Editorial – Electronic Publishing

A description of the scope of electronic publishing and its current state in practice can be found in the paper by D. Brailsford and R. Beach. The paper describes the difficulties and successes of two previous experiments in electronic publishing and then explains the choices made for the production methods of the journal *Electronic Publishing – origination, dissemination and design*. Why *EP-odd* is still, as yet, published in paper form and details of how information technology is used to ease its production illustrate the limitations and advantages of electronic publishing today.

Software tools can be much more effective in helping us handle and manipulate documents if the documents have structures that are understood by those tools. We are all so familiar with the conventions used to signify document structure that we usually take them for granted: we understand objects such as headings and their relation to chapters, and how cross-references relate to remote parts of the main text. We rarely need to be consciously aware of how typographic features such as font family, font size and the relative positioning of objects on a page are used by authors and publishers to express these structures. There is currently a great deal of interest in structured documents and how to manipulate and transmit them. R. Furuta's paper offers a classification system that can be used to describe document structures. It suggests that a typical document may be represented using three structures: primary structures expressing composition, secondary structures for links such as cross-references, and auxiliary structures for external targets of secondary structures (bibliographic databases for example). The taxonomy is applied to some well-known methods of representing documents, and some suggestions made for extending it to hypertext by adding semantics of user interaction.

If documents are to be exchanged between dissimilar systems there must be some agreement on how the documents are represented. There are two ISO standards applicable to the exchange of documents, and they are described and compared in the paper by H. Brown. Explanation and examples are given in enough detail for the non-specialist to get a general understanding of document structures and the methods currently used to express them. The documents referred to are all intended for final representation on paper: hypertext is not yet catered for by the standards (although this issue is currently being addressed).

Each of the above papers suggests an obvious question to ask about electronic publishing: why is the final presentation to the reader not usually in electronic form? Partly the answer is economic and technical, as explained in the paper by Brailsford and Beach, but that is not the only obstacle. Hypertext is still an immature medium: the technology is advancing rapidly but the skills needed by both author and reader are not yet common. I. Ritchie's paper reviews the current state of hypertext, both research and commercial, and outlines some of the problems. In particular it describes one approach to the problems of organising and navigating large documents on screen.

The abilities and limitations of the human visual system are discussed and related to the historical development of technical standards for type in the paper by R. Morris. It also describes how properties of the visual system can be exploited to improve the subjective quality of digital type within economic limitations.

Although these papers are mainly concerned with technical advances they also contain several examples of how human skills need time to catch up with the available technology. For actual improvements in quality to be realised we have to recognise and use existing document design skills where they are still applicable and develop new skills where they are not.

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