# Chapter 2 Odes to Ted Nelson

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## 2.1 Intertwingling

Ted Nelson's intertwingled brains, Spawn repeating rhythmic trains Telling stories in poetic scenes From ComputerLib and Dream Machines. His restless mind reveals a lyric vision Shining brightly with intense precision.

His playful, play-filled frantic imagery Expands my mind with his skullduggery Masquerading as intended trickery But always making planful mockery Of those who believe in standard crockery. Oh this must sound like jabberwockery.

But honestly I speak without temerity. I merely wish to add to his celebrity And honor him for his celerity A joyful sprite of youthful clarity.

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## 2.2 Playful Mayhem

Playful mayhem
Slippery fun to invent words that capture bold ideas
Sworfing flinks transclude reality
Twinkling, awesome Nelson
Transpire, conspire, inspire
Transclude, conclude, include
Persistent commitment to
A life with one clear purpose
Ever-connecting hypermind

Ted's never met a limit he didn't want to break He's never found a rule he didn't want to fake.

Self-confident clarity, true to his beliefs Original visions, zigging-zagging Fresh humping, bumping To what Markoff called "his grander ideals"

## 2.3 Early Admiration

My earliest description of Ted Nelson was on the 1988 ACM disk *Hypertext on Hypertext*, which was the first electronic journal, incorporating the articles from the July 1988 issue of *Communications of the ACM*. These articles were derived from the 1987 Hypertext conference. We created the articles as hypertext documents using our HyperTies system (www.cs.umd.edu/hcil/hyperties). The tilde marks (~) surround phrases that were highlighted selectable links that could be clicked on to jump to the related article.

Our research and development were inspired by Vannevar Bush's 1945 description of Memex, in which links were numeric codes that had to be typed in and by Ted Nelson's work with Andries Van Dam. Only later did we see Doug Engelbart's 1968 demo video, which had selectable list items. So while there were several precedents, I take credit for the highlighted textual link embedded in sentences. I invented the highlighted textual link in 1984, while working with grad student Dan Ostroff, as part of our development of an electronic encyclopedia for the emerging U.S. Holocaust Memorial Museum. We ran empirical studies of different highlighting schemes and tested user capacity to navigate as well as ability to comprehend the paragraphs of text. We called the highlighted textual links, "embedded menus," but Tim Berners-Lee referred to them with the more compelling term "hot spots" in citing our work in his spring 1989 manifesto for the web.

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Fig. 2.1 Example image of Ted Nelson in hyperties system [1]

A pioneering visionary of universal hypertext systems including the social and legal structures; keynote speaker at Hypertext '87 Workshop.

Ted Nelson (See Fig. 2.1) Keynote Speaker at Hypertext '87 Workshop.

Ted Nelson's creative visions are amply displayed in his lively books, *Computer Lib/Dream Machines* and *Literary Machines*, which detail his hypertext vision. Nelson understood that major social and legal changes would be necessary to realize his concept of universal hypertext environment. His XANADU system supported enormous docuverses including complex links among literary sources, quotations, critiques, etc. and a vast global network accessible from community-oriented computer centers.

Nelson worked with the hypertext group at Brown University and collaborated with Andries Van Dam in the 1970s. Ted Nelson was one of the three keynote speakers at the Hypertext 87 Workshop. Recently AutoCAD, Inc. initiated a collaboration with Nelson and his Xanadu project.

### 2.4 Second Admiration

A year later I wrote about Ted Nelson for the world's first electronic book [2], as determined by our Library of Congress colleagues asking for guidance about how to catalog it.

Ted Nelson's Xanadu.

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The first to coin the terms *hypertext* and *hypermedia* in his book *Dream Machines*.

In his book "Dream Machines," Nelson developed his ideas about augmentation with an emphasis on creating a global, unified literary environment. This environment looked beyond simple hierarchical relations to a densely interwoven network of nodes which would reflect the ideas within the human mind. His hypertext system, Xanadu, was in fact to be a network of interconnected hypertext engines used as an environment for both cooperative thinking and the electronic publication of hypertext works.

#### 2.5 Photos at Oxford Internet Institute

My photos of Ted Nelson (Figs. 2.2 and 2.3) show him to be cheerful and ready for creativity.



Fig. 2.2 Ted Nelson, Jennifer Preece, and Marlene Mallicoat at Oxford Internet Institute in June 2006. Ted has his colored pens ready for action

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Fig. 2.3 Ted Nelson and author at Oxford Internet Institute in June 2006. Author is trying to show that Ted Nelson is number one

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#### References

- 1. Shneiderman B (1988) Hypertext on hypertext (Distributed on hyperties disk with 1Mbyte data and graphics incorporating). Communications of the ACM, ACM Press, New York
- 2. Shneiderman B, Kearsley G (1989) Hypertext hands-on!: an introduction to a new way of organizing and accessing information. Addison-Wesley, Reading world's first electronic book