REVIEWS

ED FOLSOM AND KENNETH M. PRICE, eds. *Major Authors on CD-ROM: Walt Whitman.* Woodbridge, CT.: Primary Source Media, 1998.

Exactly ten years ago, the now defunct Electronic Text Corporation came out with the first electronic Whitman in the WordCruncher Bookshelf Series—4.5 megabytes containing the Library of America Whitman volume. It was a remarkable achievement and a milestone in our work on and with Whitman. In a review for the *Walt Whitman Quarterly Review* (7 [Winter 1990]), I described that software as putting "the author's entire oeuvre at one's fingertips." Ten years later, upon receipt of and experimentation with this new Whitman CD-ROM from Primary Source Media, I ceremoniously deleted all traces of WordCruncher on my hard disk, thereby gaining a bit of (by now) unneeded space on my hard disk—space which I would have loved to have ten years ago when WordCruncher's Whitman became a permanent inhabitant there. Nevertheless, it might as well go, because I will no longer use it.

The momentous differences between the 1988 and the 1998 projects mark the incredible progress of technology in our field. If the ten or so disks produced by the WordCruncher people amounted to one large book, the Primary Source CD-ROM now equals an entire library, complete with manuscript collection, audio and video collection, reference section, and even a guided tour. If WordCruncher allowed us to freely roam the pages of just two editions (the first and the deathbed) of *Leaves of Grass*, and some prose, the CD permits us practically unlimited access to a whole library of primary and secondary materials by and on Whitman, all of which are easily searchable with one of the fastest and most sophisticated search machines I have encountered in the various electronic environments, the Borland Database Engine.

However, the difference is not just quantitative—between one book and a library, or between a steam-driven locomotive and the French high speed train TGV. Of course, a search engine operating directly off a CD and not from the hard disk is more efficient. But there is also the qualitative difference which has turned electronic environments from electronic storage media with retrieval options to actual knowledge producers. This difference is, of course, embodied in the hyperlink which, through the World Wide Web, has become the interactive symbol of our electronic culture. George P. Landow, in his interesting study *Hypertext 2.0*, has explored the meaning of the link and claims that it "reconfigur[es] textuality by using an element that simultaneously blurs borders and bridges gaps, yet draws attention to them." This is precisely what happens on the Whitman CD. It links the most diverse aspects of works by Whitman, around Whitman, and on Whitman. The CD brings together manuscripts, photographs (an excellent part of the CD profiting from Ed Folsom's expert knowledge), secondary materials and writings on Whitman, various edi-

tions of Whitman, and much more. The possibilities for linking these texts are endless. One wonders how the two editors of the disk, Ed Folsom and Ken Price, who are known to be active in a variety of other areas as well, have found the time to think all of this out and bring it together so well. Obviously, it is the combination of the expertise of the Primary Source Media specialists and the Whitman experts that has made this possible.

The CD gives a new meaning to a now forgotten term of the early wave of postmodern theorists in the 1970s, "paracriticism." The parallelism between primary and secondary works which they postulated has now become a technological reality. In fact, beyond linkings, the CD features several interesting options of parallel readings. All editorial notes of the Collected Writings of Walt Whitman can be accessed from the main text and brought into a second window, thus allowing a parallel study of both primary texts and notes. Other interesting parallel reading options bring together facsimile reproductions of Whitman works and their electronically keyed (i.e., fully searchable) versions as well as manuscripts and their transcriptions. The possibilities to inspect materials are manifold and sophisticated and even include a virtual magnifying glass allowing users to change the size of manuscripts, first editions, etc., when needed. Purchasers of the Whitman CD should make sure to consult the "User's Tips for Major Authors on CD-ROM: Whitman" which supplement the more general information in the generic User's Guide which was written for the whole series. The "User's Tips" contain much helpful information and many hints which will make the use of the CD easier. Although the CD is very user-friendly, it does take some getting-used-to.

The high quality of this state-of-the-art product, however, should not blind us to the problems this technology poses for the study and the appreciation of literature. In my review of the WordCruncher Whitman, I wondered whether "the literary work has been so thoroughly turned into a commodity that it may lose its character as a work of art in the traditional sense." I also suggested, however, that of all American authors, Whitman's work lends itself best to digitization because the fluid, non-hierarchical quality of his texts actually anticipated the technological development. The question of commodification, it seems, is no longer so urgent, not because it is no longer applicable, but because our whole culture, at least in the industrialized countries, has opted for unmitigated commodification without compromise. Whitman research (and literary scholarship in general) will not be able to stem the tide against what amounts to an overriding tendency of the culture.

The question presenting itself, rather, is to what degree this technology enables us to pursue subversive strategies against this commodified totality from within the system. Here, in an era of what my friend Margaret Cotroneo, a family therapist, has called "creative optimism," and just a few days after the birth of my first child, I'm in the mood to believe that new possibilities and options are opening up and that there is reason for hope. While it is true that Whitman and the Whitman world are now fully searchable, the control one feels when driving the search engine is finally illusory. The wealth of hits resulting from the searches and the many different avenues suggested by the links actually make control over the texts less likely. Rather, the CD reveals the subversive qualities of Whitman's work, its creative ambiguity and diversity. "Definitive" readings of Whitman now seem less viable than ever. By placing Whitman's works and world on a CD, a commodified totality has been created which nonetheless highlights its porous quality. "We will do the worst thing one can do to one's enemy," Gorbachev said to the West before the demise of the Soviet empire; "we are going to take your enemy away." Ever since, the capitalist West has been struggling with its own identity. By placing the whole (or at least a good portion) of Whitman on one CD, the commodified Whitman can now deconstruct from within, opening up new pathways towards a liberatory culture.

The next step already emerging on the horizon will be the establishment of an online Whitman archive on the World Wide Web. In fact, the Fund for the Improvement of Postsecondary Education (FIPSE, a creative federal institution in the Department of Education) has funded a project, directed by Price and Martha Nell Smith, to create a Whitman and Dickinson teaching archive in cyberspace. The Walt Whitman Hypertext Archive (http://jefferson.village.virginia.edu/whitman)-featuring facsimiles of the various editions of Leaves, Whitman photographs, early reviews, and other materials-is already an established Web presence. Price and Folsom are now teaming up with Primary Source Media to develop a commercial online site. By linking up with the global knowledge pool of the WWW, the library represented by the Whitman CD-ROM, which will serve as a strong base for the site, might evolve into the type of "cosmic consciousness" Whitman anticipated. What the mystical school among Whitman readers and interpreters has always appreciated in metaphorical terms now seems to be emerging as a technological reality.

We in the Whitman field ought to be proud that our author is at the leading edge of these developments. Without doubt, this is due to the untiring efforts of Folsom and Price, but also to the character of the author and his works which are so much a part of this development. In the fast-changing electronic environment, who knows what the next step might be? With the emergence of the digital glove or, perhaps, whole digital suits, things are poised to take a radical turn. We may not be far from a full-bodied Whitman experience, a virtual body electric, something downright orgasmic. "Did you wait for one with a flowing mouth and indicative hand?"

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