Thema 7 Hypertext-Systeme 1

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Übersicht

- Abgrenzung
- Geschichte
- Struktur
- Systeme

Abgrenzung

- Memex (1945)
- Hypertext-Systeme 2
- closed hypertext systems

Hyperspace ohne Internet

- Hypertext kann man sich kaum vorstellen ohne Internet
- wie könnte das sonst aussehen?

Geschichte

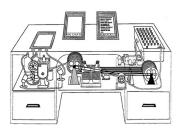
- 1945: As we may think
- 1965: A File Structure for the Complex, the Changing and the Indeterminate
- 1980: ENQUIRE am CERN
- 1983: HyperTIES für IBM PCs
- 1987: HyperCard für MAC
- 1988: Hypertext on Hypertext
- 1989: Information Management: a Proposal
- 1990: Windows Help & Hypertext hands-on

Struktur

- Name
- Autor
- Zeitliche Einordnung
- Zielgruppe
- Userinterface / Bedienmöglichkeiten
- Links / Strukturen

Memex

- **1945**
- Vannevar Bush: As We May Think.
- Konzept
- maschinellen Unterstützung des menschlichen Gedächtnisses und des assoziativen Denkens
- Für die wissenschaftliche tägliche Arbeit



Memex Funktionen

- Userinterface / Bedienmöglichkeiten
 - Schreibtisch
 - Kombination elektromechanischen Kontrollen und Mikrofilmgeräten
 - Kamera am Kopf des Nutzers
 - Schreibmaschine (Spracherkennung)
 - Hebeln zum Vor- und Zurückblättern
 - Dokumente speichern und wieder aufrufen
 - berührungssensitiven Bildschirmen
- Links / Strukturen
 - Seiten sind verknüpft

Xanadu

- **1**960
- Langzeitprojekt (Open source in 1999)
- Ted Nelson
- mehr Framework als Programm
- bestehend aus Prototypen und Modelle
- "docuverse" ein elektronische universale Bibliothek

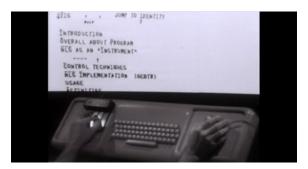


Xanadu Funktionen

- Userinterface / Bedienmöglichkeiten
 - XXXXXX
- Links / Strukturen
 - Kommentare, Notizen und Verknüpfungen innerhalb der Dokumente zu anderen Dokumenten

NLS: oN-Line System

- 1960s
- Doug Engelbart, Stanford Research Institute
- Ziel war es "den menschlichen Intellekt zu erweitern"
 - Computer zur direkten Interaktion
 - Computer Bildschirme zur Darstellung von Text
- Terminal



NLS: oN-Line System Funktionen

- Userinterface / Bedienmöglichkeiten
 - Maus
 - 5-Finger Tastatur
 - Interaktives Textbearbeiten
- Links / Strukturen
 - Dokumente sind hierarchische strukturiert
 - Jedes Segment hat eine ID
 - Jede ID kann verlinkt werden
 - Labels können verlinkt werden

HES: Hypertext Editing System

- IBM/360 Model 50 mainframe
- online production of printed documents and the exploration of the hypertext concept



HES: Hypertext Editing System Funktionen

- Invisible control information allows the printing of the entire hypertext in linear form
- pointer manipulation to text fragments
- If one instance of text is modified the changed text will show up in all other places as well [Yankelovich et al. 85, p. 23]

FRESS: File Retrieval and Editing System Funktionen

- windows
- tag: one-way link
- jumps: bi-directional links
- backtrack through a sequence of links

NoteCards



Document Examiner

- Document Examiner: Delivery Interface for Hypertext Documents [Walker 87, p. 307]
- inspired by Doug Engelbart NLS
- record. It has a title and contains the description
- unique identifier
- book metaphor. A document-like flow of text, assembling a sequence of records into a single window
- Inclusion, Precis, Crossref, Implicit[Walker 87, p. 310]
- four panes. The content area, the Candidates and Bookmarks pane and the command region below.
- A click on any link does not immediately jump to the destination; instead the link is added to a list of candidates
- bookmarks
- necessity to integrate annotations with versioning

HyperTIES

- simplified approach in browsing the hypertext [Nielsen 90, p. 120]
- MS-DOS
- click on hyperlinks if a mouse or a touch screen is present.
- all interactions can be performed with the arrow keys
- article. It has a title and a short description about its content. The title is used to automatically place links wherever the very same text phrase appears in other articles
- description is used as a preview for a link

Hyper Card

■ rectangular areas on top of the text layer

Storyspace

- 1990 by Mark Bernstein
- Macintosh (Portierung für Windows)
- Hyperlinks do not have to be coded, they are created and directly manipulated with the mouse
- diagram mode visually reveals the logical structure of arguments
- network of writing spaces
- nodes inside a writing space can link to any other writing space
- Images can be placed into the flow of text
- Links are not highlighted
- links can point to several targets at the same time
- conditions to links

Windows Help

■ Windows Help