


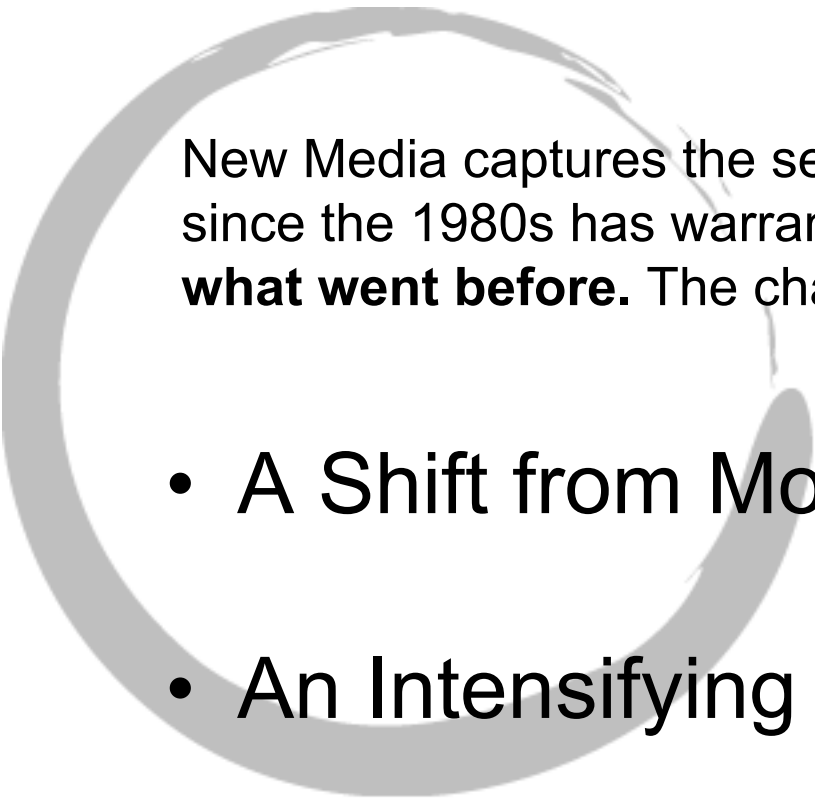


VM503
AESTHETICS AND HISTORY
OF NEW MEDIA


WEEK 2 CLASS 1
Defining New Media
As We May Think

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Fall 2009





New Media captures the sense that what has been happening since the 1980s has warranted **an absolute marking off from what went before**. The change includes:

- A Shift from Modernity to Postmodernity
 - An Intensifying Process of Globalization
 - Post-Fordism
 - A De-Centering of Established and Centralized Geopolitical Orders.
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Characteristics of New Media:

- A **system** of **knowledge** and **social | cultural meaning** that accompany its technological development and use; i.e. it is part of a much larger landscape of social and cultural change.
- **Digital, Integrated, and Networked; interactive, hypertextual, virtual, immersive, simulated.**
- **New Textual Experiences, Ways of Representing the World; Relationships Between the Subject/User and the Technology; Experiences of Embodiment, Identity, and Community; and Patterns of Organization (Production and Consumption).**

A study of these would reveal:

- **Computer-Mediated Communications** such as email, social networks, avatar-based environments, voice/video transmission, blogs, etc.
- **New Ways of Distributing and Consuming:** WWW, DVD, Podcasts, streaming, online games, etc.
- **Virtual Realities:** simulated environments and immersive representational spaces.
- **Transformations/Dislocations of Established Media:** photography, animation, TV, film, journalism...

Vannevar Bush: As We May Think (1945)

- Bush was the primary force behind the Manhattan Project.
- Developed the **Military-Industrial Complex** which nurtured collaboration between military, industry, and academic researchers.
- This essay illustrates Bush's vision of how technology could lead away from destruction and toward understanding.

As We May Think is remarkable for several reasons, including its predictions of:

- Speech Recognition and Text-to-Voice Software
- Optical Scanners
- Wearable Devices
- Wireless Networks.

At the end he asks: “All our steps in creating or absorbing material of the record proceed through one of the senses — the tactile when we touch keys, the oral when we speak or listen, the visual when we read. ***Is it not possible that some day the path may be established more directly?***”

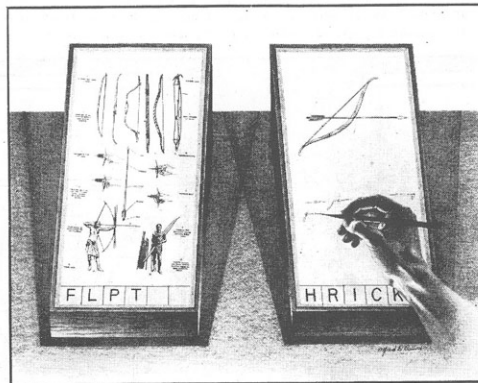
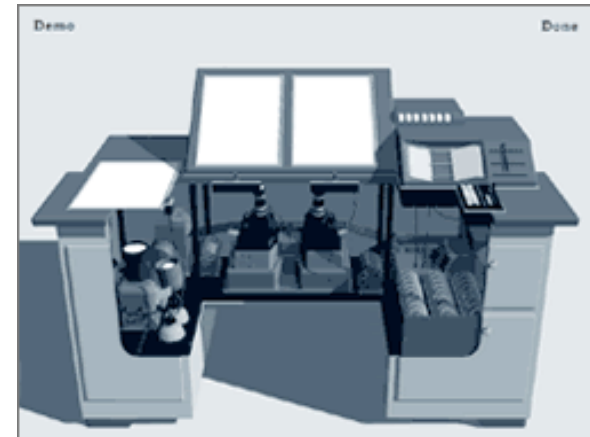
A few other things that struck me:

- In alluding to the “*growing mountain of research*,” he is expressing what the majority of us feel today; a sense of being overwhelmed by information.
- While Bush believes there is a need for *specialization*, he also understands that **collaboration** is essential. Collaboration is one of the hallmarks of New Media.
- *The world has arrived at an age of cheap complex devices of great reliability; and something is bound to come of it.* This refrain would be repeated in the 1980s when PCs became affordable and accessible to ordinary people.

- The *Encyclopoedia Britannica* could be reduced to the volume of a matchbox; indeed, look at **Wikipedia** (Bush never envisioned that encyclopedias would be collectively written by non-specialists).
- Bush predicts a new profession of *trail blazers*, whose task would be to establish useful trails through the enormous mass of the common record.*
- He recognizes that the current system for storing and retrieving information does not work.** What is needed is an effort to connect/bridge disciplines using a system that mirrors the human brain.

He proposes **The Memex**:

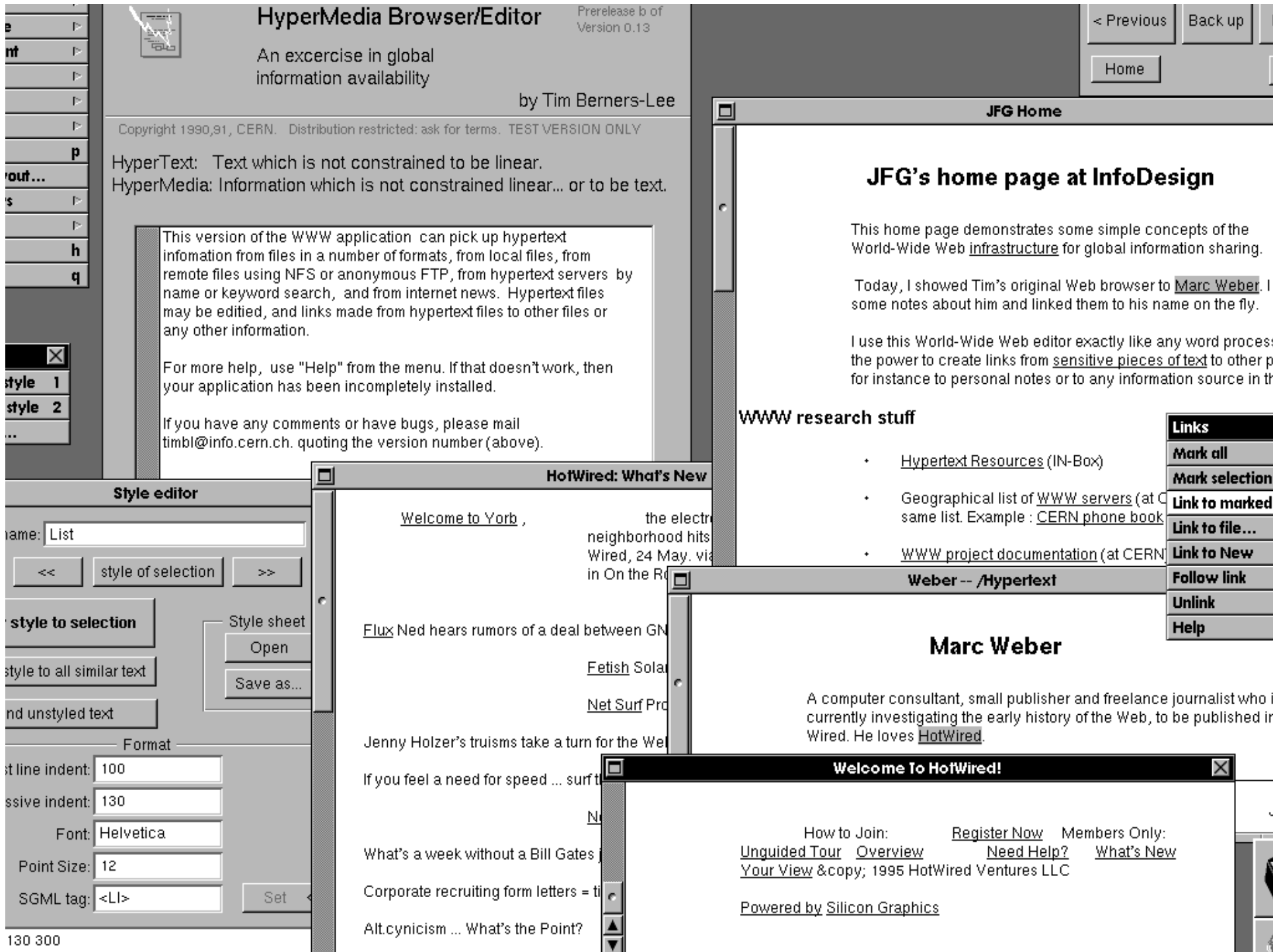
1. A device in which “an individual stores his books, records, and communications, and which is mechanized so that it may be consulted with exceeding speed and flexibility. It is an enlarged intimate supplement to his memory.”
2. One could also “add marginal notes and comments, taking advantage of one possible type of dry photography, and it could even be arranged so that he can do this by a stylus scheme, such as is now employed in the telautograph seen in railroad waiting rooms, just as though he had the physical page before him.”

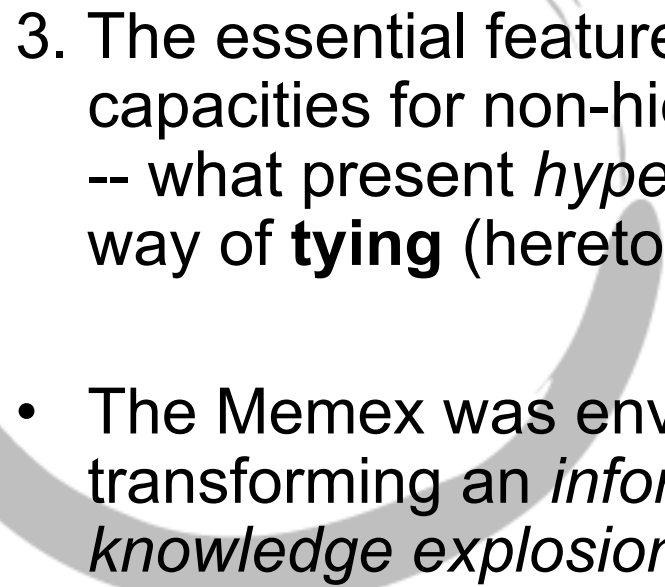
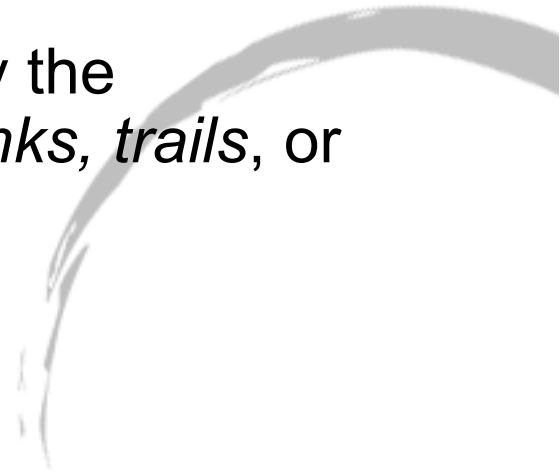


Memex in use is shown here. On one transparent screen the operator of the future writes notes and commentary dealing with reference material which is projected on the screen at left. Insertion of the proper code symbols at the bottom of right-hand screen will tie the new item to the earlier one after notes are photographed on supermicrofilm (*LIFE* 19(11), p. 124).

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3. The essential feature of the Memex lies in its capacities for non-hierarchical **associative indexing** -- what present *hypertext* systems term a **link** -- as a way of **tying** (heretofore) **separate items together**.
- The Memex was envisioned as a means of transforming an *information explosion* into a *knowledge explosion*. This remains one of the defining dreams of New Media.
 - New Media developers were inspired by the suggestion that scholars could create *links, trails, or pathways* through information.

- The Memex inspired Douglas Engelbart to invent the mouse, the word processor, and the **hyperlink**.
- Ted Nelson, too, would go on to discover the hyperlink (independent of Engelbart) and coin the terms **hypertext** and **hypermedia**, and wrote books that envisioned personal computing and network publishing.
- Have we met all of Bush's challenges? "These trails could be recorded." *Has this come to fruition?*