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Editorial

In many ways the 'EP-even' conferences have come to be regarded as a companion series to the EP-odd journal and we recently had the pleasure of participating in the program committee meeting for the next of these conferences — Electronic Publishing 1992 (EP92) — which is to be held in Lausanne, Switzerland, from April 7–10, 1992. Coincidentally, the sponsor of EP92, the École Polytéchnique Fédérale, was responsible for the first scholarly conference devoted to document preparation systems in February 1981, and, again, this meeting was held in Lausanne.

The deliberations that accompany the planning of a conference's program naturally prompt some reflections about the characteristics of the subject area. These reflections acquire historical overtones given that EP92 will be the fourth in a biennial series of international conferences and that the two conferences in Lausanne span more than ten years of research.

Electronic publishing continues to encompass a wide range of topics but it is interesting to note that the popular perception of it tends to focus on the delivery mechanism used to disseminate a publication. Consequently, many projects devoted to providing such software regard the issues of creating and correcting the publication, and of designing the program itself, as being of secondary importance. However, it is precisely these questions of representation, manipulation, and design that have remained central and challenging within EP research.

As in any area, the topics of active research shift and evolve over time. More tightly-focused conferences arise, both for the most dynamic and rapidly changing areas, but also for the most established and sophisticated areas. Nevertheless, the importance of broader-based avenues of communication remains, both to serve newly developing areas and to transmit information across the sometimes artificial lines of specialization.

An important characteristic of the study of electronic publishing is its firm grounding in the realm of the practical and the strong pressure to demonstrate relevance and applicability. There is a danger here, that things could degenerate into nothing more than a study of systems, implementations and 'hacks'. However, a review of the papers that have appeared in EP-odd so far shows an important thread of work illustrating the underlying models and principles.

A further characteristic of EP is the wide range of techniques it draws from elsewhere. For example, the areas of computer science reflected in electronic publishing include distributed and parallel processing, compiler construction technology, and textual and visual language design techniques. Lately, one area of interest has been the infusion of techniques from information retrieval (IR) into document processing and hypertextual applications. A future issue of EP-odd, guest edited by Dario Lucarella, will focus on the use of IR results in the domain of electronic publishing.

The first paper in the present issue, by Barnes and Mamrak, returns to a long-standing subject of interest: the characteristics of the markup representation for a document that is ultimately intended to be rendered in printed form. In particular Barnes and Mamrak propose a uniform representation for a class of markup languages. Tools developed to

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manipulate the document's objects could then be designed for the uniform representation rather than for each of the independent markup languages in the class.

The remaining three contributions in the issue focus on aspects of hypertext. Secondarily, as will become clear on their reading, the contributions also show that there are quite a number of opinions as to what hypertext *is*!

An important auxiliary feature of commercially-successful hypertext systems is the ability to search the information space independently of predefined links. Savoy and Desbois, illustrating the infusion of IR techniques into hypertext, describe the automatic provision of a global document retrieval mechanism that is more sophisticated than simple string matching. In a sense, the automatic derivation by a computer system of the relationships among concepts in such a hypertext replaces the manual hard-coding of links by a human author.

Peter Brown considers a quite different aspect of hypertext system implementation — the specification of how the hypertext's objects should appear when presented to a reader. Borrowing from the work on structured documents, he shows the translation and adaptation of techniques developed for representing objects that were ultimately destined for static representation on paper into representation of the dynamic objects found in the interactive world of hypertext.

The third hypertextually-related item in this issue is the initial installment of 'EP-odds and ends', as promised in last issue's editorial. This issue's essay includes speculations about whether 'hypertext' can indeed be considered a unified area of study or if it is an umbrella for two or more quite dissimilar directions of investigation.

Will the 'ultimate' electronic publishing system ever be developed? From our imperfect vantage point, the past decade's experience suggests that it appears unlikely. As technologies mature and stabilize, and as the level of expertise of the systems' users increases, heightened expectations coupled with more capable hardware open increasingly sophisticated and varied avenues for exploration. We shall probably have to return to Lausanne, ten years hence, to assess once again the state of electronic publishing research.

RICHARD FURUTA AND DAVID BRAILSFORD