

Time Travel: A Live Demo of the Intermedia Hypertext System – Circa 1989

Norman K. Meyrowitz
Brown University
Department of Computer Science
Providence, RI, USA
nkm@brown.edu

ABSTRACT

In the late 1980s, before the WWW came to be, hypertext was a hot new field. Brown University's Institute for Information and Scholarship (IRIS) developed Intermedia, a networked, multiuser, multi application hypermedia system that was well-known and oft demoed at conferences (and used by the speaker for his keynote at Hypertext '89). Its most lasting contribution has been the speaker's coining of the word "anchor" to represent the "sticky selection" that is the source or destination of a link within documents. Anchors generalized these link endpoints to include any media type.

Intermedia's development began in 1985. Its paradigm was the integration of bi-directional hypermedia links between different applications in what was then the graphical desktop interface introduced by Apple only a year earlier.

Intermedia had many features, some of which have since become mainstream – anchors (links to a span of text or a set of objects, rather than just a point), full-text indexing, dictionary lookup, links in different media type – and some still yet to be common in web browser-based systems– such as bi-directional links, integrated annotation capabilities, tracking of anchors in edited documents, and simultaneous linking by multiple individuals across the network.

Two years ago, the Computer History Museum asked if the speaker could resurrect Intermedia to show at the celebration of the 50th Anniversary of the Doug Engelbart's Mother-of-All-Demos. It was believed that all of the backup disks and tapes had deteriorated, but through the intervention of the hypertext gods, a disk was found that worked and had a full-installation of Intermedia, along with demo files – including the Hypertext '89 keynote content.

The speaker procured some Macintosh IICI machines, monitors, mice, and keyboards on eBay and amazingly, Intermedia ran.

In this presentation, you will see a fully-operational hypermedia system running quite nicely on a computer that is 250,000 times slower than today's high-end PCs.

CCS CONCEPTS

• **Human-centered computing** → **Hypertext / hypermedia**; *Collaborative content creation*; • **Social and professional topics** → **History of software**.

KEYWORDS

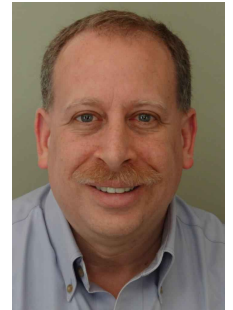
hypertext; hypermedia; linking; anchors; multimedia; GUI; Inter-media

ACM Reference Format:

Normen K. Meyrowitz. 2020. Time Travel: A Live Demo of the Intermedia Hypertext System – Circa 1989. In *3rd Workshop on Human Factors in Hypertext (HUMAN'20)*, December 4, 2020, Virtual Event, USA. ACM, New York, NY, USA, 1 page. <https://doi.org/10.1145/3406853.3432661>

BIOGRAPHY

Norm Meyrowitz is currently and Adjunct Professor of the Practice of Computer Science at Brown University. He received an Sc.B. in Computer Science from Brown in 1981, and is recognized for his work on linking and multimedia technology for the Internet and for the evolution of web development software. In the 1980s, Norm served as a Co-Director of Brown University's Institute for Research in Information and Scholarship, where he led the development of Intermedia, a hypermedia system that influenced both the creator of the web and the creator of the Mosaic web browser. In mid-1980s, he helped start two ACM conferences – OOPSLA (Object-Oriented Programming, Systems, and Languages) and Hypertext '87, which continue to this day. Following his work in academia, Norm worked for several years as the Director of System/User Software for pen/tablet pioneer GO Corporation before transitioning to his role as President of Product Development at Macromedia (later acquired by Adobe). At Macromedia, Norm oversaw a variety of web development and multimedia products at Macromedia, including Shockwave, Dreamweaver, Flash, the latter of which had more than 4 billion downloads in its heyday in the 1990s and early 2000s.



Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the owner/author(s).

HUMAN'20, December 4, 2020, Virtual Event, USA

© 2020 Copyright held by the owner/author(s).

ACM ISBN 978-1-4503-8058-4/20/12.

<https://doi.org/10.1145/3406853.3432661>