

“Why shouldn't one demand a certain effort on the reader's part? Everything is always explained to him. He must eventually tire of being treated with such contempt.”

--Raymond Queneau

Literary Games:

The Intersection of Writing and Play

DANM 132 - Summer 2012

“Why shouldn't one demand a certain effort on the reader's part? Everything is always explained to him. He must eventually tire of being treated with such contempt.”

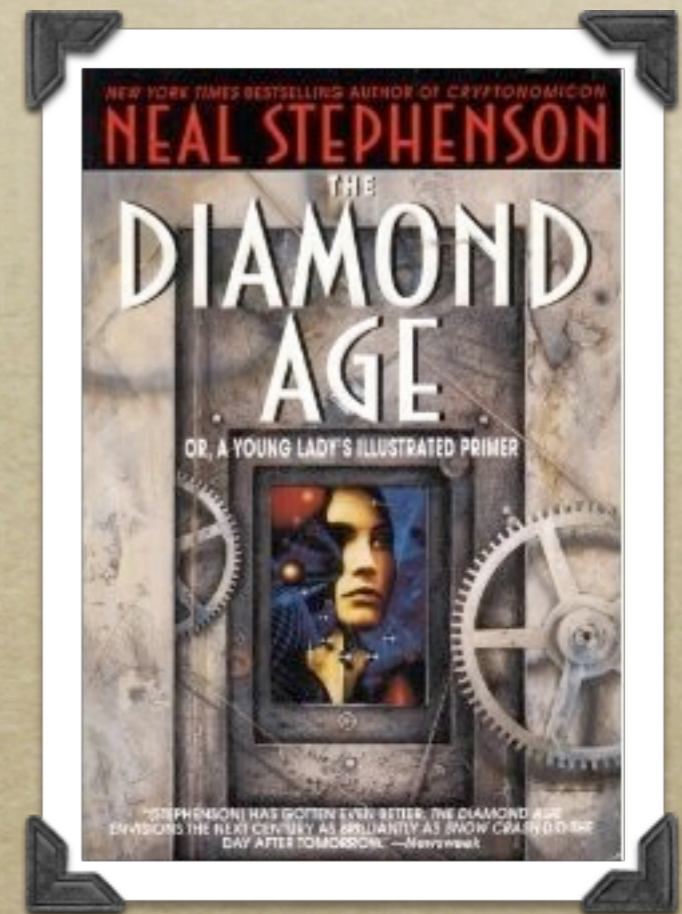
--Raymond Queneau

Hypertext and Forking Paths

DANM 132 - Week 1

The Dream of Interactive Text

- *How far back does this history stretch?*
 - *The 1980s?*
 - *The 1960s?*
 - *Earlier?*



1995 Neal Stephenson novel. Anyone read?

蘇氏蕙若蘭織錦迴文璇璣圖
私淑女子哀萃芳謹繹

仁智懷德舉虞唐貞妙顯華重榮章臣賢惟聖配英皇倫匹離飄浮江湘
 傷嗟中君容多蒼焉誓終篤志奸臣賢惟聖配英皇倫匹離飄浮江湘
 增慕懷終篤志奸臣賢惟聖配英皇倫匹離飄浮江湘
 憂荒淫妄想感所欽岑幽巖峻嵯峨深淵重泮經網羅林光流電逝推生
 空堂如思傷君夢詩明別改知識深淵重泮經網羅林光流電逝推生
 惟思將如思傷君夢詩明別改知識深淵重泮經網羅林光流電逝推生
 詠情將如思傷君夢詩明別改知識深淵重泮經網羅林光流電逝推生
 和韻將如思傷君夢詩明別改知識深淵重泮經網羅林光流電逝推生
 音南鄭歌商流微殷繁華觀曜終始璇璣圖怨念為懷如滋謙遠貞自基
 藏普南鄭歌商流微殷繁華觀曜終始璇璣圖怨念為懷如滋謙遠貞自基
 悲推生患多股繁華觀曜終始璇璣圖怨念為懷如滋謙遠貞自基
 發聲惟艱是寬端平蘇氏興感遠殊浮沉時盛意麗哀遺身長路悲曠感生
 曲發聲惟艱是寬端平蘇氏興感遠殊浮沉時盛意麗哀遺身長路悲曠感生
 秦王懷士眷舊鄉身加兼愁悴少精神趨幽曠遠離鳳知沙流頓逝異浮沉時盛意麗哀遺身長路悲曠感生
 商絃水好傷榮身加兼愁悴少精神趨幽曠遠離鳳知沙流頓逝異浮沉時盛意麗哀遺身長路悲曠感生
 激楚燕水好傷榮身加兼愁悴少精神趨幽曠遠離鳳知沙流頓逝異浮沉時盛意麗哀遺身長路悲曠感生
 流楚燕水好傷榮身加兼愁悴少精神趨幽曠遠離鳳知沙流頓逝異浮沉時盛意麗哀遺身長路悲曠感生
 清芳蘭凋茂熙陽存牆面殊意感故新霜冰齊潔志清純望誰思想懷所親
 芳蘭凋茂熙陽存牆面殊意感故新霜冰齊潔志清純望誰思想懷所親

(圖曰之二)

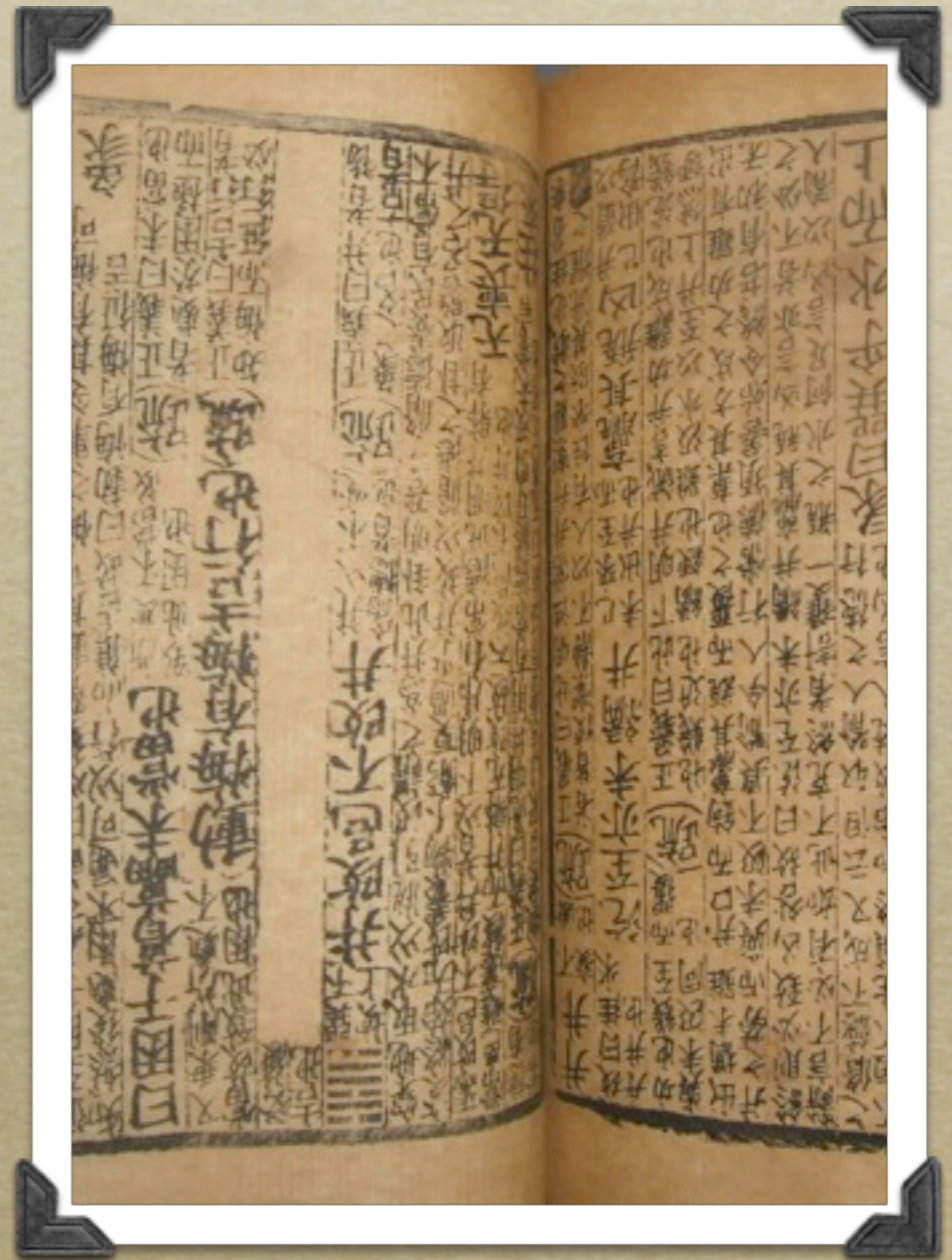
(圖曰之一)

~150 A.D.

The wife of a court official in China's Han Dynasty, Su Hui (2nd Century AD) wrote this text lamenting her husband's infidelities. Can be read 40,000 different ways.

The I Ching (Book of Changes)

- *Dates from 3rd century BCE*
- *Random procedure generates one of 64 possible meanings with shades of overlapping interpretation*



Goes back even farther.

Knight of the Burning Pestle

THE KNIGHT OF the Burning Pestle.

————— *Quod si*
Iudicium subtile, videndis artibus illud
Ad libros & ad haec Musarum dona vocares:
Barotum in crasso iurares aere natum.
Horat. in Epist. ad Oct. Aug.



LONDON,
Printed for *Walter Burre*, and are to be sold at the
signe of the Crane in Paules Church-yard.
1613.

- *Play by Francis Beaumont, first performed 1607*
- *A Citizen and his Wife come out of the audience to the stage and demand a story more to their liking.*

Pro. You seeme to bee an vnderstanding man: what would you haue vs do sir?

Cit. Why present something notably in honour
30 of the Commons of the Citty.

Pro. Why what doe you say to the life and death of fat *Drake*, or the repairing of Fleet-priuiies?

Cit. I do not like that, but I will haue a Citizen, and hee shall be of my owne trade.

35 *Pro.* Oh you should haue told vs your minde a moneth since, our play is ready to begin now.

Cit. 'Tis all one for that, I will haue a Grocer, and he shall do admirable things.

Pro. What will you haue him do?

Cit. I do not like that, but I will haue a Citizen,
and hee shall be of my owne trade.

35 *Pro.* Oh you should haue told vs your minde a
moneth since, our play is ready to begin now.

Cit. 'Tis all one for that, I will haue a Grocer,
and he shall do admirable things.

Pro. What will you haue him do?

1607

The WITNESS: An INTERLOGIC Mystery
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WITNESS and INTERLOGIC are trademarks of Infocom,
Revision number 22 / Serial number 840924

You are now in the driveway entrance.
You are standing at the foot of the driveway, the
property. The entire lot is screened from the street
by a wooden fence, except on the east side, which fronts
the house. The house looks like a mixture of a California bungalow
and a Victorian. From here you can see the driveway leading north
to the back door.

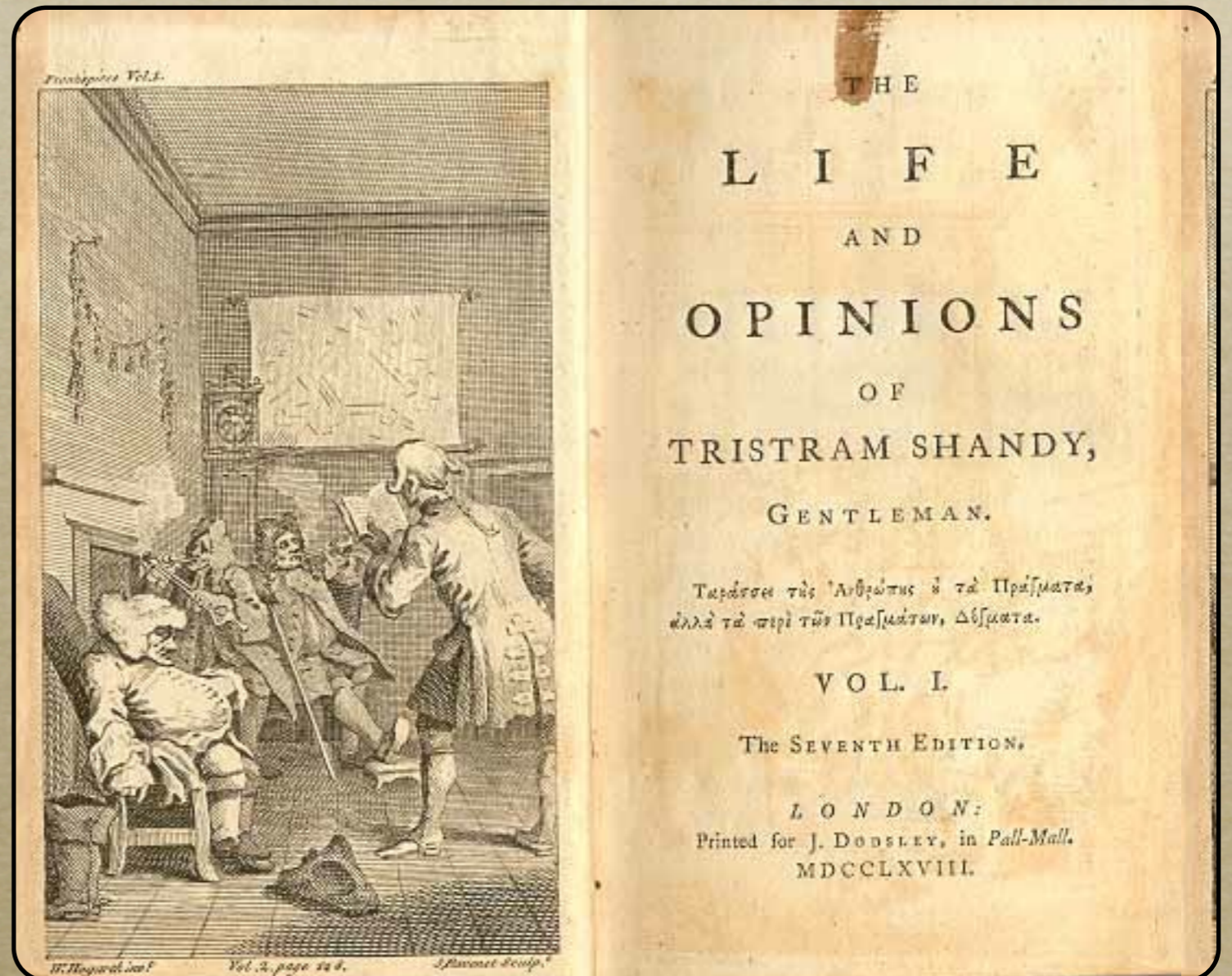
What should you, the detective, do now?
>

1981

The invocation of the audience to participate, removed when stories became static, fixed things, is re-enabled by the rise of technologically-powered stories.

Tristram Shandy

- *The Life and Opinions of Tristram Shandy, Gentleman*
- Published in six volumes between 1759-69
- Author Laurence Sterne was a priest who had never previously written fiction.
- Famously discursive and meta-textual



Main character not born till volume 3.

Filled with instructions, pleadings, entreaties: don't read the next bit, go back and re-read, etc. Fights with various readers.

Author says he has "torn out" one chapter. Preface occurs in Chap XX p142.

Playing with the structure of a book and the proscribed roles of the reader and author.

— And possibly, gentle reader, with such a temptation—so wouldst thou: for never did thy eyes behold, or thy concupiscence covet, any thing in this world more concupiscible than widow *Wadman*.

C H A P. XXXVIII.

TO conceive this right—call for pen and ink—here's paper ready to your hand.—Sit down, Sir, paint her to your own mind—as like your mistress as you can—as unlike your wife as your conscience will let you—'tis all one to me—please but your own fancy in it.

the first of the book is a very good one
 and the second is a very good one
 and the third is a very good one
 and the fourth is a very good one
 and the fifth is a very good one
 and the sixth is a very good one
 and the seventh is a very good one
 and the eighth is a very good one
 and the ninth is a very good one
 and the tenth is a very good one
 and the eleventh is a very good one
 and the twelfth is a very good one
 and the thirteenth is a very good one
 and the fourteenth is a very good one
 and the fifteenth is a very good one
 and the sixteenth is a very good one
 and the seventeenth is a very good one
 and the eighteenth is a very good one
 and the nineteenth is a very good one
 and the twentieth is a very good one
 and the twenty-first is a very good one
 and the twenty-second is a very good one
 and the twenty-third is a very good one
 and the twenty-fourth is a very good one
 and the twenty-fifth is a very good one
 and the twenty-sixth is a very good one
 and the twenty-seventh is a very good one
 and the twenty-eighth is a very good one
 and the twenty-ninth is a very good one
 and the thirtieth is a very good one
 and the thirty-first is a very good one
 and the thirty-second is a very good one
 and the thirty-third is a very good one
 and the thirty-fourth is a very good one
 and the thirty-fifth is a very good one
 and the thirty-sixth is a very good one
 and the thirty-seventh is a very good one
 and the thirty-eighth is a very good one
 and the thirty-ninth is a very good one
 and the fortieth is a very good one
 and the forty-first is a very good one
 and the forty-second is a very good one
 and the forty-third is a very good one
 and the forty-fourth is a very good one
 and the forty-fifth is a very good one
 and the forty-sixth is a very good one
 and the forty-seventh is a very good one
 and the forty-eighth is a very good one
 and the forty-ninth is a very good one
 and the fiftieth is a very good one
 and the fifty-first is a very good one
 and the fifty-second is a very good one
 and the fifty-third is a very good one
 and the fifty-fourth is a very good one
 and the fifty-fifth is a very good one
 and the fifty-sixth is a very good one
 and the fifty-seventh is a very good one
 and the fifty-eighth is a very good one
 and the fifty-ninth is a very good one
 and the sixtieth is a very good one
 and the sixty-first is a very good one
 and the sixty-second is a very good one
 and the sixty-third is a very good one
 and the sixty-fourth is a very good one
 and the sixty-fifth is a very good one
 and the sixty-sixth is a very good one
 and the sixty-seventh is a very good one
 and the sixty-eighth is a very good one
 and the sixty-ninth is a very good one
 and the seventieth is a very good one
 and the seventy-first is a very good one
 and the seventy-second is a very good one
 and the seventy-third is a very good one
 and the seventy-fourth is a very good one
 and the seventy-fifth is a very good one
 and the seventy-sixth is a very good one
 and the seventy-seventh is a very good one
 and the seventy-eighth is a very good one
 and the seventy-ninth is a very good one
 and the eightieth is a very good one
 and the eighty-first is a very good one
 and the eighty-second is a very good one
 and the eighty-third is a very good one
 and the eighty-fourth is a very good one
 and the eighty-fifth is a very good one
 and the eighty-sixth is a very good one
 and the eighty-seventh is a very good one
 and the eighty-eighth is a very good one
 and the eighty-ninth is a very good one
 and the ninetieth is a very good one
 and the ninety-first is a very good one
 and the ninety-second is a very good one
 and the ninety-third is a very good one
 and the ninety-fourth is a very good one
 and the ninety-fifth is a very good one
 and the ninety-sixth is a very good one
 and the ninety-seventh is a very good one
 and the ninety-eighth is a very good one
 and the ninety-ninth is a very good one
 and the hundredth is a very good one

“Thrice happy book! thou wilt have one page, at least, within thy covers, which MALICE will not blacken, and which IGNORANCE cannot misrepresent.”

---How could you, Madam, be so inattentive in reading the last chapter? I told you in it, That my mother was not a papist. —Papist! You told me no such thing, Sir. Madam, I beg leave to repeat it over again... ---Then, Sir, I must have miss'd a page. --No, Madam,---you have not miss'd a word. ...I do insist... that you immediately turn back, that is, as soon as you get to the next full stop, and read the whole chapter again.

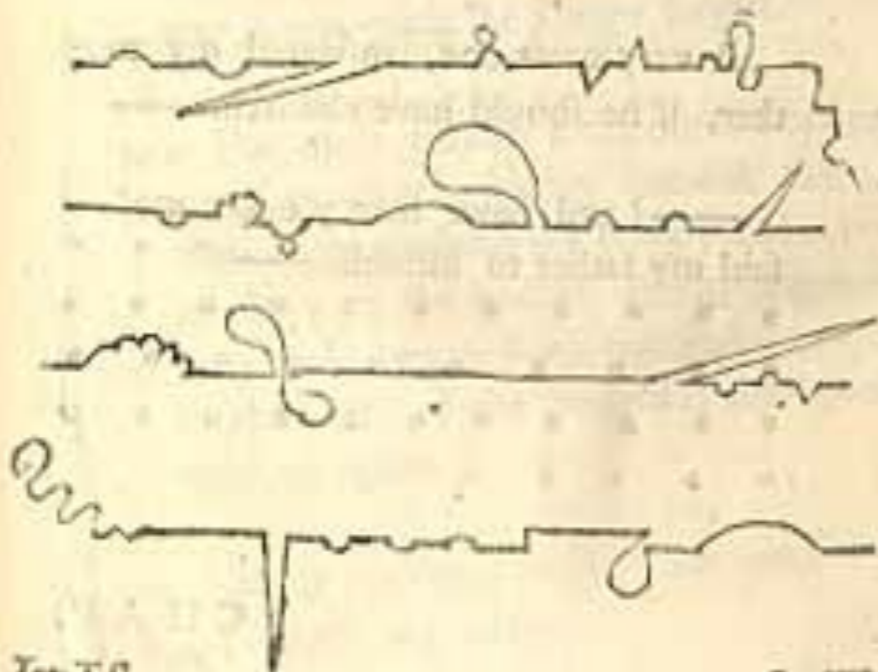
I have imposed this penance upon the lady, neither out of wantonness or cruelty, but from the best of motives; and therefore shall make her no apology for it when she returns back:---'Tis to rebuke a vicious taste which has crept into thousands besides herself,---of reading straight forwards, more in quest of the adventures, than of the deep erudition and knowledge which a book of this cast, if read over as it should be, would infallibly impart with them...

----- But here comes my fair Lady. Have you read over again the chapter, Madam, as I desired you? -- You have : And did you not observe the passage, upon the second reading, which admits the inference? ---- Not a word like it!...

Volume I, p. 120

C H A P. XL.

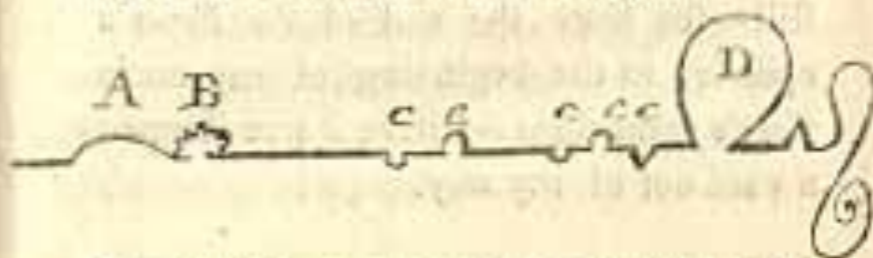
I Am now beginning to get fairly into my work; and by the help of a vegetable diet, with a few of the cold feeds, I made no doubt but I shall be able to go on with my uncle *Toby's* story, and my own, in a tolerable straight line. Now,



Int. T. S.

Scal. T. S.

These were the four lines I moved in through my first, second, third, and fourth volumes.—In the fifth volume I have been very good—the precise line I have described in it being this :



By which it appears, that except at the curve, marked *A*, where I took a trip to *Navarre*—and the indented curve *B*, which is the short airing when I was there with the Lady *Bauffiere* and her page—I have not taken the least frisk of a digression, till *John de la Casse's* devils led me the round you see marked *D*;—for as for *eeee* they are nothing but parentheses, and the common *ins* and *outs* incident to the lives of the greatest ministers of state; and when compared

"Writing, when properly managed (as you may be sure I think mine is) is but a different name for conversation: As no one, who knows what he is about in good company, would venture to talk all;-- so no author, who understands the just boundaries of decorum and good breeding, would presume to think all: The truest respect which you can pay to the reader's understanding, is to halve this matter amicably, and leave him something to imagine, in his turn, as well as yourself."



The 20th Century

Ellery Queen

- *The Roman Hat Mystery* (1929), the first Ellery Queen novel, introduced the Challenge to the Reader
- The series was so popular it lasted for over four decades, with dozens of novels and many TV and radio incarnations
- Books with rules, e.g. S.S. Van Dine's 1928 "Twenty Rules for Writing Detective Stories."

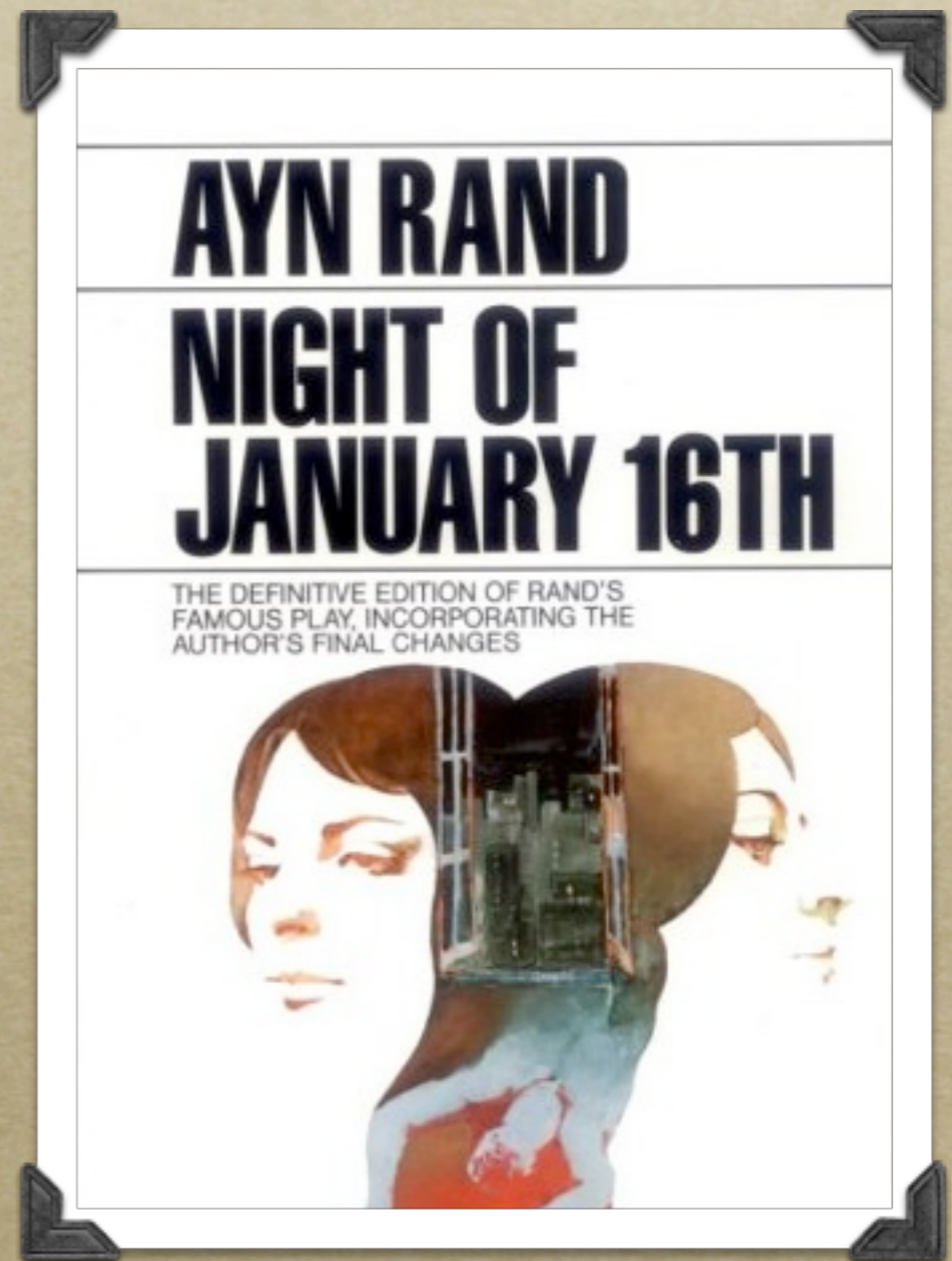
Reader: Can you solve *The Dutch Shoe Mystery* ?

By page 177 you will be in possession of all the facts concerning the murder of Abigail Doorn. No tricks, no catches. The killer is practically shouting his name. Can you get him before **Ellery Queen** does?



Night of January 16th

- Ayn Rand, 1936
- Courtroom drama where twelve jurors are chosen from audience and sit on stage; at the end of the play, they deliberate and announce their verdict
- Author saw it as a cheap gimmick, but it was wildly popular

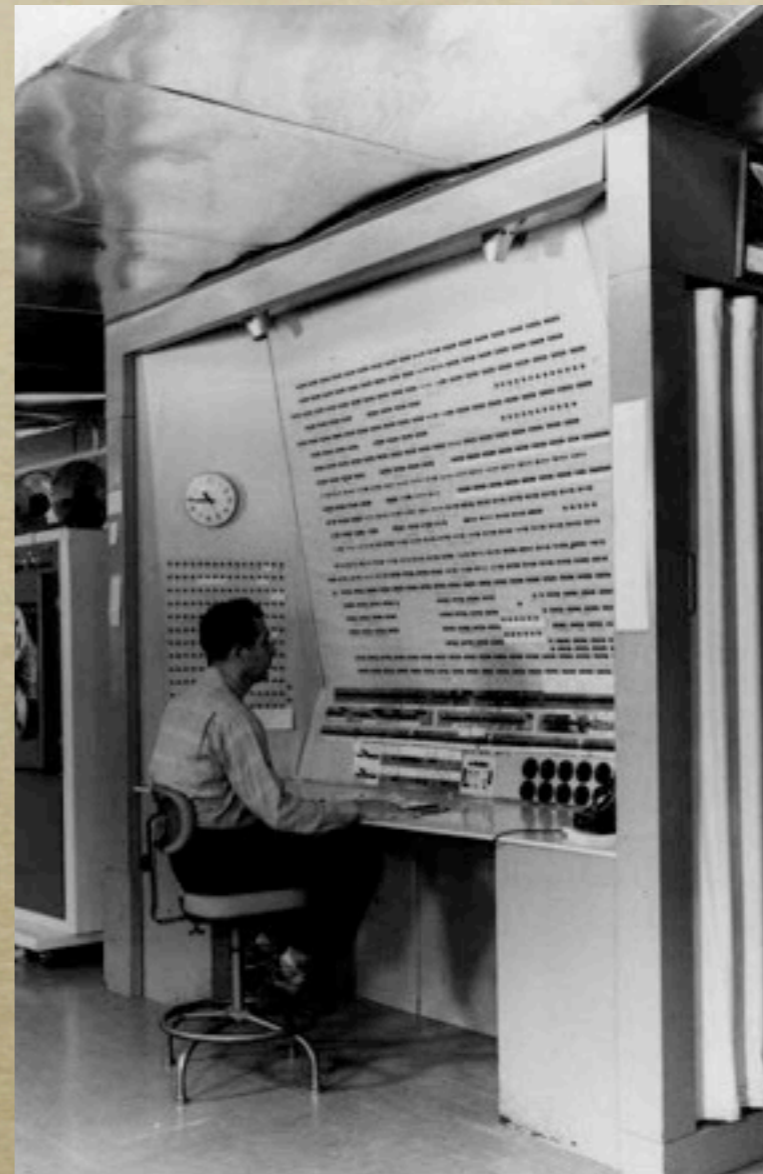


“I am still asked, once in a while—and it always astonishes me—whether I intended Karen Andre to be found guilty or not guilty. I did not think that there could be any doubt about my verdict: of course, she is not guilty.”



The idea of letting the audience have any power still very foreign.
As with Burning Pestle-- a gimmick-- and Shandy-- not technically possible.

1945



October 1941-- Roosevelt approves atom bomb program with Vannevar Bush as director
June 1943-- ENIAC project begins, to calculate artillery firing tables.
August 1945 -- Bomb dropped on Hiroshima. Feb 1946 -- ENIAC announced to public.
The world was profoundly changed.

1945



Jorge Luis Borges
The Garden of Forking Paths



Vannevar Bush
“As We May Think”

In the wake of these changes, two short pieces of writing that would alter the next generation of thinkers.

“As We May Think”

- Essay by Vannevar Bush, first published in 1945
- Bush was scientific advisor to Roosevelt and key player in development of the atomic bomb
- As the war came to a close he became anxious to improve the future of humanity.

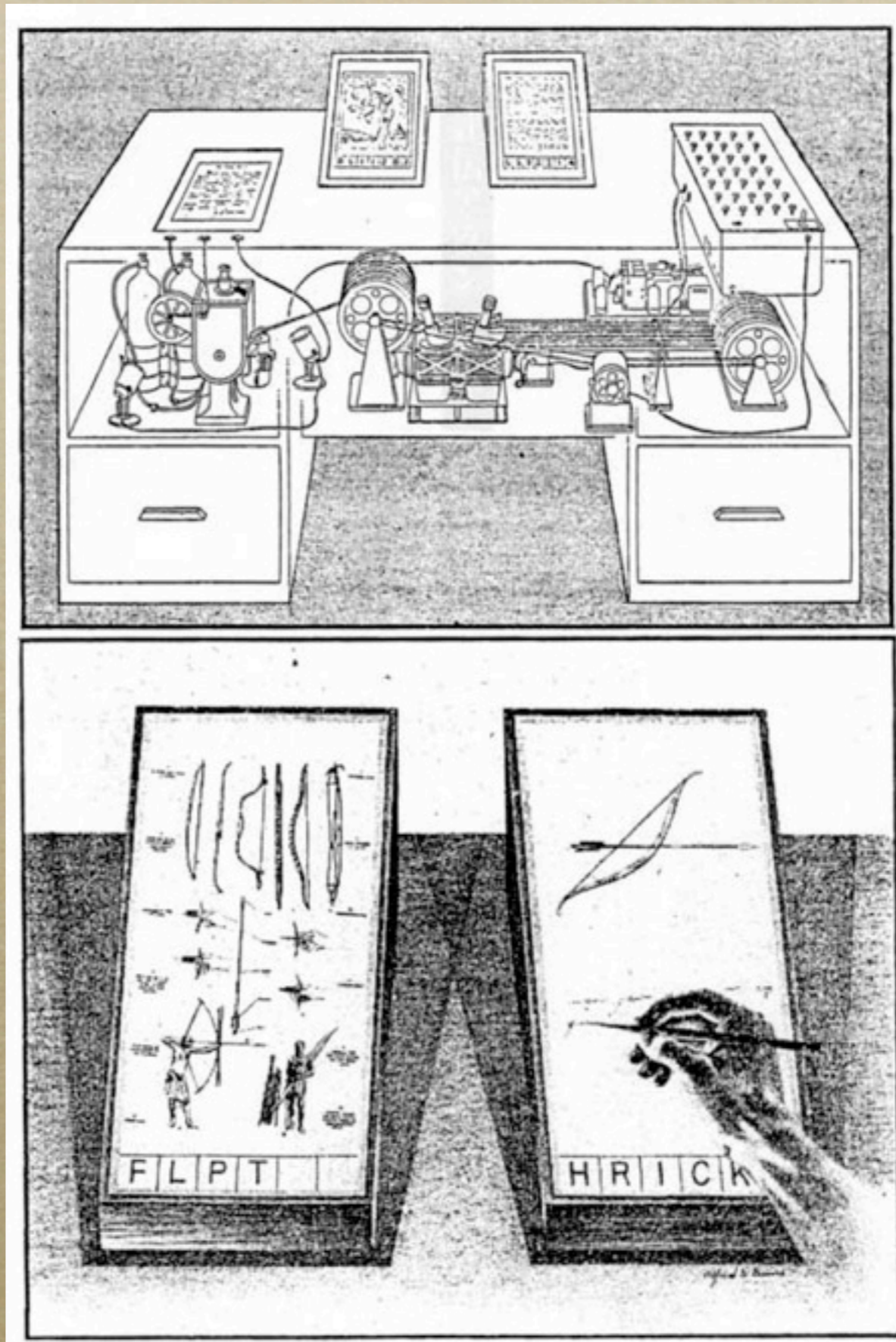


“Professionally our methods of transmitting and reviewing the results of research are generations old and by now are totally inadequate for their purpose. ...Mendel’s concept of the laws of genetics was lost to the world for a generation because his publication did not reach the few who were capable of grasping and extending it; and this sort of catastrophe is undoubtedly being repeated all about us...

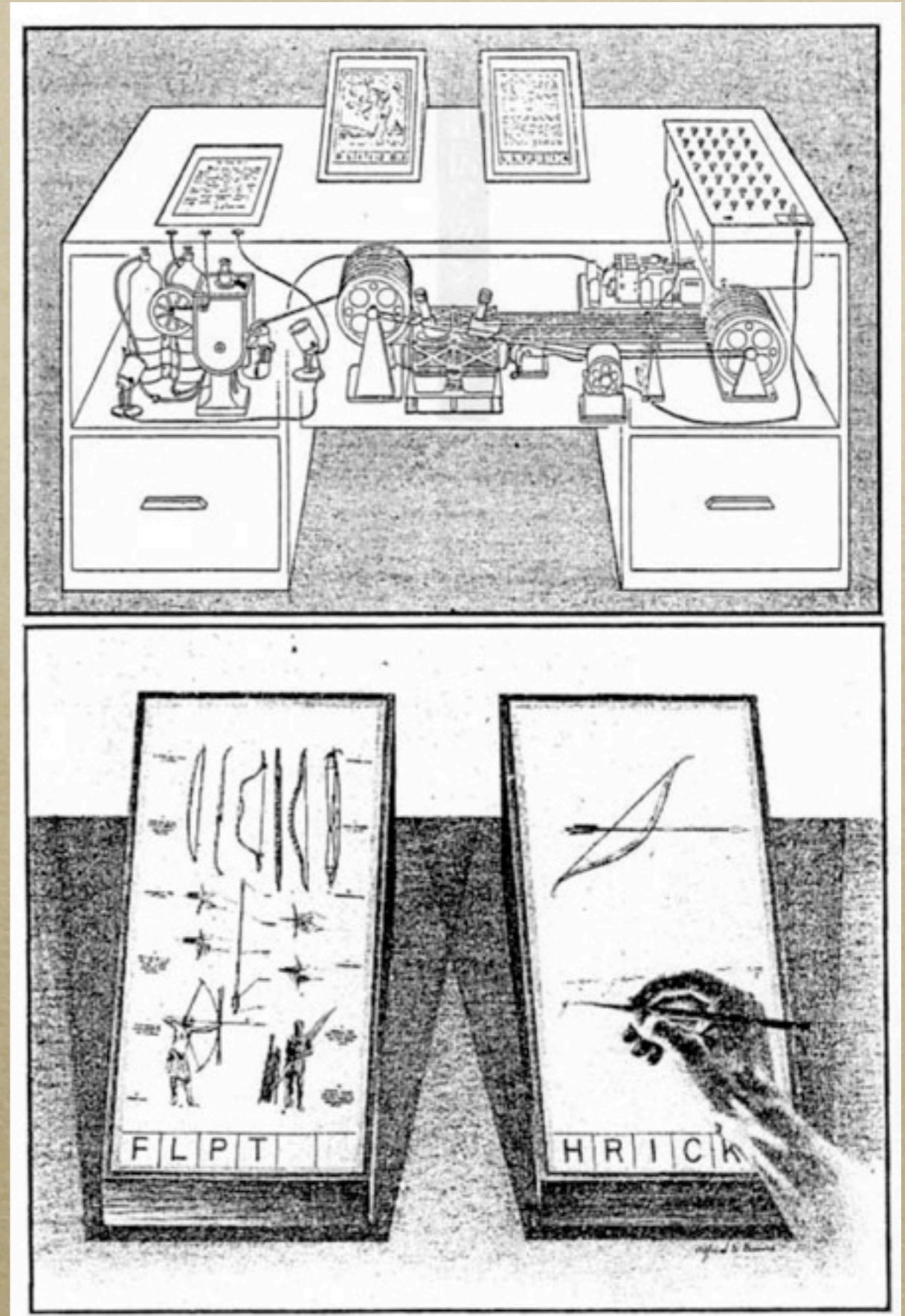
“Our ineptitude in getting at the record is largely caused by the artificiality of systems of indexing. When data of any sort are placed in storage, they are filed alphabetically or numerically... The human mind does not work that way. It operates by association. With one item in its grasp, it snaps instantly to the next that is suggested by the association of thoughts, in accordance with some intricate web of trails carried by the cells of the brain. ...Selection by association, rather than indexing, may yet be mechanized.”

Memex

(video)



- The Memex was never built, but...
- “As We May Think” was hugely influential on many pioneers of the personal computing era, including Doug Engelbart (who invented the mouse and word processor) and Ted Nelson (who coined the term hypertext).



The Garden of Forking Paths

- *Jorge Luis Borges (1941; first English translation 1946)*
- *Borges is now widely considered among the finest Spanish language writers of the 20th century*
- *First published in the US in Ellery Queen magazine (!)*

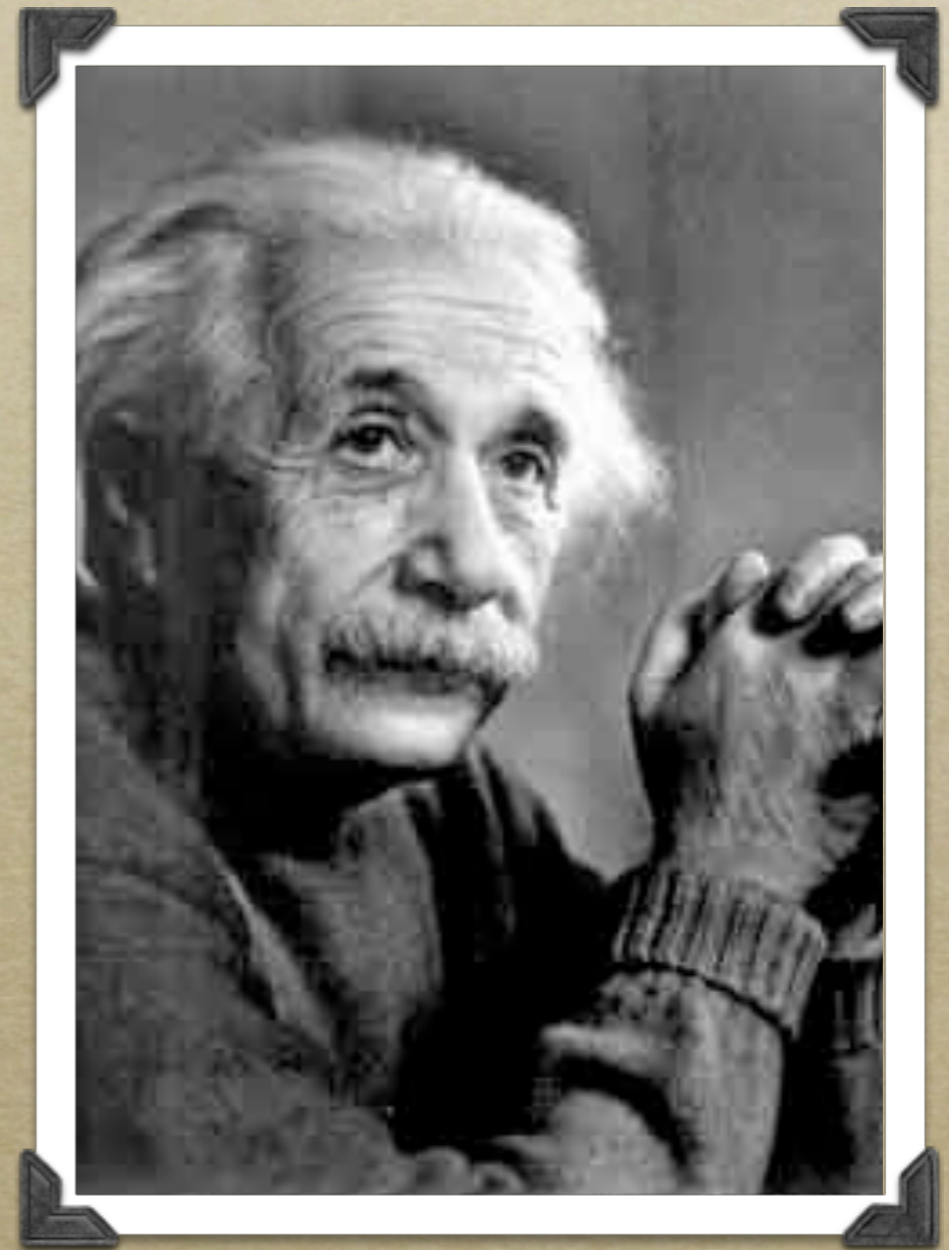


“Ts’ui Pên must have said once: *I am withdrawing to write a book.* And another time: *I am withdrawing to construct a labyrinth.* Every one imagined two works; to no one did it occur that **the book and the maze were one and the same thing...**

“In all fictional works, each time a man is confronted with several alternatives, he chooses one and eliminates the others; in the fiction of Ts’ui Pên, he chooses--simultaneously--all of them. *He creates, in this way, diverse futures, diverse times which themselves also proliferate and fork.*”

Quantum mechanics

- *Space...*
- *time...*
- *measurement...*
- *reality!...*
- *....are all not what we thought they were.*

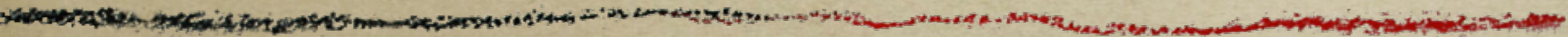


Involved in the nuclear development; maybe these ideas weren't so crazy after all.



Borges created an artistic response to a world threatened by atomic technology. Bush created a scientific response to the problem of technological proliferation. The generation of thinkers they inspired gave birth to hypertext.

BREAK!



The Oulipo and Potential Literature

- Ouvroir de Littérature Potentielle (workshop of potential literature)
- Potential literature...
 - “is that which awaits a reader, which yearns for him, which needs him in order to fully realize itself”
 - “[is] work... which willingly lends itself to exploration.”
 - “heavily relies on the active participation of readers.”

oulipo

Cent mille milliards de poèmes

- (*Hundred Thousand Billion Poems*), 1961
- Raymond Queneau
- Ten sonnets of ten lines with same rhyme scheme; can be combined in 10^{14} different ways



“Un Contre à votre façon”

- Queneau, 1967
- “inspired by the presentation of the instructions given to computers”
- first “Choose your own adventure”

1. Do you wish to hear
the story of the three
alert peas?

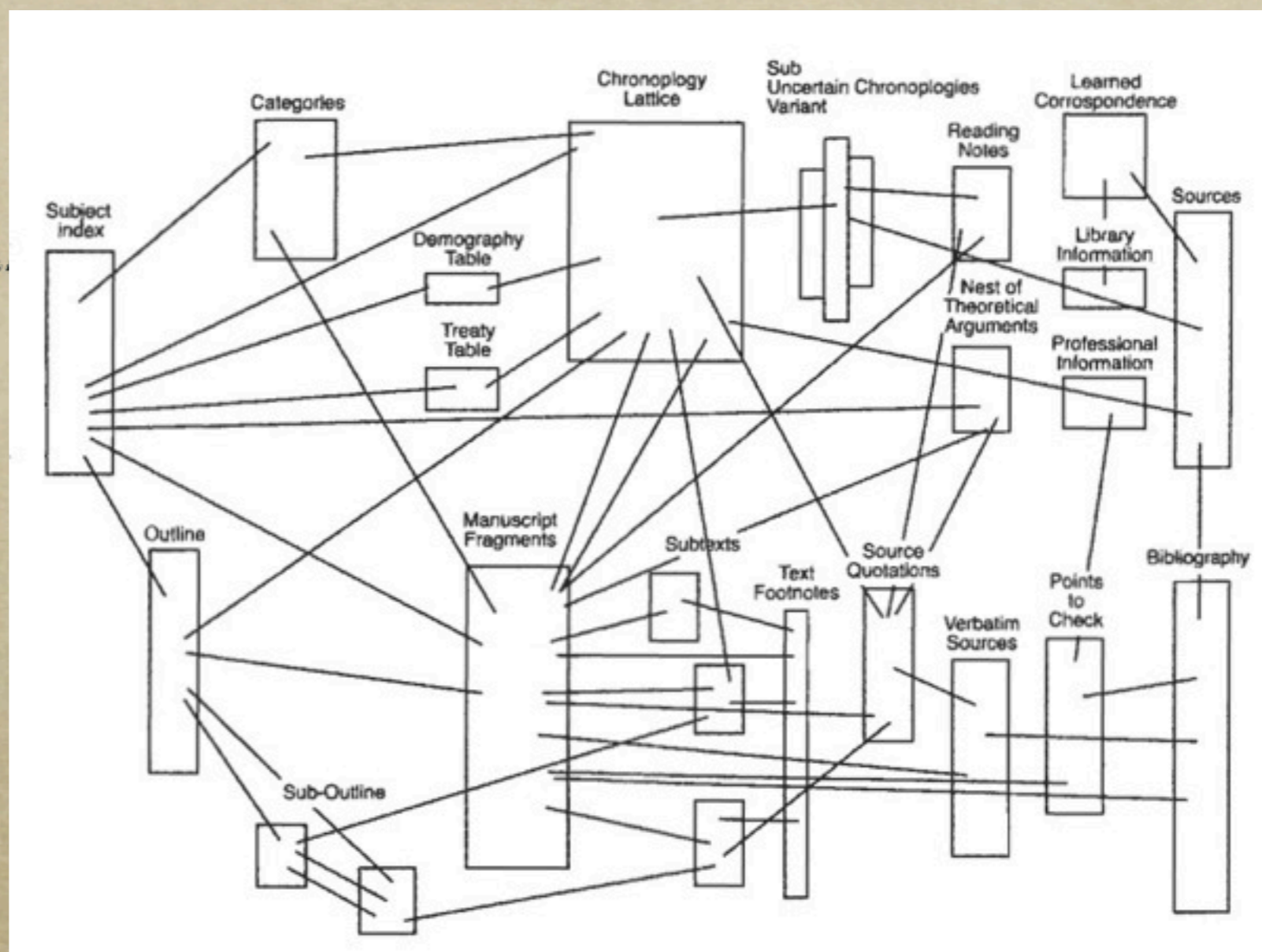
if yes, go to 4
if no, go to 2

“We regret having no access to machines:
this is a common *lamento* during our
meetings.”

The Birth of Hypertext

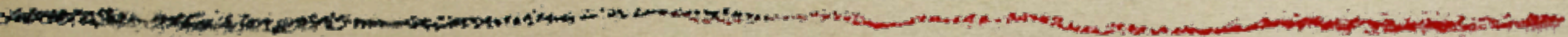
- “A File Structure for the Complex, the Changing, and the Indeterminate” (Ted Nelson, 1965)
 - “The kinds of file structures required if we are to use the computer... as an adjunct to creativity are wholly different in character from those customary in business and scientific data processing. They need to provide the capacity for intricate and idiosyncratic arrangements, total modifiability, [and] undecided alternatives...”

“Let me introduce the word ‘*hypertext*’ to mean a body of written or pictorial material interconnected in such a complex way that it could not conveniently be presented or represented on paper.”



“...*non-sequential writing*...”

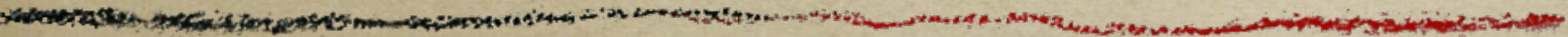
computers
+ nonlinear writing



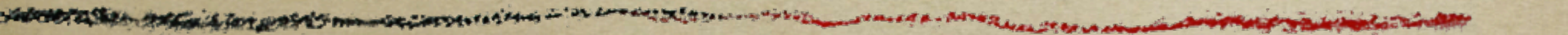
The Web is the most famous example

- HTML (HyperText Markup Language)
- One particular implementation of Nelson's ideal, although leaves out many of his ideas:
 - “HTML is precisely what we were trying to PREVENT — ever-breaking links, links going outward only, quotes you can't follow to their origins, no version management, no rights management.”

computers
+ nonlinear writing



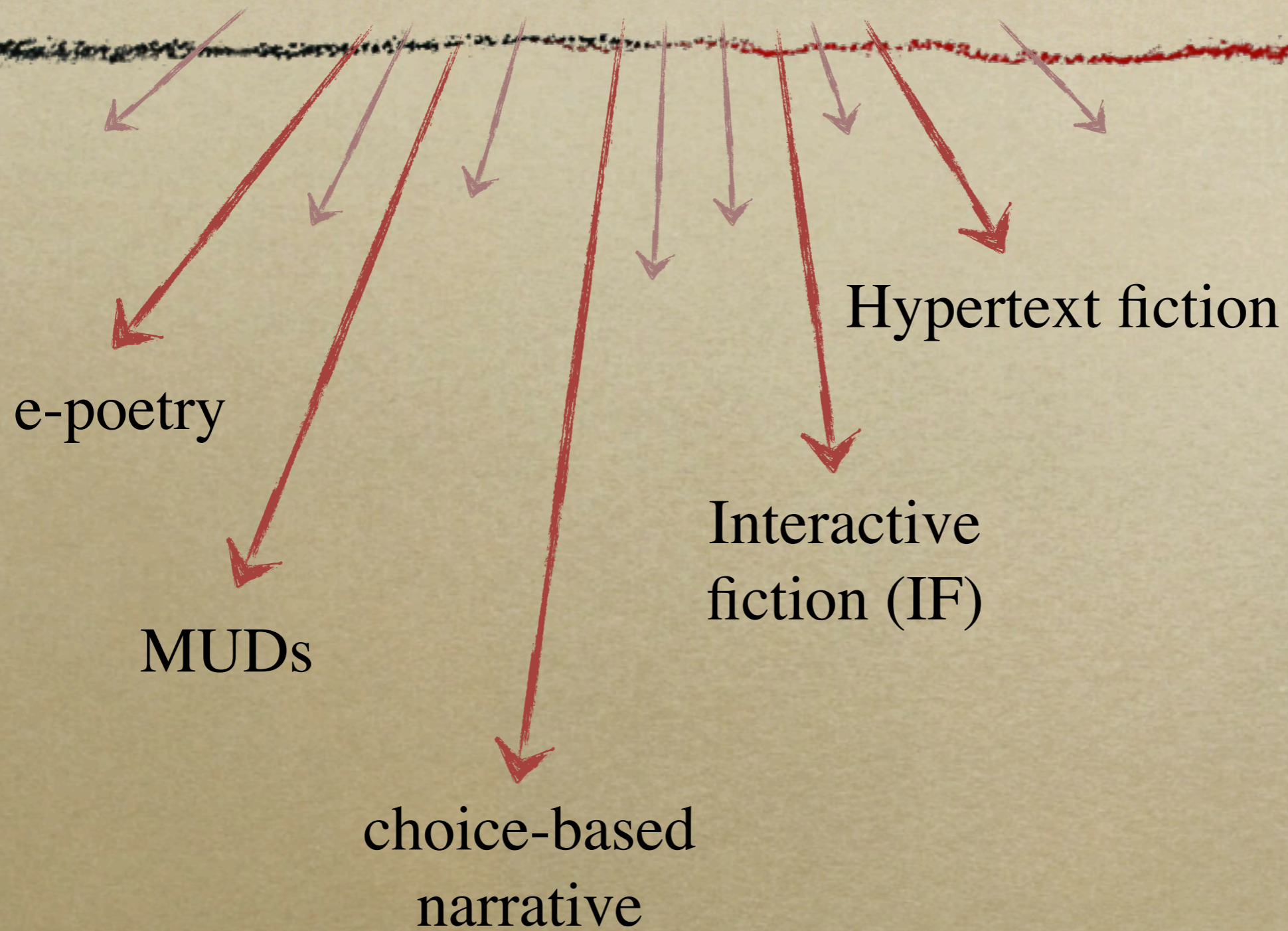
computers
+ nonlinear (fiction) writing



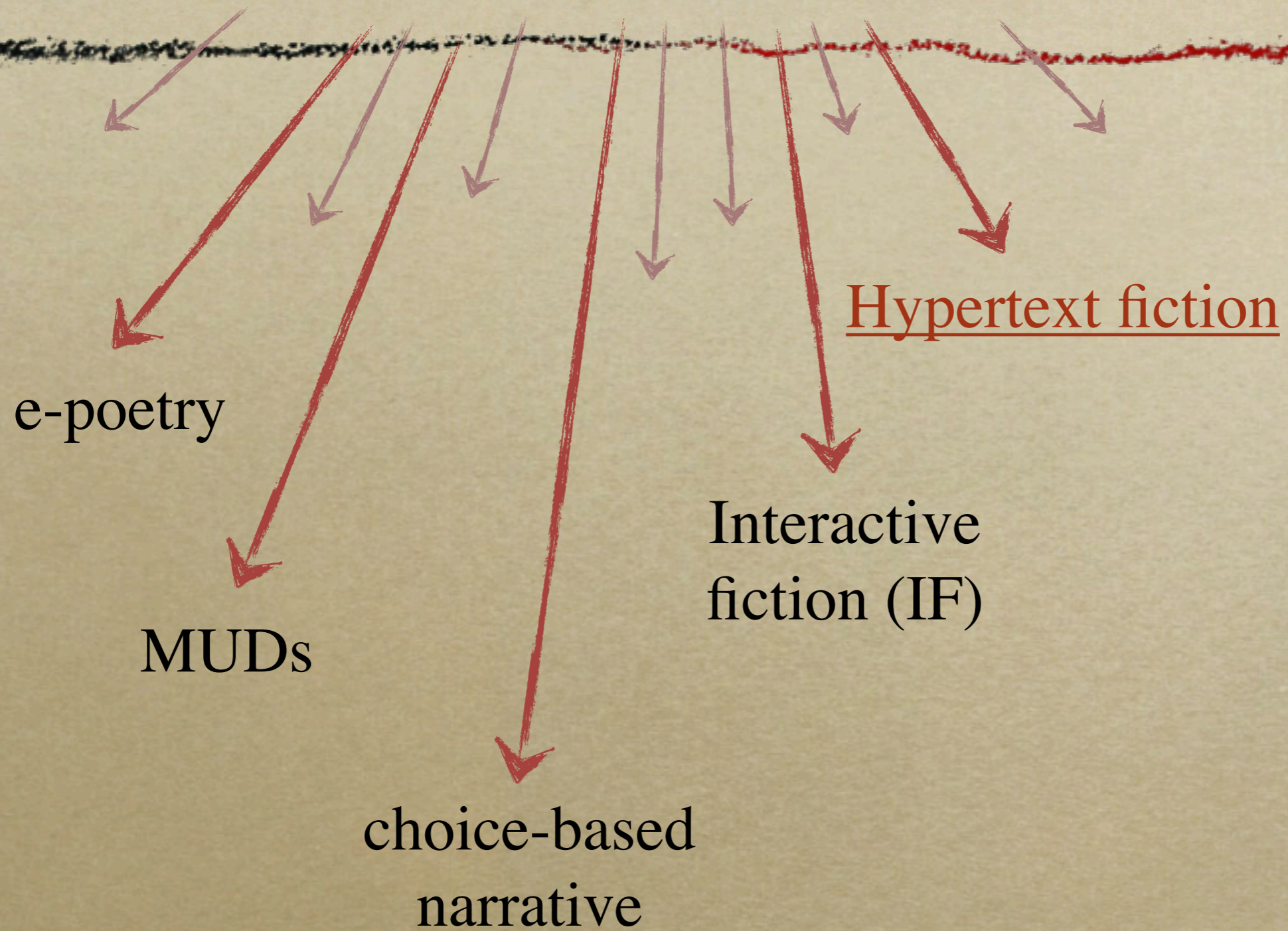
computers
+ nonlinear (fiction) writing

Electronic Literature

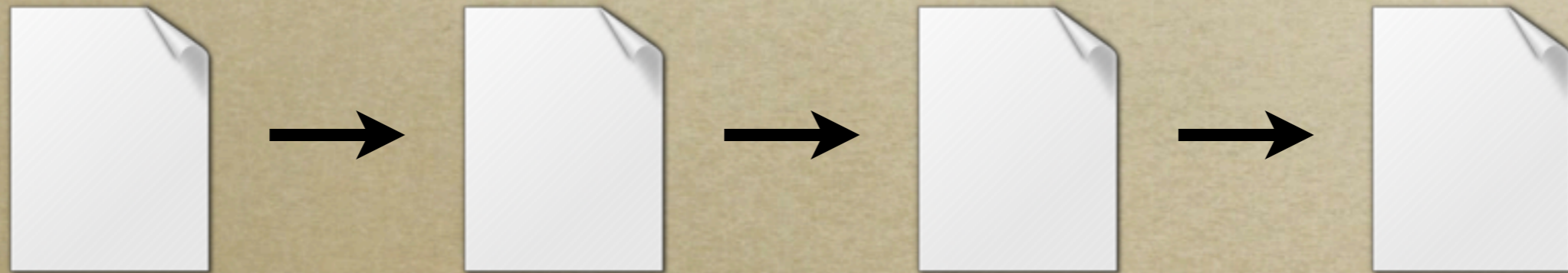
Electronic Literature



Electronic Literature

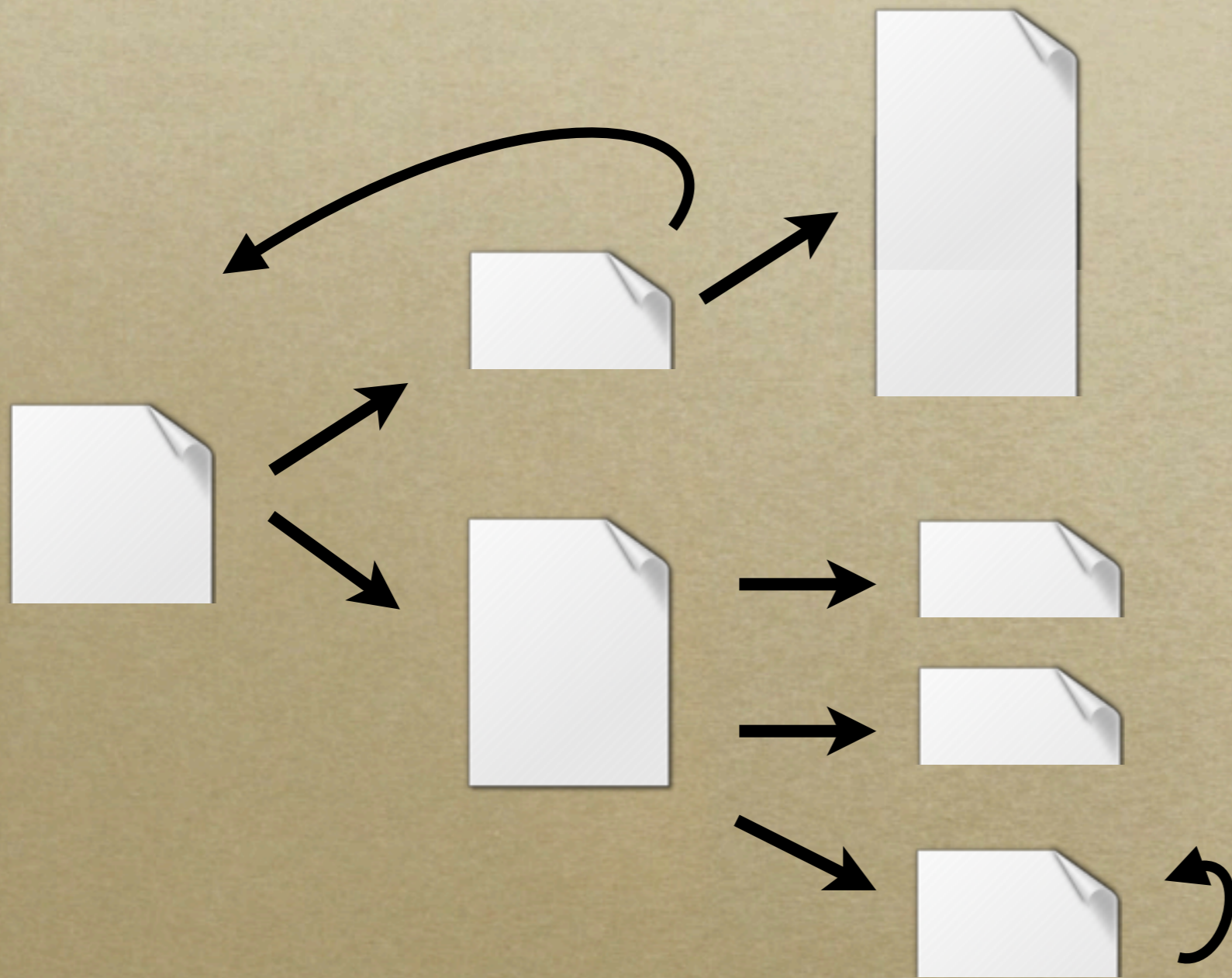


Linear Fiction



Fixed-length pages connected in static order

Hypertext Fiction



Pages (*lexia*) can be of arbitrary length; can connect (*link*) to each other in complicated ways.

Hypertext Fiction

- Instead of pages, lexias
 - A lexia can be titled
- Non-linear pathways
- Lexias connected intentionally: the link is part of the meaning

Example

When I was a kid, I used to hate my father.



There's that tapping sound again. Tap, tap.

Example

When I was a kid, I used to hate my father.



There's that tapping sound again. Tap, tap.

Example

When I was a kid, I used to hate my father.



There's that tapping sound again. Tap, tap.

- *Text + link = new structure for conveying meaning*

Guard Fields

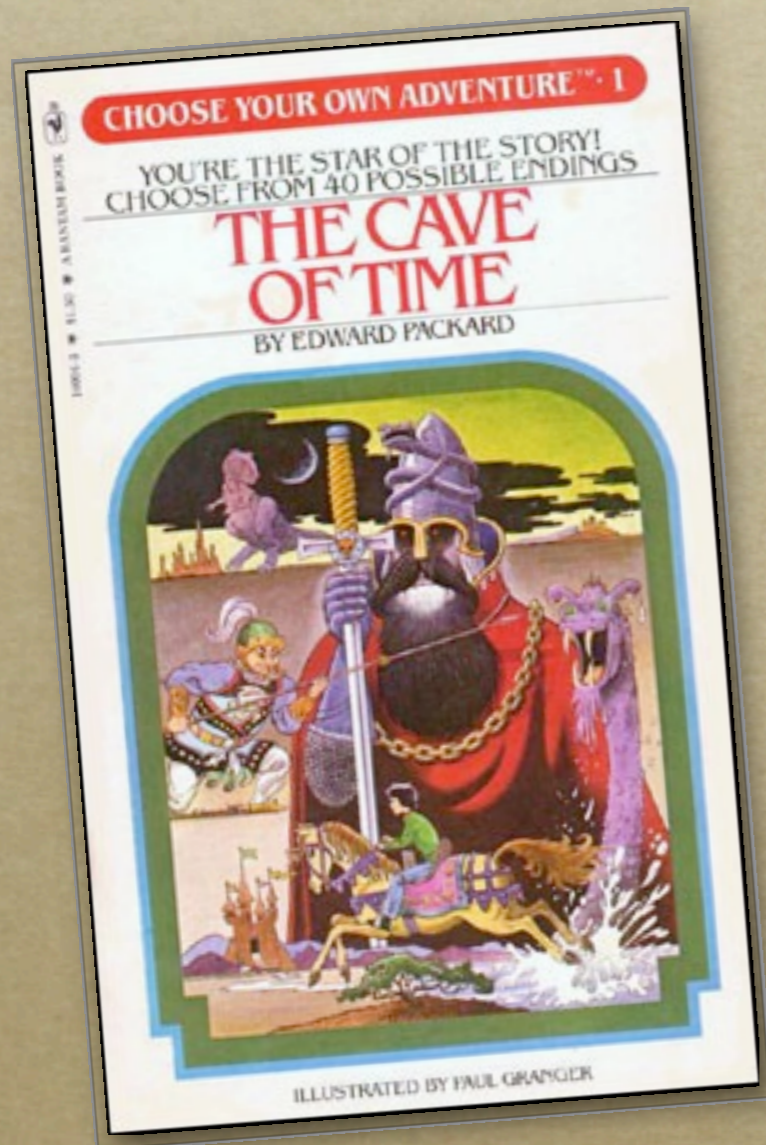
When I was a kid, I used to hate my father.

(only a link if “Moved to New House” lexia has been seen)



There's that tapping sound again. Tap, tap.

(What about these things?)



But couldn't these exist on paper?

Some have guard fields, which starts to be systematic. Technically anything could be on paper. But a more accurate definition is we're looking for systems.

Hypertext terms revisited

- *lexia (node)*
- *link*
- *path (traversal)*
- *guard fields*

Demo

- “The (Former) General in His Labyrinth,” Mohsin Hamid, 2008