

“Publishers Did Not Take the Bait”: A Forgotten Precursor to the NIH Public Access Policy

Jonathan Miller

This article compares the recent National Institutes of Health (NIH) Public Access Policy (2005–07) with the United States Office of Education policy on copyright in funded research (1965–70). The two policies and the differing technological and political contexts of the periods are compared and contrasted. The author concludes that a more nuanced approach to copyright, the digital information environment, and the support of an energized user community auger well for the success of the NIH policy, but that it is still too soon to tell.



In February 2005, after many months of discussion and deliberation, the National Institutes of Health (NIH) introduced their policy on “Enhancing Public Access to Archived Publications Resulting from NIH-Funded Research.”¹ The policy states:

Beginning May 2, 2005, NIH-funded investigators are requested to submit to the NIH National Library of Medicine’s (NLM) PubMed Central (PMC) an electronic version of the author’s final manuscript upon acceptance for publication, resulting from research supported, in whole or in part, with direct costs from NIH. The author’s final manuscript is defined as the final version ac-

cepted for journal publication, and includes all modifications from the publishing peer review process.²

The policy has three purposes: to create a stable archive of NIH-funded research ensuring permanent preservation, to help the NIH manage its research agenda, and, perhaps most important in terms of this paper, to “make published results of NIH-funded research more readily accessible to the public, health care providers, educators, and scientists.”³ On December 26, 2007, the NIH Policy became mandatory with passage of the Consolidated Appropriations Act of 2008 (H.R. 2764).

The policy mandates that within twelve months of publication the final peer-reviewed version of an article based on NIH-funded research will be placed in

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the PMC repository. The NIH leaves any copyrights that exist in the work in the hands of the authors or their assignees, the journal publishers. Therefore, legally the copies in the repository are subject to all the restrictions on reproduction detailed in copyright law. Practically, in terms of technology, there are no special restrictions on how these digital objects can be reproduced. By leaving copyright with the authors and enabling an embargo period of up to twelve months, the NIH hopes to maintain the incentive of publishers to continue to play their role as the organizers of the gatekeeping and editing functions within the scholarly communication system, while improving access to the research results.

This policy has been widely recognized as an important development in terms of open access to medical research and the scholarly journal literature. As with many such developments in intellectual property in the age of the Internet, the discussion surrounding this development has proceeded with little awareness of historical precedent. However, it is useful to view the NIH policy in historical context: as part of the transition from print to digital media, as part of the long-term growth of the role of the federal government in research and development, and as indicative of changing attitudes to government in America. To take an even longer view, this episode can be placed in the context of the ongoing legal tension between creators and users of information. A tension that goes back at least to England's Statute of Anne in 1710 and perhaps back all the way to the advent of printing and the early *privilegio* of the 15th century Venetian Republic.⁴ There is no need to rehash the history of copyright from the invention of printing to the present day to gain some historical perspective. We can instead look to a more recent example of when a U.S. federal government agency attempted to enhance public access to research, in this case by placing such research in the public domain.

The public domain is defined as "the realm of publications, inventions, and processes that are not protected by copyright or patent."⁵ In general, as set down in §105 of Title 17 of the U.S. Code, "copyright protection under this title is not available for any work of the United States Government." This is because of our overriding interest in access to public information and because federal employees or organizations, supported by public funds, don't need the incentive of copyright protection to produce new works.⁶ The roots of this policy go back at least as far as 1834 and the landmark case of *Wheaton v. Peters*.⁷

However, in writing §105, Congress realized that the situation was more complicated than that and did not prohibit copyright in works created under government contracts or grants, noting in the legislative history of §105:

There are almost certainly many other cases where the denial of copyright protection would be unfair or would hamper the production and publication of important works. Where, under the particular circumstances, Congress or the agency involved finds that the need to have a work freely available outweighs the need of the private author to secure copyright, the problem can be dealt with by specific legislation, agency regulation, or contractual restrictions.⁸

There are significant differences between federal documents in the public domain and those covered by the NIH policy. The NIH policy does not deprive the authors, or those to whom they have assigned copyright, of their exclusive rights under copyright law. However, once the documents are in PMC, they are openly accessible via the Internet and thus the copyright holders' legal rights are not reinforced by any technological capability to control use. The NIH or the user of the work might argue that, as long as that use

is “fair use,” then they could have made exactly the same use of an article from any library that subscribes to the journal. In practice, placing these materials online, on the unrestricted Web, can make a real difference in terms of level of use by people without easy access to a subscribing library. These articles might not be in the public domain, but they are publicly accessible in a way that online versions of articles in licensed databases are not. After all, enabling increased use is one of the reasons the NIH promulgated this policy in the first place. Some publishers who oppose this policy are concerned that this use might come at the cost of reduced permissions and subscription revenues.

When the legislative history of §105 quoted above was written, during the developing of the legislation that became the Copyright Act of 1976, the authors and Congress may have had in mind a recent example of an agency that sought to regulate grantees’ copyrights, an example that has now fallen out of the public and Congressional consciousness. The development of the Copyright Act of 1976 took twenty-one years from its inception in studies sponsored by the Copyright Office in the late 1950s until passage of the legislation in late 1976. This period encompassed a significant part of the Cold War, a decade during which U.S. education was strongly influenced by the successful 1957 launch of Sputnik.⁹ This period also encompassed President Johnson’s Great Society¹⁰ program, which included the landmark Elementary and Secondary Education Act of 1965. This Act focused on improving education for economically disadvantaged populations. In the context of these events, the U.S. Office of Education (USOE), the precursor to the federal Department of Education, published a Statement of Policy in the *Federal Register* on July 28, 1965, stating:

Material produced as a result of any research activity undertaken with any financial assistance through contract with or project grant from

the Office of Education will be placed in the public domain. Materials so released will be available to conventional outlets of the private sector for their use.¹¹

In his report on this issue funded by the Fund for the Advancement of Education, Julius Marke¹² outlined the issues and the perspectives of various interests surrounding this policy and made some specific recommendations with regard to the issue of government information and the public domain.¹³

Marke quoted the comments of Henry Loomis, then Deputy Commissioner of Education, at an unidentified conference with representatives of education organizations, on the purpose of the policy: “We want to make this material available to the maximum number of people, in the shortest time, with a minimum of restrictions.”¹⁴ Loomis’ statement sounds very similar to the NIH’s third purpose.

In a period when the federal government’s role in the production and distribution of curricular materials for K–12 education was expanding rapidly, USOE sought to promote competition in the production and distribution of versions of federally funded curricular materials and the rapid dissemination of scholarly research. If commercial publishers failed to publish these materials, the USOE would consider subsidizing publication. Marke noted that the reaction of educational organizations and publishers was “one of strong protest and critical denunciation.”¹⁵ Not surprisingly, they argued that the policy would inhibit rather than encourage publication.

Walter Mylecraine (Special Assistant to the Deputy Commissioner of Education) made the argument for why these materials should be in the public domain, and he used some arguments familiar to us from the current creative commons/open access debate. In a 1965 article he argued that, by placing these materials in the public domain, the educational marketplace would evaluate the materials and decide

how they could best be used and distributed. Furthermore, he argued that the absence of copyright on these materials would encourage both cooperation and competition. Since no one researcher has the ultimate truth, by enabling scholars to build on the work of others, much-needed innovation in education would be encouraged.¹⁶

There are some significant differences between the policies of the USOE and the NIH. The NIH does not deprive the copyright holder of their exclusive rights. The copyright remains with the author or the journal to which copyright has been assigned. The USOE policy mandates that the materials will be in the public domain. The NIH policy requires that articles be made available via PMC within twelve months of publication with the aim of providing journal publishers with a window of profitability. The NIH policy also mandates that the version to be submitted to PMC will be the peer-reviewed and -edited article. The USOE policy placed materials in the public domain before publication with the aim of enabling publication in multiple editions. The two policies also differ in terms of the contexts, both technological and political.

The most obvious contextual difference is technological. The USOE policy was developed when the printed word was triumphant. The nineteen sixties were part of the "information explosion" in which private publishers, universities, and governments were creating and publishing ever more printed materials of all kinds, and libraries' acquisition and storage of these materials were expanding rapidly in an attempt to keep up with the flow. Two new technologies—microform and the photocopier—that acted as ancillaries to printed texts reached maturity during this decade, and computer networks of bibliographic data were developing during this decade. Like the printing press and movable type that led to the development of copyright in the early modern period, each of these technologies play a role in the storage and distribution of intellectual

content. They enabled the USOE policy makers to envision an environment in which the results of the research and curricula development efforts they funded could be quickly and easily distributed to practitioners in the field.

Planning for the Educational Resources Information Center (ERIC) began in 1959, and the service itself began in 1966. ERIC aimed to replicate the success of leading federal technical information systems like the National Library of Medicine's Medical Literature Analysis & Retrieval System (MEDLARS). The two projects—creating an online index and microform repository of educational research, and declaring all USOE-funded research in the public domain—operated out of different sections of the USOE and were not closely linked. However, educational publishers perceived them as part of a challenge to their traditional business model. Traditional journal publishers, particularly in the educational and science and technology fields, perceived the challenges of the photocopier, document delivery services like that operated by the NLM, the vaguely understood online networks, and the USOE's statement of policy as existential threats to their businesses. Some traditional journal publishers see the NIH policy and the open access movement in much the same way today. For an overview of these current concerns, albeit a somewhat extreme version, see the American Association of Publishers' Partnership for Research Integrity in Research and Medicine Web site at www.prismcoalition.org/index.htm.

The contemporary technological context for the NIH policy seems quite different. Publishers have become reconciled to the photocopier as part of the scholarly communication system, storage on microform has largely been superseded by digital storage, and online networks have become the preferred delivery systems for information. The threat that publishers saw in ERIC, as a government-financed information distributor that overwhelms other channels, has been replaced by the

NLM's descendent of MEDLARS, PMC. In an environment in which works can be digitally duplicated *ad infinitum* without loss of quality, the prospect of a single repository and point of access for health science articles appears to publishers to be a new existential threat to the established system of scholarly communication. Yet, when viewed in historical context, it is clear that each new technology first challenges the established system, then changes that system, and is finally incorporated into the system of scholarly communication. It is conceivable that the idea that pdf file format and PMC threaten the very existence of our system of scholarly communication will seem as quaint to publishers, librarians, and researchers in 2050 as the idea that photocopiers threatened that system does in 2008.

The other context in which the differences between these two policies must be considered is perhaps the more starkly different. This is the political dif-

ference between the late sixties and the first decade of the twenty-first century. The USOE developed its policy in the context of the massive growth in the role of the federal government in all aspects of American society in the postwar period. The policy was promulgated as a part of President Johnson's Great Society campaign and specifically the increased federal spending on educational research and curricular development. While Johnson never saw government as the only answer to the problems he sought to address, he (along with the policymakers within his administration, and the many liberal Democrats elected to Congress in the landslide elections of 1964) believed that government programs and action could play a positive role in building the Great Society. They did not assume that markets left to their own devices would do so. The Nixon administration that came into office in 1969, faced with escalating costs for the Vietnam War and

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domestic programs, and with a more conservative approach to government, began America's retreat from big government. In 1970 it was Nixon's administration at the USOE that finally retreated fully from the 1965 USOE Statement of Policy.

The NIH Policy, in contrast, was developed in a very different political climate. Although the federal government retains a large role in American society, President Clinton famously declared in 1996 that "the era of big government is over."¹⁷ In this era, the most effective rhetorical lobbying tactic that the proponents of the NIH Policy used was the concept of "taxpayer access." This rhetoric is embodied by the Alliance for Taxpayer Access, which argues:

Access to scientific and medical publications has lagged behind the wide reach of the Internet into U.S. homes and institutions. Subscription barriers limit U.S. taxpayer access to research that has been paid for with public funds. Taxpayer access removes these barriers by making the peer-reviewed results of taxpayer-funded research available online, and for no extra charge to the American public.¹⁸

Instead of arguing that a government program was the answer to the problem, they argued that taxpayers (repeating the word three times in one short paragraph, lest we miss the point) had already paid for the research and should not be charged extra for access. This argument is similar to one that Marke addressed in his 1967 book concerning the USOE policy. Marke laid out Senator Russell Long's argument that allowing government contractors to acquire the copyright in works they undertake with government funding amounted to what Long described at a Congressional hearing as "privileged monopolies, denying the public access to what it already paid for."¹⁹ Marke also notes that M.B. Schnapper (editor of Public Affairs Press) took

the argument even further when he noted that, since copyrighted results of publicly funded research are often purchased by publicly funded entities like schools and libraries, this policy results in a "double subsidy."²⁰

While the fundamental argument remains that same, what is interesting is the change in rhetoric from the 1960s to the present day, from Long and Schnapper's use of the rhetoric of monopoly and subsidy for the producer to the Alliance's use of the rhetoric of value for money for the taxpayer. In a *Washington Post* article concerning the passage of the Appropriations bill that included language making the NIH policy mandatory, Heather Joseph, Executive Director of SPARC (the Scholarly Publishing and Academic Resources Coalition, a founding member organization of the Alliance) is quoted as saying, "The basic reason we went to bat so hard for this was because we thought it was the right thing to do with taxpayers' science ... Now there will be \$29 billion in taxpayer investments freely available to the public."²¹

The USOE Statement of Policy also came about in the political context of copyright revision. The effort to revise the Copyright Act of 1909 began in 1955 and finally came to fruition with passage of the Copyright Act of 1976. The late 1960s were a crucial phase in this 21-year struggle. In the mid sixties, educators, led by the National Educational Association (NEA), had lobbied hard for a general exemption from infringement for common forms of copying by schoolteachers. They ultimately failed in this attempt but gained some sympathy for their position in the House of Representatives. It is clear, from papers on copyright revision in the Records of the Association of Research Libraries archived at the Library of Congress, that the NEA linked the USOE policy to the revision process. The NEA went so far as to distribute copies of the 1965 Statement of Policy from the *Federal Register* to participants in a September 10, 1965, meeting of the Ad Hoc Commit-

tee on Copyright.²² The House passed a copyright bill in 1967 (H.R.2512) that the Senate failed to act upon. In that same year, the Williams & Wilkins publishing company brought suit for copyright infringement against the NLM for the document delivery service that the Library provided to medical libraries and their users across the country. The Williams & Wilkins suit was a test case concerning the extent of the fair use doctrine with regard to photocopying, as well as part of the long struggle between publishers and librarians to influence the copyright revision process and find the limits of fair use in library copying and interlibrary loan. The policymakers involved in the USOE policy were well aware of these developments. For instance, Stephen McCarthy, a leader of the librarians' efforts to influence copyright revision, and the Executive Director of the Association of Research Libraries, which financed an *amicus curiae* brief in the Williams & Wilkins case, served on the USOE Advisory Committee on the Publication of Copyrighted Materials in 1968 and 1969.

There is no overarching general revision of copyright law that forms the context of the NIH Policy. The Copyright Act of 1976 remains the foundation of current U.S. copyright law. However, there have been a number of amendments to the law, particularly the Digital Millennium Copyright Act (DMCA) of 1998 and the Copyright Term Extension Act (CTEA, the Sonny Bono Act) also of 1998 that many librarians and others in the newly energized user community perceive as legislation that moves the balance of copyright away from users of copyrighted works and toward copyright holders. These legislative moves—and the reactions to them—were reinforced by the Supreme Court's 2003 decision in *Eldred v. Ashcroft*.²³

The newly energized copyright user community, represented by organizations like the Digital Future Coalition and the Electronic Frontier Foundation,²⁴ is another important contextual difference between the 1960s and the current decade. In

the 1960s, no comparable grassroots information policy lobby existed. This changed as the Internet gained popularity in the 1990s, as the technology of digital copying transformed many people's interactions with music, software, and digital content in general, and as corporations sought to retain control of their copyrighted content. In the 1960s, copyright policy was a relatively arcane area of the law of interest to content industries like publishing, film, radio, television, education, and the nascent information industry. Few individuals, other than authors, were interested in the subject. As noted earlier, the disruptive copying technology of the 1960s was the photocopier. Although during the 1960s the copier moved from a strictly mediated technology, in which users placed orders to have copies made by professional staff in institutional copy centers, to unmediated copying by users in offices, libraries, and schools, the technology never migrated into the home. Photocopiers remain most useful when positioned close to the storehouses of printed materials to be copied—in libraries, schools, and offices. Therefore, the influence of users in copyright policy development was always expressed through institutional lobbies like library and educational associations. By contrast, the comparable disruptive Web-based copying technologies of the 1990s and 2000s are accessible to the individual and have led to the growth of a politically active, grassroots, user-oriented, information policy lobby that forms alliances with library and educational associations and with like-minded corporations. One outcome of this process (among others) is the open source software movement and the related open access (OA) movement.²⁵ The NIH policy is one of the most visible expressions of the OA movement in the United States. Proponents of OA see the movement as compatible with current copyright law, although some copyright holders argue that it undermines the policy aims of copyright.

The USOE policymakers were interested in getting the products of their funded

research and curriculum development projects into the schools as quickly and as cheaply as possible, so their policy was intended to allow the researchers who developed the materials, the educational publishers, and anyone else to copy and distribute these materials, as well as any derivative works based on these materials. However, as Morton Bachrach (Copyright Program Officer at the USOE National Center for Educational Communication) explained later, "publishers did not take the bait."²⁶ Publishers argued that, by denying copyright in these works, copyrights that could be assigned to publishers, the USOE was making them unmarketable. If no one owned them, no one could sell them, and thus distribution and access would be hampered, not enhanced. The policy faced determined opposition from publishers and some educational organizations, who warned that, if anyone could publish a work, no one would. Researchers also found ways around the policy. For instance, they would submit a draft version to the USOE and then copyright a revised version.²⁷ In 1968, the last year of the Johnson administration, the USOE policy was modified so that contractors and grantees were allowed to seek copyright if they couldn't find a publisher prepared to publish a noncopyrighted version. As stated in the *Federal Register*,

The public interest will, in general, best be served if materials produced under project grants or contracts from the Office of Education are made freely available to the Government, the education community, and to the general public. Ordinarily, this objective will be accomplished by placing such materials in the public domain. In some situations, however, it is recognized that limited copyright protection may be necessary during development or as an incentive to promote the effective dissemination of such materials.²⁸

In 1970, the policy was effectively reversed when the USOE, now under the Nixon administration, promulgated an edited version of the statement of policy in its copyright guidelines published in the *Federal Register*:

It is the policy of the U.S. Office of Education that the results of activities supported by it should be utilized in the manner which will best serve the public interest. This can be accomplished in some situations, by distribution of materials without copyright. However, it is recognized that copyright protection may be desirable, in other situations, during development or as an incentive to promote effective dissemination of such materials.²⁹

In contrast to the USOE, the NIH funds cutting-edge research in biomedicine and the health sciences. Typically this research is published in peer-reviewed journals that are published by specialized commercial and scholarly society publishers. There are at least three, somewhat overlapping, markets for, or communities interested in, this research: an academic one consisting of researchers, students, and their agents, libraries; a professional one of doctors and healthcare practitioners; and a corporate market of researchers in the pharmaceutical and healthcare industries. The NIH is also interested in making this research accessible to healthcare consumers in an era in which individual Americans are encouraged, if not expected, to become informed consumers of healthcare services. Each of these groups places a high premium on the currency, accuracy, and quality of the research and the reporting of the results of that research. The NIH policymakers have attempted to meet these needs for accuracy, currency, and quality by not following the USOE in declaring the published results of NIH-funded research as being in the public domain. Instead, they have attempted to retain some incentive

for publishers to continue to play their traditional role as the organizers of editing and of peer review. Publishers who oppose this policy argue that the policy undercuts their incentive to perform this role and thus undermines scholarly communication and long-term access to this research. The fact that the NIH policy explicitly leaves the copyright with the author of the work, in contrast to the USOE policy, which placed the work in the public domain, is potentially one of the most important differences between the two policies and may eventually lead to a very different outcome for the current attempt to broaden access to a slice of government-funded research.

In a particular historical and technological context, the USOE made a bold move that failed to achieve their goal of increasing access to their funded research. Over a five-year period they were forced to withdraw from a policy that placed all the works resulting from their funded projects in the public domain, to one in which some works could be copyrighted if necessary, to a final policy in which some works could be distributed without copyright protection, but most would be copyrighted. In a very different historical and technological context, NIH has made a similarly bold, but more nuanced, move to achieve much the same end. The NIH never removed copyright protection from the materials produced as a result of its funded research. In 2005 it asked

researchers to voluntarily place these materials in an open-access repository, and in 2008 it requires that materials be placed in the repository. It will be interesting to see whether they are more successful than the USOE.

The fact that the NIH has the support of an energized user-oriented information policy lobby that is supportive of open-access initiatives in general and uses a sophisticated political rhetoric, that they have not deprived the authors and publishers of their copyrights, and that their policy works with rather than against the dominant content distribution technologies of the period would seem to auger well for their success. However, the USOE's experience is just one more example of the endless tug-of-war of copyright. Stephen Brand³⁰ famously said "information wants to be free,"³¹ to which Dick Bass, VP of Technology Development at Microsoft, among others, responded, "authors want to be paid."³² The USOE policy did not, as Henry Loomis hoped, make USOE-funded research available to more people in less time. Instead, researchers and publishers withdrew from the distribution system, the market, or found ways around the policy that ensured that they would be rewarded for their contribution. Over the next few years we will learn whether the NIH's policy and the context within which it exists are sufficiently different to ensure a different outcome.

Notes

1. National Institutes of Health, *Policy on Enhancing Public Access to Archived Publications Resulting from NIH-Funded Research* (2005). Available online at <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-05-022.html>. [Accessed 27 July 2005].

2. *Ibid.*

3. *Ibid.*

4. L. Ray Patterson, *Copyright in Historical Perspective* (Nashville, Tenn.: Vanderbilt University Press, 1968).

5. Bryan A. Garner, ed., *Black's Law Dictionary*, 7th ed. (St. Paul, Minn.: West Group, 1999).

6. Julie E. Cohen and others, *Copyright in a Global Information Economy* (New York: Aspen Law & Business, 2002).

7. *Wheaton v. Peters*. 33 U.S. 591.

8. House Report. Rep. No. 94-1476, 94th Congress, 2nd session, 1976, 59.

9. Robert A. Divine, *The Sputnik Challenge* (New York: Oxford University Press, 1993).

10. Lyndon Baines Johnson, *President Lyndon B. Johnson's Remarks at the University of Michi-*

gan May 22, 1964. Available online at www.lbjlib.utexas.edu/johnson/archives.hom/speeches.hom/640522.asp. [Accessed 28 December 2007].

11. United States Office of Education, "Statement of Policy," *Federal Register* 30, no. 144 (July 1965): 9408–09.

12. Julius Marke was a professor of law and law librarian at New York University. President of the AALL 1962–63 and a prominent librarian leader during most of the copyright revision process that led to the 1976 Act.

13. Julius J. Marke, *Copyright and Intellectual Property* (New York: Fund for the Advancement of Education, 1968).

14. *Ibid.*, 12–13.

15. *Ibid.*, 13.

16. Walter E. Mylecraine, "Public Domain," *American Education* (Nov. 1965): 7–8.

17. William Jefferson Clinton, *President Clinton's 1996 State of the Union Address as delivered January 23, 1996*. Available online at <http://clinton4.nara.gov/WH/New/other/sotu.html>. [Accessed 28 December 2007].

18. Alliance for Taxpayer Access, *Alliance for Taxpayer Access Homepage* (2006). Available online at www.taxpayeraccess.org. [Accessed 28 December 2007].

19. Marke, *Copyright and Intellectual Property*, 20.

20. *Ibid.*, 22.

21. Rick Weiss, "Measure Would Require Free Access to Results of NIH-Funded Research," *Washington Post* (Dec. 21, 2007). Available online at www.washingtonpost.com/wp-dyn/content/article/2007/12/20/AR2007122002115_pf.html. [Accessed 8 February 2008].

22. Robert T Jordan, Memo to Verner Clapp on Copyright Report from Rosenfield on September 10 Meeting (Sept. 15, 1965). Records of the Association of Research Libraries. Unprocessed materials #18,632 Box 1 of 64 Folder Copyright 1967. Library of Congress.

23. *Eldred v. Ashcroft*. 538 U.S. 916 (2003). In this case the Supreme Court found that the Copyright Term Extension Act was constitutional because, although it extended the duration of copyrights, those copyrights were still limited. United States Office of Education, "Copyright of Materials: Statement of Policy," *Federal Register* 33, no. 42 (Mar. 1968): 3653.

24. For more information on the Digital Future Coalition, see www.dfc.org/dfc1/Learning_Center/about.html; and on the Electronic Frontier Foundation, see www.eff.org/about. [Accessed 8 February 2008].

25. For an introduction to Open Access, see Peter Suber's "Open Access Overview" at <http://www.earlham.edu/~peters/fos/overview.htm>. [Accessed 8 February 2008].

26. Morton W. Bachrach, "OE's New Copyright Policy," *American Education* (Aug.–Sept. 1970): 28–29.

27. *Ibid.*, 28.

28. United States Office of Education, "Copyright of Materials: Statement of Policy," *Federal Register* 33, no. 42 (Mar. 1968): 3653.

29. United States Office of Education, "Copyright Guidelines," *Federal Register* 35, no. 91 (May 1970): 7317–20.

30. Brand's statement was more nuanced than is generally recognized. The full quotation is, "information wants to be expensive, because it is so valuable. The right information in the right place just changes your life. On the other hand, information wants to be free, because the cost of getting it out is getting lower and lower all the time."

31. Stewart Brand, *The Whole Earth Review* (May 1985).

32. Clare Haney, "Microsoft Fears E-Book Piracy," *PC World* (Aug. 29, 2000). Available online at www.pcworld.com/article/id,18262/article.html. [Accessed 8 February 2008].