Digital Media Issues

communication... culture... technology...

Defining Digital Media

Communications Media

- Communications media - the institutions and organizations in which people work - press, cinema, broadcasting, publishing, online

- Forms and genres of these institutions - books, newspapers, films, magazines, tapes, discs, Web sites

New Media

- "New media" suggests something less settled, known, identified

- Changing set of formal and technological experiments

- Complex set of interactions between new technologies and established media forms

Connotations of New Media

- New media as "the latest thing"
- Connotation of better, cutting edge, avant-garde
- Social progress associated with technology
- Broad cultural resonance rather than a narrow technical or specialist application
- Some prefer digital media (digital binary code, 0's and 1's), symbolizes a clear break with analog media.

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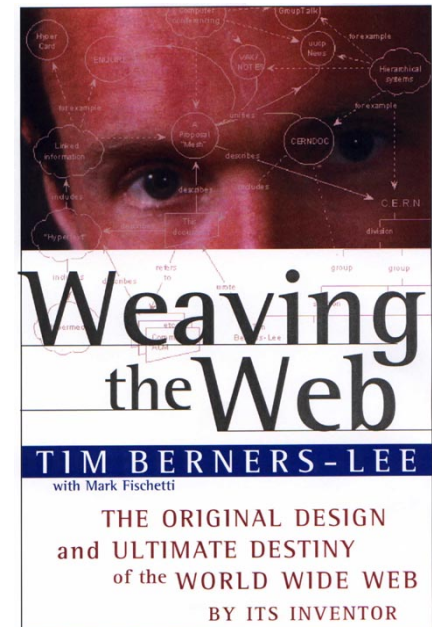
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Characteristics

- Digitality

- Interactivity

- Hypertextuality

- Dispersal – both as consumer and creator

- Virtuality

Weaving the Web

- Written by Tim Berners-Lee, 1999
- Worked at CERN in Switzerland
- Details his process for making the World Wide Web – www.
- "The vision that I have for the Web is about anything being connected to anything."
- Power in arranging ideas.
- The idea of hypertext has been around since 1965 – Ted Nelson

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Weaving the Web

- Original program was Enquire. Disk was ultimately lost.
- Left and returned to CERN, started working on Tangle and re-creating Enquire
- Worked within current standards and protocols of the Internet of the time
- Used a NEXT box to continue working on his project
- Mesh, Mine of Information, The Information Mine, World Wide Web
- The rest of book details the engineering challenges associated with widespread usage and acceptance of the Web, development of HTML
- "Starting a consortium, therefore, represented the best way for me to see the full span of the Web community as it spread into more and more areas."

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From Pencils to Pixels

- Stages of Literacy Technology
  - Restricted communication function; small number of initiates
  - Adapted to familiar functions associated with an older technology
  - Decreased costs improves spread of new technology; better able to mimic ordinary forms of communication
  - New literacy; technology creates original forms of communication
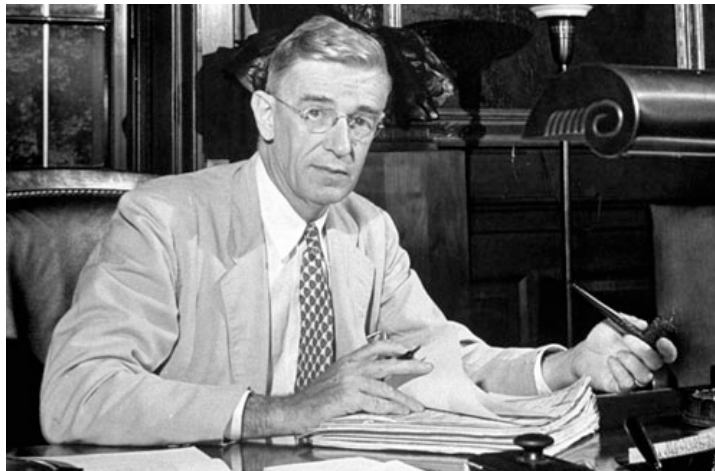 - Ultimately effects older technologies

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Vannevar Bush 1890-1974

- Director of Federal Office of Scientific Research and Development

- "As We May Think" appeared in Atlantic Monthly in 1945

- Considered insightful in regard to technology and human thinking processes.

- Writing post-WWII, questions role of scientists in the future and our ability to use the knowledge being created through technology.
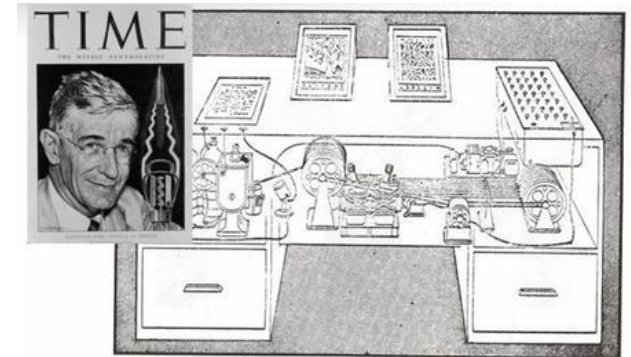
Memex

- Randomly named; concept rather than an actual device
- "A device in which an individual stores all his books, records, and communications, and which is mechanized so that it may be consulted with exceeding speed and flexibility"
- "enlarged intimate supplement to memory"
- Desk with screens, keyboard, buttons, and levers
- Large store of information; saved on microfilm
- Data could be purchased or input directly
- Concept of "dry photography"; stylus input device
- Access via numeric or mnemonic codes
- Several projection positions; view many documents at a time
- Process of tying two items together - associative indexing
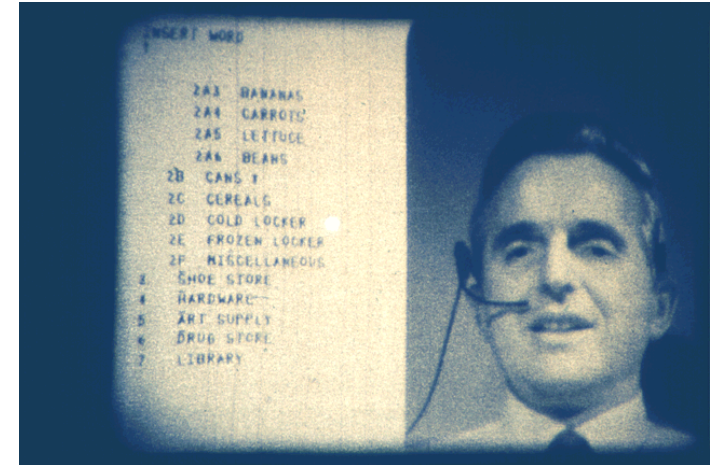- Predictions of "wholly new forms of encyclopedias" with ready-made associations.

Memex in the form of a desk would instantly bring files and material on any subject to the operator's fingertips. Slanting translucent viewing screens magnify supermicrofilm filed by code numbers. At left is a mechanism which automatically photographs longhand notes, pictures and letters, then files them in the desk for future reference (LIFE 19(11), p. 123).

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Doug Engelbart

- Born in 1925-2013. Was director of his own company, Bootstrap Institute
- Navy during WWII
- Influenced by "As We May Think"
- 1948 worked for NACA Ames Laboratory- precursor to NASA
- Professor at Berkeley then researcher at Stanford Research Institute
- Invented many defining features of computer interfaces - mouse, window, word processor
- Wrote Augmenting Human Intellect – "increasing the capability of a man to approach a complex problem situation, to gain comprehension to suit his particular needs, and to derive solutions to problems."
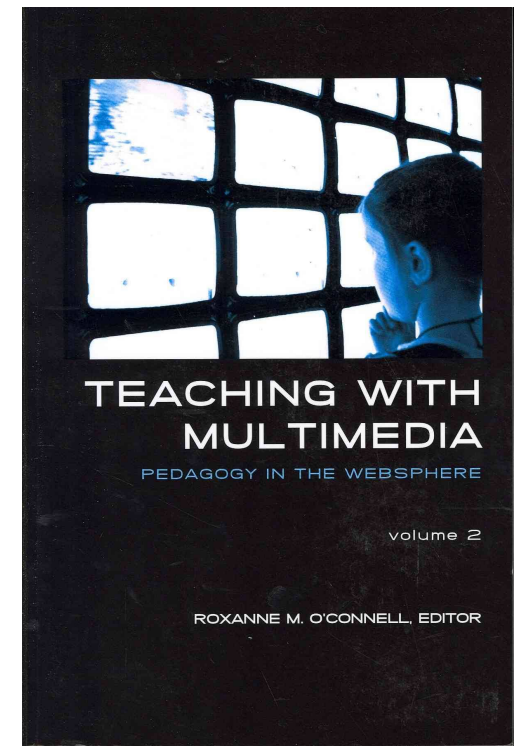
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Thinking Critically About New Media

- Published in 2011, but actually wrote it a couple years before
- Highlights changes over time to academic programs in teaching new media and multimedia skills
- Theory vs. Practice
- How to integrate into an already packed curriculum
- Hiring trends
- Difficulty in finding professors who can teach these skills and concepts
- Concepts integrated with skills, skills build across the semester

TEACHING WITH MULTIMEDIA
PEDAGOGY IN THE WEBSPHERE
volume 2
ROXANNE M. O'CONNELL, EDITOR

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Thinking Critically About New Media

- Judgment as to appropriateness of tools, content and presentation
- Perspective: news stories and current events help students gain valuable perspective on digital issues - music sharing, social media, net neutrality, online dating, digital divide... now fitness tracking, ride hailing and house sharing, location-based services, entertainment, diversity in tech...
- Tech in the service of reporting and storytelling
- Flexibility, innovation and entrepreneurship
- Tools to thinking critically and creatively about media, both now and in the future