



## Frankenstein revealed

*Penn's  
electronic  
edition*

BY PROFESSOR STUART CURRAN

The CD-ROM is probably an intermediate technology, destined to disappear before the rapid advance of electronic networks, and yet in terms of literary editions, the technology has up to now yielded nothing like the results of which it is capable. Those may seem contradictory propositions, but they have been the guiding lights for the creation of an electronic edition of Mary Wollstonecraft Shelley's *Frankenstein; or, the Modern Prometheus*, which the University of Pennsylvania Press will publish next year as its inaugural effort in electronic editions. I began work on the edition in earnest this summer, and, with the serendipitous advantage of a collaboration with two graduate students, Sam Choi and Jack Lynch, who have considerable depth in the period of British Romanticism and are expert programmers, much ground was covered before the advent of the fall term slowed the project down. But we think our sharp initial focus on accessibility, distinctive features of the hypertext,

multiple readerships, and assumptions about the necessary future of such editions will allow steady progress through the year.

### *Accessibility of the Electronic Edition*

The initial question we faced was how to construct the electronic edition so that it would be, from the start, universally accessible and, further down the line, open to the incorporation of technological innovations perhaps unforeseen as of now. After meeting with the campus Interactive Technologies Group, we were confirmed in our initial decision to avoid hitching this wagon to any commercially driven star, the particularities of whose software would make it subject to the limitations of already elaborated purposes, not to mention the whims of a manufacturer juggling various wares or a highly volatile and competitive marketplace. *(continued on page 12)*

## Frankenstein revealed (from page 1)

Rather, we decided to gear the edition to the World-Wide Web (WWW). The WWW has all the earmarks of establishing a universal standard for electronic access and gives us the added advantage of being able, when the technology and network linkages become sufficiently developed to warrant it, to shift the edition painlessly to Internet licensing, which might greatly increase its usability and free it from dependence on a mediating disk. All aspects of this edition will be keyed to HyperText Markup Language (HTML), which like its cousin Standard Generalized Markup Language (SGML), is under continuing construction and revision—once again reinforcing the technological fluidity that one must learn to live with in embarking on these exciting, but as yet uncharted, waters.

### *Hypertext Links*

What is most stimulating about this venture is the extent to which we may ourselves do a large amount of the initial mapping of these waters. The enormous potentiality of a hypertext environment is as clear to us as has been the self-evident incapacity of the publishing industry up to this point to tap it in a responsible and substantive way. A perfect example—but one that for obvious reasons will remain nameless—is a CD-ROM edition marketed last year, with many clever and glitzy features (which, however, like many electronic games pall once you figure out how they work) but with a text that was clearly the last thing anyone thought about, because it is literally unreadable, having at some late stage through officious tinkering with its format become hopelessly scrambled. Although it is inconceivable to produce an electronic edition of *Frankenstein* and ignore the glitz (not to say, kitsch) with which some 60 years of cult-worship have decorated it, still, this work is almost uniquely suited to becoming a model for hypertext technology. It manifests a series of problems, all of them needing to be worked through by a serious student of the novel, yet at the same time being in the aggregate beyond the capacity of print technology. These include 1) two fairly diverse editions of the novel, in 1818 and 1831, with a few intervening manuscript variants; 2) the fascinating issue of textual interpolations from Mary Shelley's husband, the poet Percy Bysshe Shelley; 3) a pervasive intertextuality, so that the novel becomes virtually a commentary on such diverse works as Aeschylus' *Prometheus Bound* and Milton's *Paradise Lost*; 4) a daunting array of linked contexts within the cultural icons and passions of the turn of the 18th-century, involving a number of humane and physical sciences; 5) political and social undercurrents within the text that are not always immediately discernible on its surface; 6) the legacy of stage and film reproductions; and 7) a vital history of commentary that one may assume will continue at its

present level of intensity but that is largely confined to the last two decades. Within the constraints of copyright and reproducibility, we can embed all—all—of this material on a single disk.

### *A Multiplicity of Readers*

“Who would want all this?” one undoubtedly might ask. And the proper answer might be, “no one.” But what is so attractive about a hypertext format is that it is the equivalent of a supersaturated solution. There are undoubtedly those who might want such an edition only for being able to reproduce a Boris Karloff snarl at some appropriate place in the novel (of course, those who have read the novel know that Mary Shelley's Creature does not snarl but speaks with acuity and eloquence). There are, conversely, those (and I confess I count myself among them) who would want this work as a convenient repository of otherwise widely scattered scholarly and critical materials. And in between there is every shade of reader one might think of. I have a suspicion that I, Sam, and Jack will, indeed, be the only three people ever to read everything contained in this edition, but it is exactly this likelihood that will turn what is in its intent a totalized intellectual realization of the novel's history and criticism, specifically designated as a dictatorial “Read Only Memory,” into something that is effectively interactive with every individual user's interests and needs.

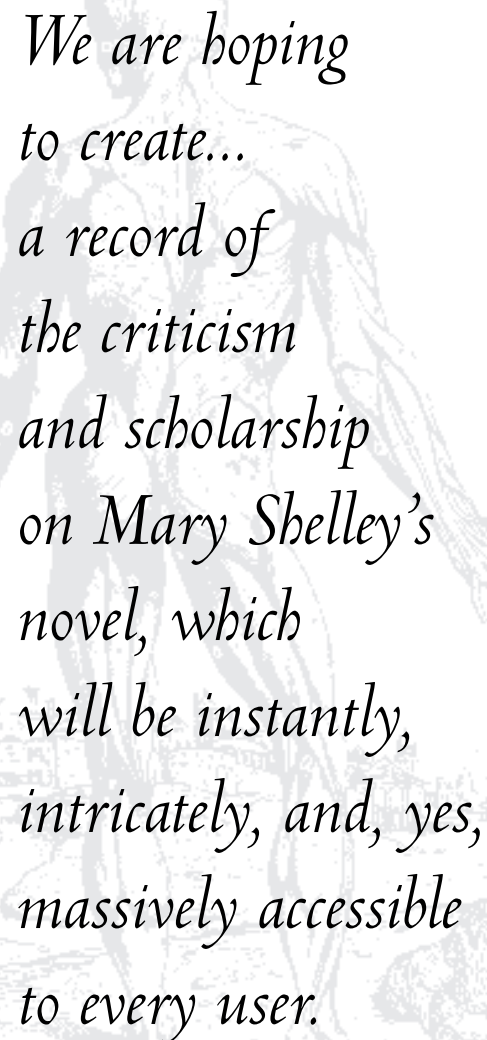
In constructing an electronic edition one is continually forced up against the assumptions to which long years of conventional reading have accustomed us, and it is probable that this will be true for the reader of this edition as well. The University of Pennsylvania Press plans to market the CD-ROM in a packet that will contain an inexpensive paperback of the 1818 edition of *Frankenstein*. If one is just reading, that would be the text of choice, and it will be the default text of the disk as well. But, then again, what is “just reading”? The flexibility of the technology allows one on screen to read either of the two editions, with a fully annotated apparatus for both, or back and forth between the two with variants highlighted. It will allow one at salient points to consult manuscript sheets for further comparison of texts. Or, since there will be literally dozens of other literary works included as portions of the informing context for *Frankenstein*, a reader might wander into Milton's *Paradise Lost* or Percy Shelley's *Prometheus Unbound* and decide to stay there for the rest of the afternoon. One would be continually tempted to such wandering, because unlike a conventional book the apparatus will not just refer one, let us say, to ten lines of Milton's epic; it will instead take the reader to those lines within the structure of his entire poem. Multiply these possibilities by the large number of ancillary texts, and you have a sense of what an assault this technology portends on a normative, atomistic conception of the act of reading. One doesn't, it is true, exactly curl up with

a good book here. Rather, one is faced with dozens of possibilities at once, literally replicating the ways intertextual allusions play against and within any literary work of dimension and intellectual ambition. Perhaps the first time through the text readers will pursue the course we conventionally assign to the reading experience; thereafter, however, they will be encouraged to browse.

### *Hypertext as Education*

One obvious and defined audience for this edition will be advanced secondary school and undergraduate college students, and on this level the temptation to browse will be truly salutary. It is not easy for inexperienced students to feel comfortable using the multiple resources of a major library for individual research. But if all that is needed is on a single disk—and, the crucial point, if there is so much material there available that it bears the character of a small and pointedly directed library—the urge to explore should be a natural response to the medium. One student may bog down in Milton; but there, too, another will dig into Humphry Davy's *Discourse, Introductory to a Course of Lectures on Chemistry*, and yet another into Joseph Priestley's *History of Electricity*, two major contemporary influences on this first work of science fiction. When the Creature demands of Frankenstein that he be given the means to be happy, it is going to dawn on some student somewhere that this being has somehow gained access to the Constitution of the United States of America, and just in case that putative student wants to be refreshed on what constitutes "the pursuit of happiness," a copy of that document will be available (and, for good measure, the Declaration of the Rights of Man of the French National Assembly). Part of the sheer fun of constructing this edition comes from allowing one's mind to play across such possibilities with the knowledge that the power is there to realize them all.

There is a further power here as well, one that will test the barriers that laws formulated for a previous century and a very different technology interpose upon our access to learning. We are hoping to create here for the first time an electronic variorum—that is to say, a record of the criticism and scholarship on Mary Shelley's novel, which will be instantly, intricately, and, yes, massively accessible to every user. As this is a non-profit venture, we are hoping that we can gather this totalized critical context at little or no expense, partly because, if this edition fulfills the function we expect of it, a few years down the line to have an essay left out of this compendium might just mean being unread. The other side of this equation, however, is that, like every other aspect of the new electronic technology, the presentation of critical opinion will be radically democratic, allowing the reader access to all the voices available without hierarchies, limitations, abridgments, or some editor's decision about what constitutes the party line. It will likewise be updated at regular intervals so that



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it remains current with the scholarship. As all these statements are framed and indexed, as well as cross-referenced with each other and with the text, they will be accessible in a synthesized way that is virtually unattainable by any other means. This, too, will constitute a new level of interactive intellectual engagement. It may be intimidating to be confronted with all these voices—both of the far past and the current scene—but it seems to me very much like the underlying essence of education, which is meant to liberate one's own voice as a vital part of this century-spanning process. That, at least, is what I hope will be seen to be the essential principle of our editorial project and, even more, its legacy for the use of this technology.

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