Where Are The Hypertexts?
asking again

Mark Bernstein
Eastgate Systems, Inc.
EVERYTHING IS INTERTWINGLED

Theodor Holm Nelson
Is hypertext....

UNNATURAL?
Malden, Massachusetts, USA

H. H. Richardson
Malden Public Library
CHICAGO, ILLINOIS, USA
ART NOUVEAU

Honest materials
Organic forms
Curves (resisting the line)
Form follows function
Gender-aware
domestic space (women as patrons)
Furnishing the salon

HYPERTEXT

Literary machines
Links
Nonlinear reading
Form follows function
Gender-aware
see Wendy Morgans paper
Demolishing the Master’s House
Jugend was an influential and stylish magazine — The WIRED of its era.
DARMSTADT

A center of Jugendstihl

Jugendstihl was the the German movement corresponding to the French Art Nouveau
“This is the eleventh hour of the human race, and there is a deadly urgency about everything we do”

— TED NELSON, LITERARY MACHINES, 1981
“Where Are The Hypertexts?”

I first asked this about ten years ago. After **TWO** hypertext conferences, why weren’t hypertexts everywhere?

Was this youthful impatience? Or a sign that something was wrong?
“Where Are The Hypertexts?”

HERE!

PAPERS
PANELS
WORKSHOPS
READINGS
DEMOS
POSTERS

THE HT CONFERENCE IS VERY OPEN, BUT EXTREMELY SELECTIVE.
Hypertext triumphant

- The Web is everywhere.
- Literary hypertext is flourishing.
- Hypertext is triumphant.
- But where are the hypertexts?
  - Many Web pages are barely hypertextual
  - Hypertext publishing often seems marginal or worse

We’ve come a long way....

...but why haven’t we come farther?
“Where Are The Hypertexts?”

TELL ME A STORY

... ABOUT HYPERTEXTS WITH CHARACTERS
... ABOUT THE BUSINESS OF ART
   AND THE ART OF BUSINESS
... ABOUT THE FAILURE OF THE TWO CULTURES

Narratives abound

The stories and characters described here are imaginary. Any resemblance to actual persons, living or dead, or to actual events, is purely coincidental.
Dramatis Personae

Chieko
Brand-new degree., brand-new job (yes!) in QA & Usability at a growing Internet company
Avid reader
Personal Web memoir gets ~10K readers per month
DRAMATIS PERSONAE

Steven Johnson,
Interface Culture

Esther Dyson,
Release 2.0

Gamma et al.,
Design Patterns
Prof. Morris Weiss (emeritus)

A student of history
Hasn’t been back to Germany since WW2
Loves books
Mistrusts the Disneyfication of publishing
Still finds ballpoint pens unsettling
(but loves Web surfing)
DRAMATIS PERSONAE

Anthony Grafton
The Footnote:
A curious history

Bolter and Grusin
Remediation
DRAMATIS PERSONAE

Ted

A student of engineering (and life)
Loves computers, writing, books
A visionary, a dreamer
Never satisfied with her work

If she’s not filming, she’s taking notes...
DRAMATIS PERSONAE

Hypertext '98 Proceedings

Deena Larsen

Samplers

Stephanie Strickland

True North
Dramatis Personae

Jan
A student of film
Loves movies, MUDs, games, VR
Searching for media that transcend text
Looking beyond the end of books
DRAMATIS PERSONAE

Scott McCloud
Understanding Comics

Espen Aarseth
Cybertext

Akira Kurosawa
Rashomon

Sam Taylor
Fallout
“Where Are The Hypertexts?”

YOU SAY YOU WANT A REVOLUTION?

We all want to change the world.

Five silly objections to hypertext.
“You say you want a revolution?

Essentially all professional writers now write on screens. We all spend our days in front of screens. They’re good enough.

Getting better, too. (HT98: Price, Xlibris; also Zellweger’s Fluid Links)
“You say you want a revolution? BUT I LOVE BOOKS!

Morris Weiss, age 8
Warsaw

Sven Birkerts, The Gutenberg Elegies
“You say you want a revolution?

BUT I LOVE BOOKS!

Of course.

We all do.

Don’t confuse the spirit with the body, or the soul with the machine.

Sven Birkerts,
The Gutenberg Elegies
“You say you want a revolution?

But I love books!

Does hypertext, like TV, corrupt us?

Arguments about the MTV generation amount to little more than that resenting youth for their nice bodies.

Sven Birkerts, The Gutenberg Elegies
“Parental fears of what children might see on the Internet are very peculiar, considering what children can see on the walls in public restrooms.”

—THEDOR HOLM NELSON
“You say you want a revolution? you CAN’T READ them IN THE BATHTUB

The Bolter Test
"You say you want a revolution?

WHAT? YOU HAVE TO PAY?

The tools are cheap. And getting cheaper.

A good book has ALWAYS cost as much as a good dinner. We’re still subject to the ills of capitalism.

FOR SCHOLARS TO BLAME ARTISTS FOR THESE ILLS IS EITHER DISINGENUOUS OR DISHONEST.
“You say you want a revolution?
It Won’t Last
NEITHER WILL YOU.

-Hypertexts won’t be lost because formats go obsolete or media decays.
-Hypertexts (and texts) are lost when nobody reads them.

Books, like Tinkerbell, survive as long as their audience cares.

See Kendall, SIGWeb Bulletin 99
“You say you want a revolution?

WHY do people fall for the silly reasons?

It’s always easier to assume it can’t work than to do the work.

People really believe that Art and Science are incompatible.
PEOPLE REALLY BELIEVE THAT ART AND SCIENCE ARE INCOMPATIBLE.

MYTHS OF ART & SCIENCE
PEOPLE REALLY BELIEVE THAT ART AND SCIENCE ARE INCOMPATIBLE.

MYTHS OF ART & SCIENCE

Hypertext research has been exceptionally open to contributions from both sides of the great cultural divide.

But we still think the camps are separate.

(Legget HT98)
Many people suppose that writing is either “artistic” or “practical.” They assume that all good technical writing is concise, brief, and sincere. They equate “rhetoric” with affectation.
Expression is easy

Which is easiest to explain?

- NP-Completeness
- Saving Kirtland’s Warbler
- Reading Dante’s Italian
- Reading your lover’s body
- Mortality

“For whom are you judging that things will be easy, or natural, or friendly?”

— DOUGLAS ENGELBART, 1984
Narrative is for kids
How do we explain algorithms?

They’re stories!
The hypertextuality of scholarship

“Historical texts are not simply narratives like any other; they result from the forms of research and critical arguments the footnotes record.”

—Grafton, The Footnote
Doing the work

Science sometimes forgets Art.

But Art seems often to expect Science to use the servants’ entrance.
Doing the work

We may be working on the easy part of the problem.

ACCESS IS NOT ENOUGH

Where will we ever find time to read it all?
Better than books?

Literature is wonderful.

We have to do better.

To believe otherwise condemns us all to misery, inequity, hunger, and oblivion.
The book world is ALWAYS in trouble.
This is different.

It ALWAYS is.
Publishers have been swallowed by competitors, broadcasters, and movie studios.
Barnes & Noble is buying the largest book wholesaler.

You mean that amazon.com is going to have to buy its books from Barnes & Noble?

Yep.

Borders, too.

And your local store, if it's still in business.
Well, there’s still my college bookstore.

It’s probably run by Barnes & Noble, too.

Or maybe another chain.
OK.

But, face it, publishing is a business.

A weird one, though. For example, bookstores operate on consignment—like used clothes shops.
Now that we have the Web, who needs publishers anyway?
Now that we have the Web, who needs publishers anyway?

MULTIVALENCE IS NOT A VICE
Now that we have the Web, who needs publishers anyway?

Well, Bernstein isn’t exactly disinterested, you know.
Now that we have the Web, who needs publishers anyway?

But it’s not just production... publishers and booksellers match books and readers.
Now that we have the Web, who needs publishers anyway?

But it’s not just production… publishers and booksellers match books and readers.

It’s nice to have the publisher do your bragging for you
Now that we have the Web, who needs publishers anyway?

It must be great to be published.
Now that we have the Web, who needs publishers anyway?

Published, shmublished.

Chieko’s Web site gets more readers than my last 3 books combined.

It’s not MY site — I’m not THAT Chieko!

It must be great to be published.
In the entire US, fewer than 1000 people make their living primarily from royalties on trade book sales.

Now that we have the Web, who needs publishers anyway?

It must be great to be published.
Mid-list novelists — people with a consistent audiences of 30–60,000 readers — are being orphaned by publishers who need best-sellers.

Now that we have the Web, who needs publishers anyway?

It must be great to be published.
Many college students no longer buy the books required for their courses.

It must be great to be published.
Do critics really read the work they review?

“How [do] I explain the enormous popular success of Robert James Waller’s Madison County books? Although I haven’t read either THE BRIDGES OF MADISON COUNTY or SLOW WALTZ IN CEDAR BEND, I answer with full confidence: . . .

— Sven Birkerts, Gutenberg Elegies, 203

It must be great to be published.
What a mess.
PUBLIC FUNDING?
CORPORATE SPONSORS?
GRANTS?
ROYAL PATRONAGE?
JUST GIVE COPIES TO YOUR FRIENDS?

Revolutionary struggle?

Destroy the channel. Then rebuilding it right?

Go direct?
We CAN (AND MUST) build a new literary world

Technological change always transform literary worlds.

- Clay tablets and scribes
- Scrolls and copyists
- Codices and printers
- Literary machines and . . .
We can (and must) build a new literary world

We can choose, now.
Or we can let economics and politics choose for us.

(See Whitehead’s paper on economic consumption networks and their impact on hypertext system design)
COMPUTERS FOR THE PEOPLE

YOU CAN AND MUST UNDERSTAND COMPUTERS NOW!

—Theodor Holm Nelson, Computer Lib
The channel shapes all that passes through it
HYPERTEXT ISN’T Theater

Some firms expected New Media to resemble Hollywood
WHY DO MOVIES COST MILLIONS?

Movies need movie theaters

- Expensive projectors (low volume tech)
- Real estate
- Overhead (seats, advertising, PR)
  - Network effects are vital
Consequences of A capital-intensive channel

Less need to conserve production costs
  Blockbusters use resources efficiently
Massive audience
  Only mass audiences can justify the investment tied up in theaters
Studios and Production Companies
  Creation requires many hands and varied talents.
HYPERTEXT ISN’T hollywood

Inexpensive projectors (ubiquitous tech)
Negligible real estate required

(Even movies may become less like movies, as direct-to-video becomes a viable market)
HYPertext ISN’T The Book Trade

Some firms assumed electronic publishing would resemble book publishing.
Consequences of a crowded channel

Millions of SKUs, each a distinct business
Many small retailers (plus a few big chains)
Every title clamors for attention
Powerful gatekeepers
Hypertext isn’t like the book trade

People won’t buy software from booksellers

Christmas CD disaster of 1996

Booksellers don’t love computers

...and don’t have time anyway
HYPERTEXT ISN’T A GAME

SOME FIRMS ASSUMED THAT HYPERTEXTS COULD BE REGARDED AS COMPUTER GAMES FOR GROWNUPS.
WHY ARE COMPUTER GAMES SO VIOLENT?

PEOPLE HAVE LONG OBSERVED THAT MOST COMPUTER GAMES SEEM TO APPEAL TO PRE-ADOLESCENT BOYS.

THEY ASSUME THAT THIS HAPPENS BECAUSE THEY THINK PROGRAMMERS ARE LIKE PRE-ADOLESCENT BOYS
Consequences of a narrow channel

Age-specific
Focus on literal realism
Issues of independence, separation
Brilliant color palettes
Careful avoidance of gender questions
Hypertext is not a game

Textuality doesn’t fit the channel

Introspection doesn’t fit the channel
ART OUTSIDE THE ECONOMY

Some suggest that hypertexts should be distributed outside the capitalist economy.

Internet -> “free” distribution
Everyone can contribute -> a world of writers
WWW + Search Engines -> why advertise?
ART OUTSIDE THE ECONOMY

Disadvantages:
The grafitti effect
Who will match readers with writers?
A world of literary beggars?

THERE IS NO OUTSIDE
Hypertext isn’t like the film industry

Hypertext isn’t like the book trade

Hypertext isn’t like the game biz

Hypertext isn’t like academe
ABSENT FRIENDS
Where are our stories?
We have lots of web Stories, too.

Twelve Blue (Joyce) • Hegirascope (Moulthrop) • Bubbe's Back Porch (Abbe Don) • Grammatron (Amerika) • Six Sex Scenes (Greenheart) • LSD-5B (Arellano) • La Japonaise (Delacour) • New River Review (FALCO, ed) • Ltske One (Malloy) • Valley of Darkness (Ayers) • Colors (Donea) • Links from Underground (Hall) • suck (Steadman) • Chunk (MILLER) • My Boyfriend Came Back from The War (Lialina) • Stitch Bitch (Jackson) • frag (Powazek)

....
ABSENT FRIENDS

For this world, which seems
To lie before us like a land of dreams,
So various, so beautiful, so new,
Hath really neither joy, nor love, nor light,
Nor certitude, nor peace, nor help for pain;
And we are here as on a darkling plain
LOVE

Which characters would you fall in love with?

Whom could you imagine loving?
ABSENT FRIENDS

Our hypertexts are relentlessly serious
“THE AVANTE-GARDE IS TO THE LEFT WHAT JINGOISM IS TO THE RIGHT. BOTH ARE A REFUGE IN NONSENSE.”

—David Mamet, 3 Uses Of the Knife
You must lie upon the daisies
And discourse in idle phrases
Of your complicated state of mind,

The meaning doesn’t matter
If it’s only idle chatter
Of a transcendental kind.
“Every historical event has two stories about it... Every massacre did or did not happen.”

“What I fear is a world of tomorrow’s information in which nothing is known anymore and everything is hoaxes and lies.”

—THEODOR HOLM NELSON
ABSENT FRIENDS
ABSENT FRIENDS

tenure committees
of the novel
ABSENT FRIENDS

THE PLOY PARADOX
So much to do: world enough and time

POT BY JANET WALKER, PROGRAM CHAIR, HYPERTEXT ’91
The most important single notion in the theory of fiction ... is that of the vivid and continuous dream.

John Gardner, The Art of Fiction
This is not a hypertext.
This is not a hypertext.
This is a hypertext.
ABSENT FRIENDS

“Travelling through Europe is hard.”
“Travelling through Europe is hard.”
“I lost my wallet.”
“I lost my password.”
“Travel through Europe is hard”

SOME NOTABLE SITES

CHIEKO YOSHIMURA

MAGGY DONEA (MOMENTS)

AMY MILLER (CHUNK)
Lots of these systems explore navigation.

Do any of them help me find a hypertext I need to read, if I don't know I need it?

I want to say that I spent last night with a wonderful hypertext by a girl who lost
I want to say that I spent last night with a wonderful hypertext by a girl who lost her wallet.
“Travelling through Europe is hard”
Travelling through Europe is hard.
Travelling through Europe was hard...
THIS IS NOT A STORY

This is not a hypertext
THIS IS NOT
the one true way

This is not a story
BUT IT CAN BE DONE

AND WE NEED TO DO IT
RETURNING TO OUR ROOTS

Computer Lib
Literary Machines
Augment, Memex

...and beyond
THIS IS A CONSERVATIVE BUSINESS

Don’t be discouraged
THE CRUSADE

THE QUEST FOR HYPERTEXT

EPISODE 10:
RETURNING TO OUR DIVERSE ROOTS

Starring Jörg Haake, Uffe Wiil, & John Leggett
1987: HALASZ & the 7 issues

1. Search and Query
2. Composites
3. Virtual Structures
4. Computation in/over hypertext networks
5. Versioning
6. Collaborative Work
7. Tailorability
VISUALIZATION

Ways to see (and manipulate) hypertext structures

Cycles • Counterpoint • Mirrorworld • Feint

Discovering emergent structure
ENACTMENT

Ways to see (and manipulate) HT dynamics
- Link traversal (fluid links, link previews)
- “Guard fields”
- Changing hypertexts (time, collaborators)
COLLABORATION

Constructive hypertext

The graffiti effect is terribly important

COMPONENT SYSTEMS

(Open systems, Structural Computing)
Collaborative on-the-fly system design
LOG ANALYSIS AND USER MODELS

CAn anyone explain the noise in this curve?
Tension and excitement

We need to demonstrate command of the medium.

Five finger exercises:

Thriller • Schlemiel • Villain • Bedroom farce • There and back
REAL CRITICISM OF REAL HYPERTEXT

Usability is important
Usability usually asks the wrong questions

How do real hypertexts work?
How do they fail?
Real criticism, real hypertexts

Let such teach others, who themselves excel. And censure freely who have written well.
REACTIVE HYPERTEXTS

Extremely volatile hypertexts
Constructive frameworks (MacWeb)
Literary machines that learn
Hypertext with characters
SPREAD THE WORD

HELP PEOPLE UNDERSTAND

The provost    Your students
My dad         Your head of state
The Times      Your bartender
Visitors to your Web site

WRITE HYPERTEXTS!
The hypertexts are coming.

Some are already here.

Some are still wandering outside.

Invite them in.
THANKS

CHARACTER DEVELOPMENT AND ARTWORK
CHRISTOPHER BALDWIN

TYPE
P-22 (LONDON UNDERGROUND, Vienna)
BRIAN SOOEY (Verve) CHAOSIUM
(Phaeton)

PRODUCTION
MACINTOSH, NIKON, PAINTER, POWERPOINT,
FIREWORKS, FLASH, COMMUNICATOR, STORYSPACE,
WINDOWS, POSER, ART TODAY, DOVER BOOKS,
PHOTOSHOP
THANKS

EASTGATE SYSTEMS, INC. 1982--PRESENT

• ERIC COHEN • BARBARA BEAN • KATHRYN CRAMER • DIANE GRECO • JOANNE WYNDHAM • COLLEEN HUMPHREYS • DAVID FRISTROM • JIM HUANG • MERYL COHEN • ROSEMARY SIMPSON • PRISCILLA SNEFF

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... AND MANY MORE TO COME