpretation.

The Second World War shattered this belief in the inviolate text and the master narrative, and by 1968 it had become evident that master narratives chiefly served the master. Poststructuralism rejected the textual horizons of new criticism; meaning isn't found in the text alone, but equally in the way we interpret the text. To accept the author's *intention* would be invidious, in exactly the same way that to accept every interpretation of the village priest (or the local political commissar) would be antithetical to freedom. Even beloved writers, after all, were deeply complicit in the mythologies and economies of their time; Jane Austen's heroines live off revenues extracted by black slaves held in captivity on distant islands, and their mothers take care to lock both their family silver and their family secrets away from their Irish maids. Jane Austen didn't intend for us to read her text refracted through Marx and DuBois, but we cannot (and would not wish to) do otherwise. This is the "death of the author." Hypertext makes the reader's active role manifest: the reader chooses which links to follow and which to ignore [6][7].

Early automata often allowed for a supervisory "game master" who might be viewed as (at least) a partial author, but great attention has been paid to situations where the story can unfold without any designated authority[8]. For some stories, indeed, constructing such an authority would be obscene [9].

# 4. ARE YOU MY MOTHER? THE SOCIAL CONSTRUCTION OF CHARACTER

In the postmodern perspective, texts are everywhere. People are texts, too, and (like *War and Peace* and that long, lonesome highway) texts act on and change them. Identity is (in part) socially constituted. Conspicuously, the Other is a social construction; an outcast, a madwoman, a witch, a fugitive Negro slave: none of these identities are a free, personal choice, and none are imposed by nature or by God, but all are imprinted on the individual by the society that surrounds them. We write ourselves, but we also are written upon.

Narrative automata enact this social constitution of subject; "your" character's appearance, abilities, and actions are partly determined by you, and partly determined by the automaton. You roll 3d6 and learn you are strong.

#### 5. SERIOUS HYPEREXT

For this session, I have examined more than forty automata with care, and examined aspects of many others [10]. These range from manuals intended to help commercial writers improve their plots [11] to an "unsettling erotic [card] game for one" [12], represent countries across the world, and address topics that range from promoting cozy feelings in the family circle[13] to exploring a world where socialism actually is inevitable [14]. In contrast to the depopulated landscapes of so many computer games, automata interrogate characters that range from the minions of a nefarious and evil Master [15] to lesbian Soviet bomber pilots [16]. The stories these automata generate are varied, interesting, and frequently surprising. They cast interesting light on such long-standing questions as the moral standing of hypertext fiction, the place of pleasure in literary hypertext, and

#### 6. THE PATH AHEAD

The lessons we have learned in the first generation of narratology [17] and literary hypertext [18] can usefully inform future automata, and can already be seen in recently-published commercial hypertexts [19], social media stories [20], and current theatrical productions. Among the topics that narrative automata suggest for our own research are:

- Exposition and Intertextuality
- Stories of Long Duration
- Social Locative Hypertexts
- Intensity vs. Irony
- Seriousness vs. Solemnity
- Visualization and Debugging
- Making systems less fun for crazy people
- Nonfiction and Structure
- Polyvocal hyperdrama
- Writing an exciting hypertext

#### 7. ACKNOWLEDGEMENTS

Numerous experts gave generous advice during the preparation of these notes. I especially want to thank: Mark W. R. Anderson, Paul Czege, Charlie Hargood, E. P. James, Diane Greco Josefowicz, George P. Landow, Stacey Mason, David Millard, Jason Morningstar, Stuart Moulthrop, Souvik Mukherjee, Em Short, and Rosemary M. Simpson.

Morgan Macri helped review and prepare the manuscript.

Copies of selected games for the personal and instructional use of attendees at the 2017 ACM Conference on Hypertext and the Web were supplied by arrangement with Bully Pulpit Games (http://bullypulpitgames.com) and Half-Meme Press (http://www.halfmeme.com).

#### 8. REFERENCES

- [1] Birkerts, Sven. *The Gutenberg Elegies*. Boston: Faber and Faber, 1994
- [2] Carr, Nicholas G. *The Shallows : What the Internet is Doing to Our Brains*. New York: W. W. Norton, 2010.
- [3] Ryan, M.-L. *Avatars of story*. University of Minnesota Press. 2006.
- [4] Bernstein, Mark. *Getting Started With Hypertext Narrative*. Watertown, MA: Eastgate Systems, Inc, 2016.
- [5] Eagleton, Terry. After Theory. New York: Basic Books, 2003
- [6] Landow, George P. Hypertext : The Convergence of Contemporary Critical Theory and Technology. Baltimore: Johns Hopkins University Press, 1992.
- [7] Barthes, Roland. *S/Z.* Richard Miller, trans., New York: Hill and Wang, 1974.
- [8] Ben Lehman, *The Drifter's Escape*, These Are Our Games, 2009
- [9] Jason Morningstar, The grey ranks (Bully Pulpit Press, 2007)
- [10] Mark Bernstein, *A Festival of Narrative Automata*, Watertown: Eastgate Systems, Inc. *in press*.
- [11]William Wallace Cook, *Plotto*, Battle Creek, Michigan: Ellis Publishing Company, 1928
- [12] Aleksandra Sontowska and Kamil Węgrzynowicz, *The Beast,* Naked Female Giant, n.d. (2016)
- [13] Atsuhiro Okada, Ryuutama, Andy Kitkowski and Matt Sanchez, trans., Kotodama Heavy Industries, 2016
- [14] Steve Wallace, *No Country For Old Kobolds*, Steve Wallace, nd (2015)
- [15] Paul Czege, My Life With Master, Half-Meme Press, 2003.
- [16] Jason Morningstar, Night Witches, Bully Pulpit Games, 2014.
- [17] Genette, Gerard. Narrative Discourse: An Essay in Method. Trans. Jane E. Lewis. Ithaca, NY: Cornell University Press, 1983.
- [18] Bernstein, Mark. "Criticism." Proceedings of the 21st ACM conference on Hypertext and hypermedia. Toronto, Ontario, Canada New York, NY, USA: ACM, 2010. 235-44.
- [19] Pears, Iain. Arcadia. New York: Alfred A. Knopf, 2016.
- [20] Egan, Jennifer. "Black Box." The New Yorker (2012)
- [21] Culler, Jonathan D. Literary Theory : A Very Short Introduction. 2nd ed.; New York: Oxford University Press, 2011.