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Perspectives in Electronic Publishing:
Experiments with a New Electronic Journal Model

by

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ABSTRACT

FACULTY OF ENGINEERING AND APPLIED SCIENCE
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The Internet and subsequently the World Wide Web made it possible for individual authors and new, independently-produced electronic publications to reach vastly greater numbers of readers than had previously been possible. The proliferation of electronic versions of commercial print journals that followed, however, has so far done little to alter the formal structures, character and culture of scholarly journals from the user's perspective. The Web also represents the first large-scale use of a hypertext system, but hypertext developers have been disdainful of it as a limited implementation of other models. In turn, a criticism of some hypertext systems is that they have been too focused on system performance rather than the needs of users. This thesis examines the contention that augmenting the Web with a hypertext linking service will support the development of a new type of interconnected journal that allows users to explore individual lines of enquiry more efficiently. In this case the 'journal' frames a user-centric information environment, where selected documents can be distributed and accessed anywhere on the Web. Editorially-*added* links act as the binding between the resources selected for inclusion, and the selection and commentary on documents exercise the journal's editorial 'voice'.

A 'journal' based on this model was built and subjected to extensive evaluation by a targetted specialist group. In a series of tests these users were invited to offer their views on this and more general journal models; because this was not a hypothetical model their responses could be cross-checked against the results of their experiences of using the new journal model. Thus, users could not hide their true preferences. Although small in number, the target evaluation group provided strong reactions both for and against the model, revealing some of the challenges that radical new electronic journal models face if the structure of the traditional printed journal is to be displaced in favour of journals that can properly exploit the prospect of fully interconnected and accessible networked distribution.

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