Playing Many Parts: Models of Collaboration in an Electronic Edition

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Panel Abstract

Editorial theory has in recent years been much concerned with re-evaluating the assumptions that lie behind the practice of editing, in light of the arguments promulgated by McGann and others that the text we edit is of necessity constructed through social interaction. A parallel argument makes the claim that the electronic medium is uniquely situated to put into practice the claims of the theorists (exemplary articles are included in the collection edited by Landow). While creative collaboration is not a norm in the humanities, it is very much at the centre of disciplines in the performing arts: drama, in particular, involves the interaction of many kinds of creative endeavour before a play is staged. The *Internet Shakespeare Editions* are uniquely in a position to explore varieties of collaboration that borrow from other disciplines: the open source movement in software development, and the well-developed traditions of collective creativity in the performance arts, since the concept of 'text' in a play by Shakespeare can - and arguably should - be extended to include the history of his plays in performance. This panel will provide a forum to discuss the electronic edition as an exemplar of the creation of a social/performance text as the various contributors to an edition interact and learn from each other.

Many of the collaborative activities in the preparation of an edition for a print press are so familiar as to be transparent: peer review, copy editing, data entry, printing, binding, distributing and so on. The print interface is also very stable, with minimal experimentation with the appearance of the print on the page (but see Jowett, Grusin and Bolter). Those working in the electronic medium, however, are still experimenting with ways of displaying the text and its associated navigational structures. The result is that the lonely textual scholar will ideally become involved in the process of creating much more than simply a word-processor file to send off to the publisher. The team of technical designers and programmers are unlikely to understand what the editor sees as important or what a typical user of the edition will be seeking, and the textual scholar is unlikely to know what opportunities the full capabilities of the medium offer: thus the most effective edition will be the result of a deep and interdisciplinary collaboration between the various creators.

The *Internet Shakespeare Editions* is a collaboration in many ways. An academic Editorial Board oversees general standards; plays are edited by individual editors, or (in several cases) further collaboration between scholars; the General Textual Editor works with the editors to ensure quality and consistency; and technical experts work on separate but interrelated tasks - the development of the XML structure that is the basis for textual materials on the site, the creation of databases to display images of the texts and of performance materials, the graphic design of the site, and the stylesheets that determine the overall look of both static and dynamic pages.

The analogy with the performing arts is persuasive, since they typically involve a similar interaction between specialists (set design, costume design, choreography, lighting), creative artists (actors, the author perhaps) and administrative/creative personnel (director, producer). Publishers and actors are similarly concerned to reach and engage their audiences. Where the analogy fails, however, is in the contrast between the maturity of the theatre community and the inexperience of those of us working to create electronic texts. Much in the way that the print medium has evolved transparent signposts for navigation within the book, theatre companies have evolved generally consistent and effective structures to manage the collaborative endeavour of producing a play. The challenge that lies ahead for organizations like the *Internet Shakespeare Editions* is to develop similarly coherent and effective management of collaboration. How can we best ensure that scholars are not intimidated by technical demands, and that the programmers are aware of the full potential of the materials they are responsible for displaying?

As well as providing a potential model for collaboration in the creation of online texts, the analogy with stage performance also provides a warning. Performance (unless on film) is evanescent, leaving traces only in reviews and theatre archives. Methods for preserving print are highly developed, and there is every reason to expect that a book published today will survive for several hundred years if it is judged worth the storage

space. But techniques for archiving and for ensuring the permanence of electronic data are also evolving as file formats and the medium itself evolve.

In a recent essay, W.B. Worthen asks

> If we take the printform of a work to be like a performance, materializing a historically contingent, socially inscribed instance of the work . . . we may be able to seize a more dynamic sense of the changing interplay between these two enduring, and volatile, modes of production.

This panel will involve a representative group of those working on different activities within the structure of the *Internet Shakespeare Editions* as they explore the interplay between multiple modes of production.

Panel members will give short presentations (maximum ten minutes), in order to leave sufficient time for questions both within the panel and from the floor.

Michael Best, Coordinating Editor of the *Internet Shakespeare Editions*, will chair the panel, and begin by providing an overview of the academic and administrative structure of the *ISE*. He will also discuss the audience for which the editions are designed, and the potential of content management software and other software packages that facilitate collaboration.

Jessica Slights, one of two editors collaborating on *Othello*, will discuss the challenges facing scholars trained in literary studies as they work with the additional demands made by the electronic text, both in the sheer quantity of material the electronic space makes available, and in dealing with the demands of preparing a text in e-format.

Peter van Hardenberg will discuss the need for the XML structures chosen for the texts to reflect adequately the needs of computing humanists.

Wendy Huot is responsible for designing the databases for images and performance materials that will be integral to the editions. Her presentation will explore strategies for developing, in consultation, an overall data model that can organize and interrelate a wide variety of binary and textual objects.

Alan Galey, an editor with extensive experience in programming, will discuss current thinking on archiving and long-term preservation of electronic artifacts.

A Kind of Yeasty Collection: Organizing Collaboration in the Internet Shakespeare Editions

Michael Best

In 1996, when I first began work on the *Internet Shakespeare Editions*, I chose to describe my role as that of 'Coordinating Editor' rather than the more usual 'General Editor'. Coordination and collaboration are necessarily at the centre of the development of a major scholarly site that involves both academic and technical organization. Academically, there is an Editorial Board to oversee general standards, a General Textual Editor to crack the whip, and an extensive team of editors, since each play is being edited by one or more scholars. On the technical side the demands are no less complex. Gone are the days that a scholar can, as a sideline, whip up some reasonably effective HTML code and publish it; Web users now expect attractive, professionally designed pages, intuitive navigation, and full searching capabilities. In addition, sites are increasingly being generated from centralized relational databases requiring sophisticated programming skills. All this costs money, and it is still true, in Canada at any rate, that granting agencies tend to be frugal in apportioning funds for what seem more like computer science than Humanities activities. One solution is to apply for funding for student assistants — coop positions, MA or PhD fellowships and so on — since these can be more readily justified as academic expenses than the fees of professional programmers.

The challenge thus becomes the management of two teams, largely separate in their activities, but requiring collaboration before the editors' texts can be effectively displayed by the structures created by the technical team. In his paper, Peter van Hardenberg will discuss the problems that he faces in creating an effective XML schema for the complex documents the editors produce as they transcribe, modernize, collate, and annotate texts that often have multiple origins; Wendy Huot will discuss the process by which she is designing a database that will respond flexibly to a wide range of textual and multimedia artifacts created by the performance of Shakespeare. On the academic side, Jessica Slights will discuss the learning curve that a textual scholar faces when preparing materials for electronic publication, and Alan Galey will bring the perspective of that rare bird, a textual scholar who is also familiar with programming, to the discussion of the long-term viability of the texts we are publishing.

The technical team also requires a high level of internal collaboration. Academic editors are used to working on their own, but the various activities of the programmers — designing templates for a consistent look, developing XML, and designing the database — are deeply interconnected. There are also important external consultants on graphic and interface design. To facilitate collaboration, we are using standard processes — email lists, a *Yahoo* discussion group, and conference calls — but we are also looking at possibilities for software solutions: a content management system that would permit flexible access to the site, at the same time as making networks of communication available to those working on parallel projects.

Made Tame and Most Familiar: Adapting to the Medium of the E-text

Jessica Slights

This paper will address the topic of editorial collaboration from the perspective of a literary scholar trained in Shakespeare studies and now facing the multiple challenges of helping to prepare an electronic edition of *Othello* for a modern readership. The paper will argue, following Jeffrey Masten, that collaboration was a prevalent model of textual production during Shakespeare's lifetime, and that it is therefore a particularly appropriate model for us to adopt in the 21st century as we move to bring his plays to new reading audiences. I will offer my own experiences in collaborative editing as a test case for this claim since the *Othello* edition involves not simply the traditional challenges of editorial partnership, but also a commitment to new technologies that require a degree of teamwork with which most scholars in the humanities are probably unfamiliar.

Hierarchies and Treespaces: A Proposed Extension of XML

Peter van Hardenberg

Those in the Humanities Computing community will be very much aware of the limitations of XML as a markup language for working with literary texts, especially in its awkwardness in dealing with documents that require some method of encoding overlapping hierarchies. As is the case in many other projects, texts prepared for the *Internet Shakespeare Editions* must at the very least record hierarchies that represent the separate conceptual and physical divisions of the text. A third independent hierarchy, tentatively labelled 'annotational' would also simplify much of the difficulty in describing the complexities of textual variants and other scholarly apparatus. This paper will propose a solution to this problem through a simple extension to the standard format of XML documents.

The necessary flexibility is accomplished by relaxing XML's requirement that all element tags must form a single tree, to the requirement that nesting must only be preserved within a given *treespace*. A document may have multiple treespaces, each with its own DTD or schema. Immediate advantages include elegant decomposition of complex DTDs into modular component DTDs, and the abolishment of stopgap tricks like span tags. This change has many ramifications and consequences to explore, including validation techniques, combining documents, extensions to the *DOM* (Document Object Model), and backwards compatibility with vanilla XML formats. Application domains are not limited to the text encoding community and could potentially be realised in many fields including bioinformatics, word processing file formats, and any other field where tagging applies to a stream of character data.

Communicating with the Ivory Tower: Modeling Humanities Multimedia Data

Wendy Huot

Creating a data model for Humanities multimedia and data requires scholarly understanding of the content itself and a technical understanding of database design. This can lead to collaboration between humanities scholars and database technicians; experts that may be largely ignorant of the other's realm.

The major communication challenge in such a collaboration is defining the functional requirements of the data model. Misunderstandings abound due to a lack of shared terminology, the scholar's unfamiliarity with the needs and capabilities of the technology, and the technician's ignorance of the significant characteristics of the data to be modeled. Special cases and extremes within the data provide for a difficult interdependency: the technician may need to be warned of problematic special cases by the scholar, but only the technician may understand what kinds of special cases are problematic.

The *Internet Shakespeare Edition*'s development of a data model (and resulting database) for text and multimedia performance materials inspired some strategies for managing collaboration. These strategies included describing data content with samples in hand, early development of speculative designs, and conducting technical discussion using media — such as instant messaging — that record a text log of the conversation for later review.

Collaborating with the Future: Shakespeare and Preservation

Alan Galey

"Thy easy numbers flow," writes John Milton in an early poetic commentary on the preservation and transmission of Shakespeare's works: "each heart / Hath from the leaves of thy unvalued book, / Those Delphic lines with deep impression took" (10-2). Unusual in its praise for print as a preservation format, Milton's poem prefaces the first reprinting of Shakespeare's first chief textual archive, the collection of the plays in folio (1623, rpt. in 1632, 1663-4, and 1685). Since the advent of electronic Shakespearean editing and text analysis, Milton's words have acquired unintended resonance. As encoded alphanumeric data, Shakespeare's works easily flow into new digital forms and objects of analysis. (Indeed, Shakespearean compatibility with hypermedia is almost a truism now.) But Milton's poem also serves to remind projects like the *ISE* of two vital points: that a distinctly Shakespearean subculture of textual archiving predates us by centuries; and that even in 1632 this subculture had articulated the importance of both collaboration and remediation.

This brief paper will attempt to bridge the distance between digital preservation and software longevity practices, on the one hand, and Shakespearean editing and textual studies, on the other. Both traditions of thought bear upon the *ISE*'s electronic transcriptions of plays and poems from the 1623 Folio and the early quartos. In developing encoding strategies for these complex, historically loaded texts, the ISE must weigh present software needs against future interoperability, and *TEI* compliance against editorial responsibility. As Milton understood, Shakespeare has no perfect archive for "transcendental data" (as Alan Liu terms it); his works persist only through renewal and collaboration with generations - and encoding formats - yet unknown.

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