

Press Release
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PROFESSOR NELSON'S ALTERNATIVE COMPUTER WORLD

Professor Ted Nelson, originator of the hypertext concept, predicted the World Wide Web forty years ago -- long before anyone else could even imagine such a system. Professor Nelson believes it is still difficulties of imagination that hold back real computer progress.

Today at the Open Research Forum at the Keio SFC campus, Professor Nelson will demonstrate a pre-release version of his new multi-dimensional software, ZigZagTM. ZigZag, currently being implemented at the University of Jyvaskyla in Finland, is based on cells, like a spreadsheet. But it is not limited to two dimensions, as a typical spreadsheet is. Links are made between cells in as many dimensions as a user desires. Individual users are free to create whatever dimensions and connections they require to facilitate their work. Data is not locked up in applications and files as in most computer software today.

With ZigZag, users are free to make links that are useful *to them*. With today's typical software, how does a user make a comment on an electronic document? A comment linked to a spreadsheet cell, for example. With ZigZag, a comment, an image or document scan, or anything useful to the user can be connected directly to any spreadsheet cell. As another example -- perhaps the user receives a voice message that triggers a calendar entry. With ZigZag a direct connection between these two items can be made. No more wasted cutting and pasting from one application to another! User productivity dramatically increases.

To understand ZigZag, it is useful to understand Professor Nelson's point of view.

"The computer simulates imaginary worlds. Having it simulate an imaginary world of paper, as in today's software, is a misleading restriction of its powers and usefulness. ZigZag is intended to be a new abstract world of greater power and depth."

It is the intention of the Transpublishing consortium here at Keio SFC to develop applitudes (applications that are not compartmentalized) based on ZigZag that will improve productivity for consortium members, as well as add value to their existing software products.

Professor Nelson's vision has always been to free individuals from the limitations of paper into a world of multi-dimensional connections that more closely resemble human creative thinking. But the computer world has gone in an opposite direction, into the graphical simulation of paper. Today's software is tyrannical and

disempowering -- a source of frustration and disappointment to most users. Professor Nelson characterizes this state of affairs thusly: "Using computers to simulate paper is like tearing the wings off a 747 and driving it down the highway." ZigZag is intended as an empowering alternative to today's software universe, a theoretical proof that such alternative universes are possible and useful.

Professor Nelson's concept of hypertext is much broader than the World Wide Web. The Web is a mere subset of his design, which he calls Project Xanadu (R). The Web doesn't deal with such important functions as copyright protection, version management, true micropayment, two-way links. All of these are aspects of the simple Xanadu design. Xanadu is designed to be "artist-friendly", in stark contrast to today's Web, where copyright is notoriously ignored and micropayment is impossible.

Professor Nelson continues to implement these ideals here at Keio SFC in such projects as Transpublishing. Transpublishing, which is being demonstrated in the northern lounge area of Delta building, allows individuals to create composite documents combining their own original material with material transcluded (which means included by pointing to the original, rather than making a copy) from other electronic documents. Copyright of transcluded material is maintained by the original author, and micropayment (if desired by the publisher of the transcluded material) is easily made. Professor Nelson holds a patent on a micropayment system designed specifically for this kind of "Transpublishing"; the Transpublishing consortium intends to integrate his "HyperCoin" system with the current Transpublishing server.

Transpublishing is designed to facilitate the compositing of small pieces of material from any number of sources. Teacher T preparing a lesson on Churchill, for example, can transclude a photo from site P, audio clips of a rousing speech from site S, historical commentary from site H -- all mixed in with the teacher's own prose. The material from the photographer, the Churchill estate, and the historian are all seamlessly blended in the lesson. When the student reads the lesson, the various pieces are brought in (not copied) at the designated place.

The Transpublishing consortium actively seeks new members to support the research and development of these exciting new ideas.

Professor Nelson' background is in media and philosophy. He came from a media family. By the age of twenty-two he was already a writer, editor, filmmaker, professional actor and prize-winning playwright. His degrees are in Philosophy and Sociology, and he has strong interests in Literature, History and Film. All of his designs have been done with the goal of empowering the individual to be as creative and productive as possible.

RESOURCES:

ZigZag Web sites: [Http://www.xanadu.net/zigzag/](http://www.xanadu.net/zigzag/) and www.gzigzag.org
(development in Finland)

Transpublishing Web site: <http://hts.iprs.sfc.keio.ac.jp/>

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