The MIT Shakespeare Project: Tools for Online Learning and Scholarship

The MIT Shakespeare Project has undertaken several significant efforts since its inception nearly 12 years ago, starting with creation of a laser disc system linking film sequences of Shakespeare’s plays with their corresponding written text for more than 40 Shakespeare films. This system launched a new pedagogy, allowing both students and scholars to enrich their interpretations and use visual evidence to support their analyses of Shakespeare’s plays. Peter Donaldson, professor of literature and head of the literature faculty at MIT, is also director of the MIT Shakespeare Electronic Archive. He describes the evolution of the Shakespeare Project and the electronic archives, as well as other related projects. Donaldson’s work has convinced him that all humanities faculty stand to benefit from active involvement in multimedia design.

The Shakespeare Project

“Close reading” is a time-honored practice involving sustained attention to details of a manageable passage of text in quest of an interpretation or “reading.” It is based on the ideas that interpretation must stem from specifics of the text that one can point to as evidence, and that group discussion plays an essential role by confirming, revising, expanding, or finding alternatives to an interpretation. In one well-known formulation, the academic classroom thus becomes an interpretive community.

My aim was to extend this style of
education from text to performance materials, to render the complex interplay of text and performance legible—into something that a class could read as closely and care-
fully as they were learning to read sonnets and soliloquies. While class film viewings did expand students’ sense of the possibilities inherent in the text, in the end, we watched the films and talked about them a bit, but it was the text that we studied.

The first technology to offer a partial solution to this dilemma was the now obsolete CED videodisc system, which I bought initially not for the classroom but for home use in the hope that my children would find it an acceptable substitute for television. As it turned out—largely because the system had a minute counter—the stylus could be repositioned quickly and easily enough to replay key passages of movies we enjoyed or wanted to talk about. As soon as the first Shakespeare videodiscs were released, I bought them and, with the help of a few key start points written on an index card, found that the medium permitted rapid enough access so that materials could be selected on the fly, in the course of a class, in response to the ebb and flow of discussion.

What was needed to take this promising approach the next step forward was a comprehensive system in which a student or teacher could find the right place in any Shakespeare related material—text, image, or film. Work in the early 1980s at the MIT Media Laboratory suggested a technological solution to the problem of text and film juxtaposition. There, computer-directed laser discs being used in the Aspen Movie Map project to simulate a drive through the city of Aspen provided the crucial metaphor of navigating through information.

The core vision for the MIT Shakespeare Project was thus inspired by the Media Lab’s experiments with navigable video environments, and by our family conversations about movies that the CED videodiscs enabled. The Movie Map project pointed toward a navigable archive, while the success of the videodiscs led to a version of group “close reading” in the multimedia domain.

The Shakespeare Electronic Archive

The need for a Shakespeare multimedia archive was widely recognized in the field. Shakespeare materials exist in greater profusion and across a broader range of media than those available for any other author. Further, individual collections tend to be complementary and need to be brought together; images and film need to be juxtaposed with the texts they enact or interpret.

Our first efforts, began in the early 1990s, employed a laser disc and HyperCard system with which my colleagues, Janet Murray and Larry Friedlander, and I created links between the text of Shakespeare plays—about one link for every three lines or so of text—and the time code of the discs, so that a student could click on a speech and watch the corresponding film sequence in which the lines were spoken. Additionally, we created software note cards, allowing students to define their own film sequences and include links to the video in their own notes, presentations, and multimedia essays. This was an exciting new tool, and confirmed our belief that studying text and moving image in close conjunction could lead to something different from studying either medium by itself.

Most striking, perhaps, is that my role as teacher began to shift as I used these new learning tools: the classroom became more like a workshop, as students helped one another to edit material or offered critiques of preliminary versions of presentations.

Laser discs are no longer manufactured, but this early system served its purpose as “proof of concept.” The laser disc system helped launch a new pedagogy, and made the style of copious video citation felt in the scholarly world. The multimedia essay is now a well-established form for scholarly communication in Shakespeare studies.
The ultimate goals of the Shakespeare Electronic Archive are to create an archive in which all Shakespeare materials in any medium will be quickly available from corresponding lines of text, and to enable students not only to find, but also to rearrange materials and use them in their own presentations and essays that incorporate pictorial and video evidence. In short, we envision a comprehensive archive flexible enough to support spontaneous discussion as easily as scholarly research.

Tremendous progress has been made in building the archive. For Hamlet, for example, which exists in three distinct early versions, all extant first and second quartos, as well as the relevant pages of the First Folio, are digitized in full. We also photographed 1,500 works of art and illustrations for Hamlet, as well as several films, including the 1913 Forbes-Robertson version, the 1984 Ragnar Lyth version (in Swedish), and the 1964 Richard Burton theatrical version. Thus, for Hamlet, the archive contains multiple versions of the play across media: a complete record and facsimile of variation among early editions; multiple electronic texts; films; and, for many lines of text, several—even dozens—of artists’ representations.

Because differences across the numerous Shakespeare texts abound, complete records such as these are extremely valuable. Scholars have long been concerned with these textual variants, but the divide between specialized knowledge and what traditionally has been taught about Shakespeare has been great. This is, in part, a consequence of the form of the printed book and the specific design traditions of the “authoritative” edition, in which textual variants are relegated to tiny footnotes, endnotes, or appendices, and even, in the case of the The Oxford Shakespeare, to a separate volume. But it is important for all students to know that books in Shakespeare’s time were very badly set by compositors working quickly, and to recognize the consequences of this and other details of the history of the early printed book.

In the past, the most fundamental facts concerning the variation and instability of Shakespeare’s texts were seldom taught at the undergraduate level. The current generation of Shakespeare teachers, however, is for the most part intent on making these things clear in the classroom. A digital archive can contribute access to the full range of texts and variants, making it possible to juxtapose different versions on the screen—without making all but the preferred edition impossible to read sequentially. Artwork, too, presents alternative versions of a play and offers glimpses into how it has been performed and interpreted.

The Stanford University/MIT Shakespeare Project

The early stand-alone Shakespeare laser disc systems evolved to the Internet with the collaboration of the MIT and Stanford University literature departments. Our first experiments connected my class at MIT and Larry Friedlander’s Shakespeare class at Stanford in 1996. Once again, the small discussion class with a passage of literature at its center—the “close reading” model—provided the inspiration. Along one axis, the short poem or passage becomes an “expanded text,” extending across variation and media forms, and requiring good software tools to make it manageable and accessible to the class. Along another axis, the classroom itself may now extend over space as we find ways to capture essential features of the intimacy of the small class in remotely shared discussions and collaborations.

These early efforts, while largely successful, made us realize that we needed another technical platform to take full advantage of the possibilities presented by video-enriched remote conversations.

Cross-Media Annotation System (XMAS)

The basic idea of remote discussion incorporating video has developed into the Shakespeare Electronic Archive group’s major project over the past three years: the Cross-Media Annotation System (XMAS), one of the launch projects for the MIT-Microsoft iCampus Initiative. We planned a system that would look like a bulletin board-style discussion, but that would also include two video windows on screen, each with editing controls, so that streaming video passages could be inserted into student comments. For this first version, Microsoft provided a great deal of highly
skilled programming time, and we created a system that was used in MIT classes and for a Shakespeare Association of America remote seminar for faculty members writing about Shakespeare films. Use at MIT was successful, and those of the distance seminar participants who could establish a good connection experienced a new kind of collaboration. Several published papers came out of these discussions.

But several extremely complex programming challenges stood between these first efforts and broadening the reach and usefulness of the XMAS system. The MIT Shakespeare team met the challenges, though, and in Fall 2002 we began to use XMAS in our Shakespeare classes. It has opened up an exciting array of possibilities that we have only begun to explore and refine. In Fall 2003, we launched the second version of XMAS, which supports a broader range of media, including text and DVD video, as well as image collections (with the ability to crop images when inserting them into student work) and URLs. We now have discussion, annotation, and collaboration tools that can be used with the materials in a comprehensive digital archive, and we are a step closer to achieving the goals of the projects we began in the early 1990s. Next steps include extensive educational assessment, which we are beginning this term, use with collaborators, and extension to MIT courses outside the Shakespeare domain, such as film analysis courses, distance seminars on the cultural reception of major films in the United States and Asia, and thence to any subject area in which looking closely at film and text in conjunction can play a role.

Conclusion

MIT's exceptionally open and flexible tradition of finding border-crossing ways of supporting faculty projects has been essential to the success of our efforts. The MIT model of project-based education, working in (relatively) non-hierarchical teams that integrate disciplines and skills across boundaries is a powerful one. Further, an environment in which staff, faculty, and graduate and undergraduate students meet and communicate frequently and freely has great advantages.

With every step in the process, I have become more convinced that all humanists need to be actively involved in finding technical solutions to scholarly and educational needs. Not all faculty will devote as much time to the effort as described here, but none should be passive about technology or new media. Because digital technology is fundamentally fluid, the media we work in need to be designed and redesigned. Humanists must be involved in this work and recognize it as an integral part of their calling.

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