Future Visions of Common-Use Hypertext: introduction to a special issue

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In 1945, Vannevar Bush talked about exchanging Memex trails to allow colleagues to work on similar material in different contexts (Bush 1945). In 1960, Ted Nelson took a computer course and foresaw a vision of electronic information connected and reused, recontextualised - deeply intertwined (Nelson 1987) - but with all its original contexts also available. In 1968 Douglas Englebart gave 'the mother of all software demos', an incredible visionary outline of the future of computing: linked documentation, annotations, video conferencing, as well as the famous mouse.

All of these events contributed to the birth of a new field - Hypertext - described by Nelson as "non-linear reading and writing". Thoughout the 1970s and 1980s, hypertext became realised through systems such as Guide, Microcosm, Hypercard, and many others. There was also, of course, the development of Project Xanadu at AutoDesk. It could be argued that none of these systems became 'commonly used', but rather were deployed in various vertical and niche markets, or never fully realised their potentials.

Another view is that common-use hypertext grew out of ARPANET, moving on through gophers until, in 1990, came HTML. Famously, the first paper on HTML was rejected from the Hypertext conference of the time as 'not hypertextual enough'. This view, and its implications, have followed us since, as the Web seems to have proved that HTML/HTTP is just hypertextual enough.

This special issue arises out of a panel held during the ACM Hypertext '03 conference at the University of Nottingham. Panelists were invited to sell their vision as 'the next big thing' in hypertext, either to supplement, augment or supplant 'modern day' systems, which, let's face it, is the Web. Ted Nelson sold the idea of his system, ZigZag, as a complete, power beginner's replacement for modern computer paradigms, 'a new cosmology'. This special issue carries, for the first time, a full technical specification of ZigZag by Nelson. First conceived in 1983, ZigZag has found new life in recent years (Moore and Brailsford).

In other contributions to the panel that are now included in this issue, Peter Murray-Rust presented his ideal of an XML-enabled world of 'datumsets' (Murray-Rust and Rzepa), and Paul De Bra gave his view of a personalised Web, one that responds to each user's needs, providing tailored, individualised experiences (De Bra et al.).

The subsequent call for papers based on the panel theme attracted other views of the future. Brown and Brown point out that the distinction between processes for reading and writing is artificial, and propose annotations as the solution for integrating reading and writing.

Di Iorio and Vitali argue that hypertext, and the Web in particular, need to be writable, with blogs, wikis and transclusions, and discuss how xanalogical storage can be implemented. Edmonds et al. discuss their view that tomorrow's personal data storage and management applications will arise from today's blogging tools.

Catania et al. describe a system for adding a rich contextual layer to the Web, using meta-information - giving you "what you want, when you want it".

Harper et al. envision a world in which tiny mobile devices form part of an ambient network and can be provided with personalised data.

On a more academic note, Mayans discusses how the creation of a global hypertext on a broad topic - in this case, mathematics - could transform the way people learn, especially when the topic is fundamentally densely connected as is mathematics.

A very interesting point of view - that powerful hypertext is currently alive and well and in common everyday use, as email! - is discussed by Schroefel et al.

Perhaps the most unusual of these visions is by Obendorf who argues there is no single grand system to solve all ills but rather that a plethora of small, specialist authoring tools will become commonplace.

We hope this special issue will inspire readers to consider new ways to embed their research in contexts and situations that are accessible to the majority, making their technology, not just the next 'cool' thing, but the next 'big thing' in common use hypertext.

References


Link
The Demo (of the online system (NLS) by Douglas C. Engelbart et al. on December 9, 1968, in the Augmentation Research Center, Stanford Research Institute, Menlo Park, CA) [http://sloan.stanford.edu/mousesite/1968Demo.html]