on equipment and space utilization. These topics are covered comprehensively and will likely be the most heavily consulted sections of the book. The reader comes away from them with a clear overview of the many options available. Also notable is Hinchliffe's thoroughness as a bibliographer on this subject. There are close to two hundred book/article references, thirty-one legal references to codes, standards, and the like, a directory of seventy-two suppliers, and a list of twenty-three library classroom Web sites. URLs are supplied whenever possible.

Less successful is the section on planning, mainly because of its rudimentary nature. Most librarians at this level are unlikely to need coaching on how to gather information and reach a decision. It also should be noted that the book is geared toward those libraries that are big enough (and rich enough) to have a robust instruction program that justifies a dedicated electronic classroom. Many small academic libraries do not fall into this category. They wind up using existing facilities or sharing space with other programs such as distance education.

As the use of electronic information in academia has increased, library-based instruction has evolved from handy option to practical necessity. And, of course, a fundamental element of such instruction is a properly designed and equipped facility. Although the majority of major academic libraries today are likely to have electronic classrooms up and running, some still do not. A ready audience, especially in those institutions that need to upgrade out-of-date or inadequate facilities, exists for this useful handbook.—*Paul Rolland, Mesa State College.*

The Renaissance Computer: Knowledge Technology in the First Age of Print. Ed. Neil Rhodes and Jonathan Sawday. London, New York: Routledge, 2000. 212p. alk. paper, $85, cloth (ISBN 0415220637); $25.99, paper (ISBN 0415220645). LC 99-087623.

The essays of this collection are guaranteed to raise some hackles among book history purists. Is it acceptable, for example, to characterize an octavo edition of a seventeenth-century book—the *Eikon Basilike* of 1649—as a "neat palmtop," while referring to larger quarto and folio versions as cumbersome "laptops" and "desktops?" How can Claire Preston describe the curiosity cabinet of the sixteenth and seventeenth centuries as a "visual search-engine" and Neil Rhodes call the humble almanac "the information superhighway (or cobbled lane, at any rate) of the later sixteenth century?" Anne Prescott begins an essay on early modern reference books by asking, dead seriously, "Is an encyclopedia a computer?" The last straw for a number of readers may just be Jonathan Sawday's comparison of John Donne (1572–1631), the great Elizabethan poet, with William Gibson, the cyberpunk author of the 1984 cult novel *Neuromancer.* In essay after essay, we are confronted with never-before-heard comparisons, similes, metaphors, and analogies, imposing, it would seem, the nomenclature of our computer age onto aspects of early modern literature and book culture.

This book contains then, prima facie at least, more than enough evidence to convict the editors and contributors alike of the high historiographical crime of *anachronism*, which the *Encyclopaedia Britannica* defines as "neglect or falsification, intentional or not, of chronological relation," as "disregard of the different modes of life and thought that characterize different periods… in ignorance of the facts of history."

But then take a closer look at the contributors' biographies: There's not a cyberpunk or a geeky anachronist among them. Timothy J. Reiss, for example, is a distinguished early modernist at New York University; Leah S. Marcus, a Renaissance scholar at Vanderbilt; and Stephen Orgel, professor of humanities at Stanford, is the editor of standard editions of works by Shakespeare, Jonson, and Marlowe. The more numerous U.K. contributors are equally distinguished. Indeed, the volume bristles with scholarship, and no claim is made that is not an-

chored in lucid argument and copious references to the literature, both early modern and contemporary.

What's more, if it is true that modern categories and fashionable computer vocabulary have been projected a bit too enthusiastically back into time, there is certainly more than enough movement in the other direction as well, for the authors of these essays are just as eager to show how Renaissance philosophers, mathematicians, poets, and dreamers anticipated many of our own modern knowledge technologies. The history of the computer began, after all, with Pascal's adding machine of 1642, with Thomas Hobbes's reflections on "computation" in 1656, and with Leibniz's "calculus ratiocinator," first demonstrated in January 1673. Far less known is the contribution of sixteenth- and seventeenth-century poets who imagined what we would someday know as the Internet and the World Wide Web, introducing for the purpose words such as *matrix, Web,* and *net* that we now regard as being so trendily our own. In a poem in 1611, for example (quoted by Sawday), John Donne describes how a network of mind has been "thrown upon the heavens" and, like the nets used by fishermen, now brings the universe to us—to our very desktop, as it were:

> For of Meridians, and Parallels,
> Man hath weav'd out a net, and this net throwne
> Upon the Heavens, and now they are his owne.
> Loth to goe up the hill, or labour thus
> To goe to heaven, we make heaven come to us.

Hyperlinks, image maps (such as the "zodiacal man"), use of icons as memory devices linking to larger meaning complexes, even interactivity (in the form of almanacs that performed astronomical calculations for the user and contained blank pages for the reader to add his own observation data)—all of these information-processing tools were anticipated, many also fully developed, in the printed works of early modern times. Today, when we use a combination of hardware and software to retrieve a subset of data from a larger set based on shared properties, does it really matter whether we call the device a "search engine" or, with Samuel Quiccheberg (1529–1567), a "promptuarium?" It becomes clear to the reader of these essays that the twentieth-century pioneers of computing, the Internet, and the Web all applied existing *topoi*, algorithms, and mnemonic devices to make their creations, confirming the truth of Victor Hugo's dictum: *Imaginer, ce n'est au fond que se ressouvenir.* ("Imagining is in fact nothing other than remembering"). Or, as Thomas Browne put it in his *Religio Medici* of 1635, by Claire Preston, "intellectual acquisition… were but reminiscential evocation."

There are numerous parallels between then and now. In his essay "The Early Modern Search Engine: Indices, Title Pages, Marginalia and Contents," for example, Thomas Corns shows how "publishers and printers in the first century of print were already aware of the complex issues of varieties of user-interface" and succeeded in providing a host of user-friendly features that surely won them appreciative readers. His main case study is the Geneva Bible of the mid-1500s, financed and annotated by Calvinists to advance their version of the true faith. As Corns writes: "Each book has an abstract, as does each chapter. Each page has a header indicating content. The margins ooze glosses, interpretation, cross-references, and further pointers to context." But this user-friendliness has its price, for despite the wealth of reader aids, "paradoxically, its apparatus, while facilitating access, closes down the openness of the text." This shows, in Corns's words, the "repressive potential" of hypertext and other user-friendly apparatuses that facilitate access on the one hand, but also "direct and control interpretation," serving the ends of "premature closure." The implications for cre-

ators and users of heavily linked Web sites today could not be more obvious and disturbing. (Several pages later, Sarah Annes Brown describes in "Arachne's Web: Intertextual Mythography and the Renaissance Actaeon" the astonishing variety of Renaissance responses to Ovid's story of Actaeon, showing just how "open" a text can be, how myriad the potential "links" are that actual readers make in their minds. By implication, Brown confirms Corns's fears about the restrictive potential of hypertext, how constraining and limiting even the most richly linked electronic version must be).

The sense of incongruity that arises from the curious juxtapositions of language, concepts, and minds that is so jarring as we begin this book yields only gradually to appreciation and understanding. We first must learn to see how very different words from entirely different eras can, in fact, relate to the same referent—that whatever word we may use to name the rose changes not what the rose itself is. By the time we complete Neil Rhodes's impressive final essay, "Articulate Networks: The Self, the Book and the World," we realize that the difference that modern computers have effected in our world is really one of degree rather than of kind. This is an enormous and a humbling realization, a gift to the reader from a fine piece of humanities research.—*Jeffrey Garrett, Northwestern University.*

Westbrook, Lynn. *Identifying and Analyzing User Needs: A Complete Handbook and Ready-to-Use Assessment Workbook with Disk.* New York: Neal-Schuman Publishers, 2001. 307p. $75, alk. paper (ISBN 1-55570-388-7). LC 00-045220.
Because of the continued growth and development of information technology, people who work in libraries are confronted, almost daily, with changing expectations concerning their roles. Accountability and assessment have become keywords for those trying to provide updated services to library patrons. At the same time, librarians and staff are expected to justify budget expenditures, set priorities for collection development and reference services, adapt to change, seize new opportunities for services as they arise, and position the library as a major competitor in the information business. According to Dr. Lynn Westbrook, faculty member of Texas Woman's University's School of Library and Information Studies, support for these decisions can be obtained by conducting a community information needs analysis (CINA).

Westbrook believes that CINA can be a key in gaining an understanding of the existing information needs of the population the library serves, whether it is a public, school, or academic library. She presents a step-by-step procedural tool for conducting such a study in any of these three settings, emphasizing the cyclical nature of identifying information needs, implementing the appropriate changes in services, and evaluating those changes. Westbrook clearly states the prerequisites for doing a CINA: staff support, necessary resources, ethical considerations, and the correct techniques and questions to include. Later chapters explain important points in designing various data-gathering instruments and assessing the in-house data already available through system reports. She takes great care to explain various sampling techniques and methods, to define types of statistical analysis, and to describe how to organize the data into meaningful patterns and codes.

The book's value is enhanced by its many features. Most apparent are the suggested readings. Westbrook has not only compiled an extensive works cited list, but she also has categorized the readings at the end of every chapter, providing an annotated bibliography for each type of library. The appendices include examples of different library studies and the coded and charted statistical reports created by various OPACs. An ample glossary and index also are provided.

Academic librarians may find themselves wishing she had written an individual book addressing their specific needs instead of trying to speak gener-