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Chapter 17

The Scholarly Wing of the Public Cybrary and the Right to Know

John Willinsky

Let us imagine that to speak of a *cybrary* is a way of moving the idea of the library into *cyberspace*. The cybrary will be enabled by existing technologies and buffeted by new knowledge economies, but it will also be shaped by the legacy of the library. The library has always been a *public* and *private* space for bringing together books, ideas, and people. In the case of the English language, this duality and its resulting tension enters very early in the history of the language. The *library* was private before it was public. In defining the word, the *Oxford English Dictionary* (*OED*) holds up Chaucer's reference to "the walles of thi lybrarye" in his book *Boethius*, circa 1374, as the first published use of the word. And yet within 75 years of Chaucer's instance—and still before the

invention of the printing press—*library* was also being used to refer to a place, as the *OED* defines the second meaning of the word, "containing a collection of books, for the use of the public or of some particular portion of it."[1] The clerical and university libraries of medieval times were the first to give library its public sense. It amounted to a limited public, to be sure, who wandered freely among those manuscripts, and such limits form the very theme of my chapter. For the element that should most concern us in the ongoing formation of the cybrary, I argue, is the public scope of the scholarly pursuit of knowledge, and what we can do to expand and extend it.[2] The library is both public and private in a number of senses; there is a governed and ungoverned quality to the time spent there. What that means in terms of the cybrary is best suggested by a little more etymology on the *cyber* side of this new coinage.

Cyberspace has its origins in the creative mind of novelist William Gibson, who coined the term two decades ago in *Neuromancer*: "Cyberspace. A consensual hallucination experienced by billions of legitimate operators, in every nation, by children being taught mathematical concepts … A graphic representation of data abstracted from every computer in the human system" (1984, p. 51, original ellipsis). In the novel, this definition is overheard in a voice-over to a children's television program, itself a clever means of including footnote

explication in the novel form. In the course of *Neuromancer*, cyberspace cowboys "jack" into "rich fields of data" on a video-game high; they rustle corporate information for unsavory clients, in an age-old story of good, evil, and the making of a living (p. 5).

Even apart from Gibson's references to criminal intent, this idea of cyberspace as a *consensual hallucination* may not seem a particularly positive metaphor for thinking about libraries and literacy. And yet when you think about it, the lending library has long been home to a collective and consensual serial reading of novels among, shall we say after Gibson, *legitimate operators* of literacy. As such, it is true that the library has indeed enabled greater public participation in the hallucinatory suspension of disbelief, while permitting it to be that much more differentiated (private and ungoverned) in the choices of books to read, than is suggested by Gibson's image of students sitting in rows in their geometry class. That is, the principle at issue is that library is public in a way that affords an important degree of variation and independence, as it offers a way of pulling out, as well as plugging in.[3]

Yet as we travel deeper into the etymology of the cybrary—which I am doing by jacking in from a hotel room in Mexico City to the online edition of the

OED at my university library—*cyber* appears to be a prefix peeled off the earlier formation, *cybernetics*, which is a term Norbert Weiner used in 1948 to name a new field of study (as well as to entitle his accompanying book): "We have decided to call the entire field of control and communication theory, whether in the machine or in the animal, by the name *Cybernetics*, which we form from the Greek *χυβερνητης* or *steersman*" (1948, p. 11). Weiner's manner of lumping control and communication together, as well as grouping machine and animal—with the very ordering of terms also worth noting—managed to set the stage for Donna Haraway's later "Cyborg Manifesto" which recognized how far we have already gone in becoming machines subject to "the informatics of domination" (1991). And certainly Weiner was into laying the groundwork for mechanical reasoning and self-organizing systems.[4]

While Weiner draws his use of *cybernetic* from ancient Greek, somewhat more than a century before he wrote his book, André Marie Ampère used *cybernétique* in his *Essai sur la Philosophie des Sciences* of 1834 to also coin a new field of inquiry: "The future science of government should be called '*la cybernétique.*'" The *cyber* prefix harbors, then, associations with control and governance. Let us choose our words carefully for, like things wished for, they may come true. Yet Ampère himself lived in the very spirit of the library that I

am intent on preserving in the cybrary. He did not attend school but was educated at home, taking his lessons in large measure from what was then the newly published *L'Encyclopédie*, itself forming, by text and engraving, a worldwide web of the known world, at least as envisioned by eighteenth-century Parisian knowledge architects, Denis Dederiot and Jean Le Rond d'Alembert. Young Ampère worked his way through *L'Encyclopédie*, from first to last volume, and was said to be able to recite entries from memory until the end of his life. Ampère went on to be a professor of mathematics, eventually with an appointment at the Collège de France, an institution given to the ungoverned pursuit of knowledge. To this day, the highly regarded faculty do not teach courses in degree programs but rather offer a regular series of free *public* lectures or seminars around their current research.[5] Cybernetic Ampère has, then, a way of bringing us back to these themes of the governed and the open. Ampère, Gibson, and Weiner represent this cyber-urge to find the order of things through their own self-directed pursuit of ideas in public realms. Such is the originating impulse of the library. It is itself all about organizing principles, within which we cannot wait to freely wander and become lost.

Now when it comes to thinking about the library in *cyberspace*, it is easy to conjure up images of a Borgean labyrinth of endless book-filled shelves, in a

fantasy of knowledge and narrative without end played against a set designed by Peter Greenaway, the great film director of book-encrusted lives.[6] And it is true that the cybrary is increasingly vast, not only in the scale of what it contains, but also in who it reaches. There is nothing quite so global in its reach, in its reconstituting the public space of the library as something accessible everywhere, if not by everyone. While the huge digital divide is not about to be closed, the Internet continues to spread not only to Internet cafés in Manila, Nairobi, Alice, and Chennai, but to rural Indian villages, remote schools in Nepal, and to government offices and university libraries around the world.

Yet the cybrary is not fulfilling the dream of endlessly open stacks. Just as Chaucer borrowed the French word for bookseller's shop, *librairie,* in writing about Boethius' collection of books, the modern cybrary of the Web is divided between materials that are free and items that are for sale, sometimes from the same title. So that while readers can browse the last seven days of the *New York Times* for free, anything earlier, should they want the details on what took place a few weeks ago, is pay-per-view. The *New Yorker* offers readers free access to a weekly short story and cartoon, as well as a selection of reviews and articles, along with materials not available in the magazine itself; and finally—to stay with this geographical theme—the *New York Review of Books* makes close to

half the articles in each free, with the rest restricted to subscribers only. (Readers interested in other perspectives on the news can as readily consult the *Japan Times*, *The Hindu*, and the *People's Daily*, and with less restricted access to the archives.) Fans of Shakespeare, Austen, and Plato do well in the cybrary with public access through the Gutenberg Project and others sites. Yet it takes a credit card to learn more about these authors from the *Encyclopedia Britannica*, although most authors of any note have free sites dedicated to them. One can also browse through the opening pages of the latest books at Amazon.com or search for words or phrases in them, before deciding whether to purchase them online. The cybrary is divided in this way, not entirely a public library, by any means, and yet affording a modicum of public access and public space.

When it comes to the scholarly wing of the cybrary, things are far more sharply divided between what is public and what is closed to public view. Although the majority of academic journals have electronic editions, online access to well over 80 percent of this literature is restricted to subscribers, with the very high price of admission ensuring that only well-financed research libraries can provide public access to this work, if that public can make its way to the physical library and use an open terminal there. If the public wants to see what this work is about online, it has two rather limited choices. It can view the small

number of open access or free online journals that are now available in almost every discipline. Or it can turn to pay-per-view services, which the major journal publishers offer, which puts the cost of a medical research article, for example, at well over the price of a good hardback book (although the article's abstract may be free to read). Public access to this journal literature is decidedly less than one might expect of work that is largely financed by the public and for which authors and reviewers are not paid by the publishers.

By the same token, research libraries are finding their own access severely hampered by growing corporate concentration among scholarly publishers.[7] By impeding the circulation of knowledge, this knowledge economy is detrimental to the work of many researchers and students, detrimental in ways that are bound to affect the quality of knowledge itself. Restriction in access also has consequences for the public presence of research in policymaking and public life (Willinsky, 2003b). It runs counter to the interests of the researcher-authors in finding the widest possible audience for what they have learned and are keen to share with others.[8] It fails to take advantage of what this new publishing technology can contribute to the global circulation of knowledge. The good, however, is that it has given rise to a small "open access" movement among academics and librarians. They wish to use the Internet's capacity to manage

and distribute journals to increase access to scholarly materials, for universities around the world, for colleges and schools, for the professions and the public generally. Advocates of open access to research are experimenting with a number of approaches that will make research free to read. Stevan Harnad, for example, has led the way in encouraging faculty members to deposit copies of their published articles in open access eprint archives, with free software for libraries to set up such archives readily available in open source format (2003).[9] Meanwhile, journals are testing out a variety of economic models for providing some form of open access to their contents (Willinsky, 2003a). The focus is on using the cybrary to make this literature free to read. It places the priority in publishing on the widest possible circulation of knowledge. And it draws directly on the model and spirit of the public library, bringing it explicitly into the sphere of the cybrary, most noticeably with the Public Library of Science, which is establishing itself as a leading open access journal publisher.

Up to this point, most of the important questions about academic life in cyberspace have been about the move to online courses and degree programs, in what often amounts to a capitalization of the university's brand and a further commodification of knowledge. While some see online course delivery as an extension of the human right to education, providing individuals with

opportunities for personal growth and economic development, David F. Nobel (1998), for one, has mounted a substantial critique of it as threatening to rob "faculty of their knowledge and skills, their control over their working lives, the product of their labor, and, ultimately, their means of livelihood."[10] Yet it now seems clear that there is another side to this cyberspace tension between academe and commerce, closer to the heart of the cybrary, and no less important for what Nobel calls "our once great democratic higher education system" (ibid.). While only a few faculty in any given university are involved in the online development and delivery of courses, almost all faculty, whether they realize it or not, are currently caught up in shaping the scholarly side of the cybrary.

An irony here is that the self-organizing cybernetics of the Internet—with its close and controlled engineering of communication through protocols, networks, and systems—is precisely what makes open access viable for journals and archives, which can greatly expand, in turn, the intellectual scope of the *public* cybrary, and open the doors wide to this hard-won knowledge. This same technology, however, is being used by journal publishers to further privatize and commercialize the scholarly side of the cybrary. Corporate journal publishers such as Reed Elsevier have found they can use this technology in

cyberspace to increase their share of the market by bundling their journal titles, charging per-article fees to non-subscribers, and limiting some of the uses of journals in subscribing libraries to members.

Still, the economics of the scholarly cybrary is far from straightforward. Journal prices, for example, are not associated with journal quality as the leading journals in a field can be divided among prohibitively expensive titles—in the thousands of dollars annually—and moderately priced titles in the low hundreds (Bergstrom, 2001). That journals of the same quality can operate with such discrepancies in costs suggests how thoroughly the current state of scholarly publishing is in a state of flux. The picture is further complicated by a free online indexing service to the medical literature, PubMed (with a special MedlinePlus section designed for lay people), which is provided by the U.S. National Library of Science. PubMed serves as an elaborate catalogue, in effect, for marketing pay-per-view access to commercial publishers' articles in the life sciences, as well as providing a window on that small proportion of the literature that has been made open access. Then there is the for-profit entity, BioMed Central Inc., which has implemented—and championed—the open-access business model, which it uses for over 100 titles (financed by author fees as well as institutional and national memberships). As well, many of the

corporate publishers, including Reed Elsevier, have decided, through the efforts of the World Health Organization, to generously grant developing countries open access to their medical and agricultural journals.[11] The public and commercial scale of this scholarly cybrary is thoroughly entwined. Yet make no mistake, the corporate sector's major stake in journal publishing is only increasing, as more scholarly societies turn their journals over to them. Open access publishing has emerged as the alternative program for scholarly publishing, one that has everything to do with how the cybrary is going to be constituted across these public and private interests.

The mixed economy of the public and private cybrary is full of implications for research and public libraries. In the case of the university's serials collection, direct online access to many of the titles is rendering the library increasingly invisible to its patrons. The library licenses access to the journals, creates a portal for its patrons, and then slips into the background. Yet librarians—information scientists that they now are—understand the issues of access better than anyone on campus. As a result, many of them are becoming involved in the struggle over the public and intellectual quality of the cybrary. These strong advocates of alternatives modes of publishing, including open access, are

raising banners exhorting faculty to *declare independence* and *take back control of scholarly publishing*.[12]

The next logical step, then, is for research libraries to play a more active role in constituting the cybrary as a public space. They can do that, in my estimation, by working directly with scholarly associations to underwrite and host their journals in open access formats. The research libraries could go so far as to form cooperatives that would support the journals of scholarly associations or independent editors through a system of distributed journal hosting while providing financial support, which, with the eventual dropping of print editions, would be at less than current subscription levels. The research libraries have the technical infrastructure in place, which is currently being used to support access to the major publishers' journals among others. Librarians have the expertise in information retrieval and indexing, as well as knowing a good deal about patterns of student and faculty use of the research literature. Using open source journal management and publishing software such as Open Journal Systems, the libraries could readily manage the publishing of open access journals in collaboration with associations and independent editors.[13] The institutions would remain the major beneficiaries of this support of open access journals, but it would have this bonus of global public access to a much greater portion

of the scholarly side of the cybrary. It could only further the circulation of knowledge, which hardly seems to lie far outside the library's mandate, even as it changes the library's very role in the circulation of knowledge. One place that this active support of open access is bound to affect is the public library.

The public library is already proving a major beneficiary of the cybrary, if still considerably limited in access on its scholarly side. Access to the Internet itself appears to lead to increased numbers of people visiting their local library, at least in the United States. Internet access is now available in 95 percent of public libraries in the United States, up from 28 percent in 1996, thanks to the efforts of the Bill and Melinda Gates Foundations, matched by a corresponding level of local support (Lohr, 2004). According to a Gates Foundation evaluation study, the number of visits to the library, following the installation of the Internet, increases by 30 percent, with the proportion of poor visitors being greater than is found in the general population (Gordon, Gordon, Moore, Heuertz & Evans, 2004).[14] As one patron put the benefits of having the Internet in the library, "it's rather profound … easy access to information … it expands our view of the world. We here [in a small town] are the unknowns. We become more open-minded and open to new ideas" (*ibid*.). Another said of this new

access that "it gives all of us who can't get a computer for some reason [the chance] to learn just as much as those with a computer" (*ibid*.).

The Internet in these libraries is being used, above all, for emailing family members (52 percent), but patrons also used it to find information about current events (35 percent), do schoolwork (33 percent), learn about a medical problem (31 percent), get government information (30 percent), and do homework (29 percent) (Gordon et al., 2004). Even at the low end of this usage, with nine percent of patrons using the Internet to "get information on voting issues," one can see possibilities for the social sciences contributing more to this public information sphere, if not to be read by the library patron directly, than as the research will be used by interest groups and political parties in substantiating their positions (*ibid*.). Certainly, the signs from the public's uptake of health information and related research are very encouraging, and it may yet turn out that such access can bring down health costs (Fox & Raineee, 2000).[15] As one librarian described this new level of Internet access, "it has enhanced and expanded our research capabilities for both students and general patron interest. This used to require sending them to a larger or academic library," while another referred to how "it's like adding a whole other wing of information onto our library, it has become indispensable to staff and patrons alike …" (*ibid*.).

Now, I do not mean to suggest that I believe that providing greater public access to scholarly work is *the* requisite for living a fruitful life. Rather, I fully recognize that the work of the university is often marked by, to return to one of Foucault's lectures at the Collège de France, "the centralizing power-effects that are bound up with the institutionalization and workings of any scientific discourse organized in a society such as ours" (2003, p. 9). True, if reinforcing this centralized power-effect were the whole of scholarly activities—and clearly it is not, given Foucault's very critique of it—then calling for a wider distribution of this knowledge would only increase its power over people. Instead, efforts to open the scholarly cybrary will create more public space for what Foucault identifies as the "discursive critique," which he saw rise in the 1960s by drawing on a combination of "the buried scholarly knowledge and knowledges that are disqualified by the hierarchy of erudition and sciences … in which we have both a meticulous rediscovery of struggles and the raw memory of fights" (2003, p. 8).

By going public through this new global medium, the hierarchy of erudition will be that much more open to buried knowledge and rediscovered struggles. It will be open to a new range of scholarly journals, to new proximities of

critique. The risk is indeed the unorthodox approaches, with troubles arising from not being able to rely on a handful of known entities in the hierarchy of erudition. Public spaces are like that. Private ones are not. So we may well see in an open access cybrary more of what Foucault describes as "playing local, discontinuous, disqualified, or non-legitimated knowledges off against the unitary theoretical instance that claims to filter them, to organize them into a hierarchy, organize them in the name of a true body of knowledge, in the name of the rights of science that is in the hands of the few" (2003, p. 9).

This proposed openness is meant to extend the republic of science and scholarship on a global scale, making it that much more democratic, as it expands who can read this work, and expands the prospects of journals being able to operate outside the centralized power-effects. Greater access to research is only the first step in enabling more equitable participation in the circulation of knowledge by a now-global academic community. The same systems that are enabling the major journals to reduce their costs by publishing online have also been developed in non-commercial, open source formats. Software, such as Open Journals Systems, is now being used to support journal publishing across this global community, in an effort to break free of the center-periphery model endemic to scholarly publishing. It can tap into the indexing and citation

systems that have, up to now, kept it invisible and devalued even within its own communities.

Yes, readers will have to be that much more discerning amid any increase in access to information, and research is underway on how to support the critical reading skills of those new to this literature (Willinsky, 2003c). But are we to restrict access to this literature on the grounds that the public is not somehow equipped to read what is known? Their right to this knowledge is inherent in its very nature as a public good. A case would have to be made that public access would reduce the contribution of this good, and it is not apparent to me how that can be done. Will nonsense be produced? Will good work be misread? Indeed. It happens all the time now, with so little open access, and it happens to such an extent that it might well be mistaken as necessary and inherent to the process of circulating knowledge. Elsewhere I have worked on a number of reasons why faculty members should take a more active role in ensuring the public scale and scope of their work. Those reasons have to do with the epistemological principles of openly circulating knowledge that is worthy of that claim, enabling it to be subjected to a thorough critique. But there are also slightly less noble principles of furthering the author's interests, as are upheld

by copyright law, by increasing the readership of their work and raising the degree to which it is cited by opening access (Willinsky, in press).

Here, however, I am guided by the history of libraries, with a focus on what it might mean to the public to make the Internet more of a public place for open learning and self-education. The ease with which we can lay our hands on scholarly work today, through the Internet, public libraries, cheap paperbacks, and second-hand bookstores, was itself the result not only of technological breakthroughs, but of people's determination to create a larger public sphere of ideas. As these Internet technologies now make open access a viable alternative for journals, so an earlier great leap forward in the public library movement was underwritten in the nineteenth century by new print technologies, as well as the availability of cheap paper and postal rates. Community and worker libraries took ready advantage of the reduced costs of books, magazines, and newspapers to bring a wide selection of fiction, non-fiction, and periodicals within reach of far more people than had ever had access before. *Cheap editions* is everywhere the cry of open and independent learning.[16]

Lest we forget earlier struggle for access, I would conclude with scenes from that earlier time that speak directly to what the public status of this online world

of learning might mean, as we take up the legacy of this earlier struggle over the right to know, and to participate in that knowledge. While we may think of the public library as the home of middle class interests and manners—a well-governed and ordered space—it is built on a long-standing, if buried, struggle among the disenfranchised seeking to exercise their right to know. The library does well in housing and equipping the aspirations of its patrons, in public and private senses, and in ways that cannot be so easily governed or ordered.

A vivid picture of what public access to this larger world of ideas has taken over the last few centuries is found in Jonathan Rose's recent *The Intellectual Life of the British Working Classes,* which portrays "the vital minority of self-improving workers" and "the passionate pursuit of knowledge by proletariat autodidacts" (2002, pp. 2, 4). Rose goes back to the first miners' libraries and mutual improvement societies in the mid-eighteenth century, and traces the efforts of individual working class readers and writers across two centuries. These dedicated readers may not be representative of their class, in any statistical sense, but they stand as an encouraging expression of interest in the value of opening the great storehouses of academic knowledge. The "autonomous intellectual life" of the otherwise disenfranchised during that period was to give rise to the Labour Party in Great Britain which grew out of a

belief that, in Rose's terms, "the politics of equality must begin by redistributing this knowledge to the governed classes" (2002, p. 7). And while working-class women had far less access to even rudimentary schooling and were not always welcomed in miner's libraries or other working men's associations, they did manage to form the very successful Women's Co-operative Guild by the final decades of the nineteenth century, in which women presented papers on feminist themes and engaged in other forms of mutual improvement (p. 77).

Earlier in the nineteenth century, a radical press movement emerged in the face of repressive laws and taxations—*taxes on knowledge*, as they were called at the time. The price of access was very much an issue in those days, and the undue levy placed on inexpensive newspapers was seen as a blatant effort to restrict people's right to know. In response, Thomas Jonathan Wooler, for example, launched the *Black Dwarf,* an *unstamped* (untaxed) newspaper which made it affordable to the working class, in 1817, and for all of its critique of contemporary political practices, Wooler also included the elements of a larger learning for its curious readers, by offering extracts from Aristotle, Erasmus, Machiavelli, Locke, and others, as well as the works of poets and other writers. While the *Black Dwarf* ceased publishing in 1824, other unstamped papers

continued to grow, until in 1836 there were a half-dozen that could claim a combined circulation of over 200,000 (Rose, 2002, pp. 35-36). Men and women editors, contributors and even sellers went to jail over this freedom of the press issue, a freedom that had everything to do with maintaining both the right to criticize and the right to inexpensive access to knowledge.

It was a time when, as Robert Lowery wrote in his autobiography from that period, that "every branch of knowledge had its public-house where its disciplines met" including those interested in music, literature, philosophy, and science (Rose, 2002, p. 38). The Spitalfields Mathematical Society, made up of weavers and other tradesmen, began meeting in the local taverns in 1717 (p. 70). Rose reports that there was also a "tradition of working class naturalists, who were meeting in pubs up until the 1920s" (p. 294). They had an impact on the research in botany, Rose notes, as works such as "William Jackson Hooker's *Muscologia Britannica* (1818) were written in accessible English because the authors depended so heavily on the contributions of plebian naturalists" (p. 224).

But then the research enterprise itself was far more of a public activity, if more largely so among the middle and upper classes, during the nineteenth century.

For example, Jim Endersby points out how “Darwin sat at the center of a web of correspondence that encircled the earth. Letters poured in every day containing answers to questions, new facts, fresh problems, seeds to plant, and an endless variety of specimens to ponder” (2003, p. 21). Darwin corresponded with the leading men of science of the day with the letter “his primary research tool,” but as Janet Browne goes on to point out in her biography of him, “he hunted down anyone who could help him … fur-trappers, horse-breeders, society ladies, Welsh hill-farmers, zookeepers, pigeon fanciers, gardeners, asylum owners, and kennel hands” (2002, p. 11). Making a similar point about the public contribution to research, Tom Shippey points out the parallels between Darwin’s *Origin of Species* and the philologist (and fairy tale compiler) Jacob Grimm’s *Deutsche Grammatik* (“for the humanities, the *Grammatik* had much the same effect as Darwin's Origin of Species for the life sciences”) the first volume of which appeared in 1819: “Both works integrated literally millions of observations and sets of data, often, interestingly and significantly, recorded by people from outside the scholarly world—dog-breeders and pigeon-fanciers in the case of Darwin, dialect-speakers and old women in the case of Grimm, the despised ‘nurses and spinning-wives’ (*Ammen und Spinnerinnen*) whom he angrily defends in his later *Deutsche Mythologie*” (2003). There are no less impressive instances of public participation from

around the world in the making of the *Oxford English Dictionary*, which began in the Victorian era and carried through to the twentieth century with considerable impact on the defining of the language (Willinsky, 1994).

William Lovett was one of the leaders of the working-class sector of this earlier knowledge society. He took over as secretary in 1828 of the short-lived but promisingly entitled British Association for the Promotion of Co-operative Knowledge, having had a stormy political career that included being jailed for libeling government officials, and went on in 1841 to found the National Association for Promoting the Political and Social Improvement of the People, whose circulating libraries and teachers were funded by worker contributions (Rose, 2002, p. 36). He entitled his autobiography, which he worked on for decades, *Life and Struggles of William Lovett in His Pursuit of Bread, Knowledge and Freedom*. Lovett wrote of wishing "to establish a political school of self-instruction among them [working classes], in which they should accustom themselves to examine great social and political principles, and by their publicity and free discussion help to form a sound and healthful public opinion throughout the country" (cited by Tawney, 1964a, p. 19). He wrote that "the time has gone by for the selfish and bigoted possessors of wealth to confine the blessings of knowledge within their own narrow circle, and by

every despotic artifice to block up each cranny through which intellectual light might break out upon the multitude" (cited by Rose, 2002, p. 64). Now all of that may seem a rhetoric of long ago, before public schooling, financial aid programs for colleges and other measures, and clearly the progress has been considerable. But one has only to look at the knowledge gap identified as one of the major challenges facing developing countries, to see that the blessings have not yet become universally available in ways which they reasonably could (Persaud, 2002).

These themes of self-instruction, mutual improvement, and co-operative knowledge are very much about the struggle for enfranchisement, at a time when the working classes were regarded, by those who governed, as unfit to vote or at least unfit until they were properly educated. Lovett also helped to found the London Working Men's Association, which proved to be a source of published work on workers' rights, universal suffrage education, and international politics, which drew on the work of Paine, Godwin, and Ricardo. Lovett also called for a government-supported national education system, a system that went far beyond the charity schools of the day, or the achievement score measures of today: "Imagine the honest, sober, reflecting portion of every town and village in the kingdom linked together as a band of brothers, honestly

resolved to investigate all subjects connected with their interests, and to prepare their minds to combat with the errors and enemies of society" (cited by Tawney, 1964a, p. 26).

In some of those nineteenth-century villages and towns "learning collectives" were formed, with local libraries playing a critical role in supporting such learning (Rose, 2002, p. 67). Lovett was concerned that this education be more than, as historian R. H. Tawney puts it, "a system devised by one class for the discipline of another" (p. 28). More than that, as part of this effort, Lovett arrived at the fundamental educational question: "Is it consistent with justice that the knowledge requisite to make a man acquainted with his rights and duties should be purposively withheld from him?" (*ibid*.). The worker association efforts at education culminated by the turn of the nineteenth century in the Workers Educational Association, which Tawney captures the spirit of in this spirited and misogynous way: "Men meet and discuss. There is hesitation, curiosity, interest, eagerness for knowledge. We ought to have learned about that; can't we learn about it? We will *learn* about it, and we will find a man to help us if a man is to be found" (1964b, p. 77).[17] "Knowledge for its own sake is a better principle," was how one WEA student responded to the question of whether vocational courses should be taught (Rose, 2002, p. 285). Still, it

should be noted that when Rose examined the records of worker's libraries, especially among Welsh miners, he found fiction far more popular than non-fiction, and he is happy to dispel any undue romanticization among socialists looking back, by pointing out that Karl Marx was not much read by anyone at all, though his works did figure often enough in the library holdings, serving much as they do in Diego Rivera's great murals at the National Palace in Mexico City as icons of dissent and hope (2002, ff. 298).

Certainly, university extension, adult education, open universities, and other means of extending access to higher education, including online programs, should go hand in hand with any defense of the cybrary's public sphere. Yet even here, with such programs, the self-directed elements of this learning must be balanced against the governed aspects of such programs, to keep it from becoming one class seeking to discipline another or, in Foucault's terms, as a way of increasing the centralizing power-effects of a hierarchical erudition. The very goal of providing open access to the full body of the learning and scholarship at issue provides a check on what might otherwise be presented as a monolithic and entirely coherent understanding, when in fact it is riddled with ideas and values that are not only contested and challenged, but in need of grounding and a greater sense of connection to this very community it would

otherwise educate. But then opening access would also provide a greater reason for such educational programs, as the cybrary, as public library, to go on serving people long after this or that course is completed.

Now Rose does describe how working class interests in self-education had by 1945 gone into a serious state of decline, and I would not want to suggest that suddenly opening the gates to the research literature, through the never-ending cybrary, would reverse this decline, in the face of entertainment and the other time and mind absorbing enticements of our era. But I do believe that this history demonstrates how assumed boundaries between educated and uneducated, learned and unlearned, were crossed in earlier times through developments in print technology and economics, and will be crossed again, all the more so with the support of faculty members committed to providing others with the opportunity out of a recognition of this basic right to know.

There remains much research to be done on what this new expansion in access to knowledge will mean for the public, and how that will change over time and with greater exposure to that literature. Still, before conclusive evidence on the benefits is in hand, I am calling on faculty members everywhere to begin to move on this issue *now*, on the principle of the public's right to know. I am

asking them to consider access and costs of the journals in which they seek to publish. I am asking them to explore how the journals with which they are associated, through professional associations or board memberships, can offer some form of open access (Willinsky, 2003a). There is no reason for faculty members to wait in posting their published work in open access websites and archives, or to publish their work in open access journals. This contribution will support the encyclopedic, open, and public force of the cybrary, even as it ensures the greater possible exposure or access to their work. By such means, they can begin to contribute to a cybrary that not only maintains the original spirit of the library, but greatly extends its public scale and resources.

We are withholding this research from the public domain by virtue of the choices we make in how it is published in this new online medium. The open access movement is being treated by some as a challenge to a researcher's right to pursue impact and prestige. It is being held up as a threat to the scientific system by the publishers.[18] It is being dismissed with indifference and complacency: "Hey, I have no time to worry about what this or that journal costs the library or whether it is freely available." But it makes little sense to speak of a loss of personal prestige or a threat to scholarly quality when some of the top journals in their field, from the *New England Journal of Medicine* to

Teachers College Record, have gone with various forms of open access (while still selling subscriptions in these two cases). One's career is not being placed on the line to publish with an open access journal as open access increases readership and citation levels. And as for complacency, it may seem in looking back to be of the most reckless and irresponsible sort, as hundreds of societies turn their journals over to corporate publishers who are contributing through their pricing policies, in effect, to a declining state of access to research on a global scale, even as the number of faculty and students continues to grow.

That leaves me, of course, with my own obvious inability, over the last few years, to place a compelling and persuasive case before an academic community otherwise entirely and deeply committed to learning, libraries, and the circulation of knowledge. What could be easier than convincing faculty members that it falls to them to shift the intellectual balance of the cybrary in favor of its longstanding *public* library legacy, one that is rooted in the ancient university libraries and in the basic scholarly urge found in the unfettered pursuit of ideas? All they need to do is look up from their own work for a moment. What could be easier? What could be harder? You do have to keep your voice down, after all, in the library, even as it remains that place where the

governed and ungoverned pursuit of knowledge, where the public interests and private concerns, meet.

NOTES

[1] The first citation for this public use is Reginald Pecock, from the *The Repressor of Over Much Blaming of the Clergy, circa 1449,* "In caas a greet clerk wolde go into a librarie and ouer studie there a long proces of feith writun in the Bible."

[2] Centuries after these initial citations which the *OED* has collected for this public sense of library, we come to how "Charitable … Persons have … erected Libraries within several Parishes and Districts," from 1708 Acts of the Privy Council, and to schemes for "free libraries," by the mid-nineteenth century.

[3] When Gibson subversively suggests that children in a geometry class are absorbed in collective illusion, it calls to mind just how closely PowerPoint slides projected on the walls of darkened rooms—whether classrooms or boardrooms—resemble one of the West's great philosophical parables. See Plato's *Republic*, Bk VII, "The Cave Allegory."

[4] It may seem entirely unscholarly to raise the spectrum of coincidence in George Orwell composing his informatics dystopia, *1984*—which was the year Gibson's *Neuromancer* was published—during the same year that Weiner published his *Cybernetics*, in 1948. Weiner's choice of philosopher Leibniz as "the patron saint for cybernetics" has its own resonance with the cybrary, as Leibniz was, among many things, a librarian, who sought "to build systems of solid knowledge for promoting man's happiness" that would link together in the form of a "demonstrative Encyclopedia" (1951, p. 32; see also Willinsky, 2000, pp. 65-72).

[5] For example, Foucault's lectures at the Collège de France were attended by thousands between 1971 and 1984, and are now in the process of being published. As François Ewald and Alessandro Fontana explain: "Professors teaching at the Collège de France… are under an obligation to teach for twenty-six hours a year (up to half the hours can take the form of seminars). Each year, they are required to give an account of the original research they have undertaken, which means the contents of their lectures must always be new. Anyone is free to attend the lectures and seminars; there is no enrollment, and no diplomas are required. The professors do not award any diplomas. In the vocabulary of the Collège de France, its professors do not have students, but *auditeurs* or listeners" (2003, pp. ix-x). Foucault opened his lectures of 1976 by stating that "I do not regard our Wednesday meetings as a teaching activity, but as public reports on the work I am, in other respects, left to get on with more or less as I see fit," and he referred to this reporting as "an absolute obligation" (2003, p. 1).

[6] On Borges, see his "The Library of Babel" (1962); on Peter Greenaway, his movie production of the Tempest, *Prospero's Books* (1991).

[7] An estimate from EPS Market Monitor places ownership of the $7 billion Science, Technology and Medical research publishing industry at 62% of the market, with the top four players, beginning with Reed Elsevier, controlling fully half of that industry (STM Market, 2003, p. 12).

[8] A recent poll of 7,400 faculty members conducted by the non-profit Ithaka noted that the characteristic of a journal that was most desirable was wide circulation (endorsed by 87%), while 58% said the journal should be free, while 52% felt is should be highly selective (Kiernan, 2004, p. A34).

[9] See Eprints (http://eprints.org) and DSpace (http://dpsace.org).

[10] Also, see the Bryson Decision at the University of British Columbia on protecting academic freedom in online teaching contexts (2004).

[11] See Health InterNetwork Access to Research Initiative (HINARI) (http://www.healthinternetwork.org/) and Access to Global Online Research in Agriculture (AGORA) (http://www.aginternetwork.org/en/).

[12] See Scholarly Publishing and Academic Resources Coalition (SPARC) (http://www.arl.org/sparc/).

[13] See the Public Knowledge Project, which I direct, and its Open Journal Systems, an open source journal management and publishing system, designed to be utilized with minimal technical skills and limited editorial experience, which is being used by African Journals Online and other agencies and publishers (http://pkp.ubc.ca/ojs).

[14] In one county in southern Louisiana, for example, the government saw a one-quarter-cent sales tax passed in support of local libraries in 1998, which has resulted in funding for "81 computers, more staffing and a 10-fold increase in the annual book budget" (Lohr, 2004).

[15] I am indebted to my colleague Stephen Carey for this entirely sensible idea.

[16] Frederick Engels: "And in how great a measure the English proletariat has succeeded in attaining independent education is shown especially by the fact that the epoch-making products of modern philosophical, political, and poetical literature are read by working-men almost exclusively … In this respect the Socialists, especially, have done wonders for the education of the proletariat. They have translated the French materialists, Helvetius, Holbach, Diderot, etc., and disseminated them, with the best English works, in *cheap editions*" (1969, my emphasis).

[17] From its current website: "The Workers' Educational Association (WEA) is the UK's largest voluntary provider of adult education. Ever since it was founded in 1903, in order to support the educational needs of working men and women, the WEA has maintained its commitment to provide access to education and learning for adults from all backgrounds, and in particular those who have previously missed out on education." (http://www.wea.org.uk)

[18] Association of Learned and Professional Society Publishers: "Abandoning the diversity of proven publishing models in favor of a single, untested model could have disastrous consequences for the scientific research community. It could seriously jeopardize the flow of information today, as well as continuity of the archival record of scientific progress that is so important to our society tomorrow." (Publisher's Associations' Statement, 2003)

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