

Buy or Lease? Two Models for Scholarly Information at the End (or the Beginning) of an Era

*Some say the world will end in fire,
Some say in ice.
From what I've tasted of desire
I hold with those who favor fire.
But if it had to perish twice,
I think I know enough of hate
To say that for destruction ice
Is also great
And would suffice.*

—Robert Frost
“Fire and Ice”

WITHIN LIVING MEMORY, our use of print (static) information has been governed by copyright law and the practices that have evolved around it. Enter electronic information, where publishers deliver it with licenses and new rules, a very different framework from copyright. In fact, the recent report of the US National Information Infrastructure Working Group on Copyright imagines a world that is increasingly governed by licenses (or contracts) rather than copyright. In order to understand these two different modes within the context of today's research and academic libraries, given the rapidly growing world of electronic information, I will discuss the concept of copyright—

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what it is, how it works, and what it achieves—as well as contractual licensing and how it currently works. Since the publishing universe now contains both modes, with licensing rapidly on the rise, we need to imagine how the two kinds of regimes will interrelate and what the future may hold for academic research libraries whose mission for centuries has been to provide scholarly information for their patrons.

Poets and prognosticators from the earliest mythical times to Robert Frost have shown us a world imperiled from opposite extremes at once. At a time when settled ways of publishing and distributing the fruits of research are shaken up by new electronic technologies, it may seem that the prevalent economic models offered by copyright law and licensing agreements suggest threats as extreme as Frost's. This essay will look at both contexts—fire and ice—to see what unexpected middle ways might lie before us, suggesting that in fact there will be a middle ground if the copyright and information licensing worlds converge over time.

SYMBOLIC MONEY AND DE-MASSIFIED INFORMATION

In discussions during a recent meeting about the future of scholarly communication, a wise publisher of our time thought to express his uncertainty about the future of electronic information by wondering rhetorically whether people would be comfortable paying “real money” for networked electronic information, which by its nature does not supply them with the physical sense of possession that the printed book or even the CD-ROM can provide.¹ Under what future conditions, in other words, will the movement of information happen optimally, so that both prospective seekers of information and prospective distributors are content with the exchange and with the relationships that emerge?

If indeed we are to live in a postindustrial, information-based economy, few questions are of such practical, social, cultural, and economic moment. So it is a curiosity of fate that this particular question is one raised with surprising clarity and force in libraries—places not usually thought to be much roiled by forces of social change and certainly not often perceived as the setting for front-line confrontations or innovations. Few regard the collections development departments (not infrequently, cramped spaces

hidden away off back corridors) of major research libraries as the center of paradigm shifts. But where the information is of high sophistication and urgently broad social value (affecting research and education across the full range of active disciplines), that is just where substantial economic decisions are made daily, through market encounters between those who have information to sell and those who would buy it; it is there that change is felt, seismically, disturbingly, long before the rest of society is aware of the issues.

Let us return for a moment to the publisher mentioned at the outset and his juxtaposition of “real money” and electronic networked information. The notion of the “reality” of money is worth lingering over. In earlier times, the reality of money was not an issue. A donkey might be swapped for two goats; a crop of corn might be swapped for a cow; or, one remove from direct barter, a laborer who tilled the corn (or built a barn) might be paid from the corn crop. But donkeys and corn were heavy and awkward to carry and soon became inadequate for the diverse and multiple transactions in which people wished to engage. So the reality of money next inhered in the value of the material from which currency was minted. That value was itself a bit precious, possibly in more ways than one, but it was firmly grounded in a market reality: more people wanted gold than there was gold to go around.

Most recently, and for a long time now, money has itself been virtual. Written bonds promising to pay “real money” are as ancient as literacy itself. Indeed, the remarkable thing is that precious metallic currency retained its real value as long as it did. But then there came a time when paper money began to stand as a surrogate for gold and silver hidden away in national vaults, followed by a time when direct relationships to that gold and silver eroded. The “realest” money today is itself a symbol of an abstractly constructed value, valuable itself because all have agreed to agree that it is valuable.

These days, only a tiny fraction (apparently well under 10 percent) of the money in daily use in the United States is the kind that folds or clinks.² Few consumers give much thought to what happens when they hand over a credit card to settle their restaurant check. At this moment, several closely related electronic transactions begin, completed perhaps a month later when the con-

sumer sits down miles away to write a check and drops it in the mail, covering possibly dozens of diverse purchases and transactions. That check itself is turned from “real” paper (a surrogate for the donkey, the gold, and the paper cash) into electronic information as rapidly as possible. If the check is returned to the consumer with the monthly bank statement—and this is less and less the norm—it is only because customers are still irrationally attached to that previous transaction mode: the check, a physical artifact, itself a triumph of virtuality. Banks would probably prefer to throw away the canceled check the moment the electronic juice—the *real* money—has been sucked out of it.

Two important points should be taken away from this consideration. First, that the unreal, the virtual, the abstract—the purely mental—construct of a human culture becomes reality enough for its users in time, reality enough that they will cling to it and prefer it to other, seemingly less substantial constructions of later date or less broad acceptance. Second, if we return to the moment when we consider the curious seeker of information and the libraries with which we here began, we realize that what is at stake is not *precisely* an exchange of money for information, or reality for insubstantiality, but in fact a more complex interplay of information systems communicating with each other. If the formula for a complex polymer or a collection of Cyrillic characters appears on a computer screen, it will only be because the formula for one’s bank account has made its way onto someone else’s screen in a carefully scripted and understandable way.

Surely, a book is one thing, and a file of data bits scattered over multiple sectors of a multi-gigabyte hard drive hundreds or thousands of miles from a reader’s desk is another. But the *value* of the book and of those data bits is in the way they are constructed to fit a given use. Once we recognize that, we are faced not with a shift from reality to virtuality but with a study in the history of virtual realities going back at least two hundred years.

OWNING THE EXPRESSION OF IDEAS

For convenience’s sake, we may assign the rise of modern intellectual property law to the early eighteenth century.³ That is when the idea of copyright took on tremendous power, shaping a mar-

marketplace for cultural products unlike any seen before. Today's authors, publishers, and readers have taken the assumptions of copyright for granted to a considerable extent, but it is easier to understand where electronic information transactions may be headed if we unpack those ideas and characterize their strengths, weaknesses, and influence. This is not merely an academic exercise in self-understanding. Society now faces what seems to be a powerful competitor for copyright's influence over the marketplace of cultural products, one that carries its own assumptions about what intellectual property is, how it is to be used, how it can be controlled, and what economic order can emerge as a result. The concept of the license (or detailed contract) for buying and using intellectual property is a comparatively new one, certainly new in its application to most of the products a librarian thinks about, and powerful in its own way.

The creation of the concept of copyright was an ingenious fiction. It abstracted from the covers of a book the words contained therein and turned them, no matter how many times multiplied by printing technologies, into a single piece of property governed according to strict rules. In its original form, copyright depended in two ways on the technologies of its time.

First, the capital costs of establishing and operating a printing press meant that those who used such presses to violate copyright (by printing and distributing what was not theirs to handle) were liable to confiscatory punishment at least commensurate with the injury done by the crime itself. The thought of losing what had been produced or the instruments of production themselves was enough to give one pause, and the likelihood that the printer could escape detection was relatively slight.⁴

Second, the power of copyright was enhanced by the development of high-speed printing presses that both increased the capital investment at risk and greatly multiplied the number of copies that could be produced of a given original (and thus lowered their price) so that an author could begin to realize financial rewards through signing over his copyright to a publisher. The publisher (generally becoming the new copyright owner to whom the creation was transferred), who had assumed the expense and risk of publication, stood to gain a substantial portion of the revenue earned by the publication.

The technologies themselves have, of course, been transformed over time. Publishers and authors concerned with protecting the intellectual property that is rightfully theirs have seen, beginning in the 1970s, the photocopying machine, the offshore knock-off artist, and most recently the personal computer dramatically increase the ease, cheapness, and accuracy with which intellectual property can be copied and distributed in great quantities and the relative certainty with which the perpetrator of such an offense can escape detection. The photocopier is still a large and expensive tool but not nearly as pricey as a printing press; it is ubiquitous in places of business and education (though not in the home). The personal computer, a tool for accomplishing many organizational, personal, and social activities, is an important growth industry. Nowadays even school children own PCs, as do most libraries, businesses, and other kinds of institutions. Gradually the offshore knock-off artist might be brought under control as the countries where he plies his trade develop an interest in protecting intellectual property of their own. The photocopier and the computer are less subject to such scrutiny.

In a modern society supposedly based on private property, copyright both exalts and undermines the integrity of property in telling ways. It grants to the person who has written a text (or created a picture, film, or dramatic work) an extraordinary power over that creation, though it may go to the ends of the earth—a power that lasts at least five decades beyond the author's death. Elvis Presley has already made more money dead than in all his career alive. At the same time, copyright means that those who have hundreds or thousands of books on their shelves do not quite own them the way it is possible to own a screwdriver or a piece of real estate. It is remarkable just how much of what humans own is constrained by property law of one kind or another—patent and trademark, if not copyright. But the likelihood that one would wish to create an exact copy of one's own, say, teddy bear is so slight that one does not feel constrained by the potential violation of patent, trademark, or copyright protection. With written material, the temptation to copy has always been great, and the technological possibility now in hand is greater than ever and thus far more tempting. It is no accident that the legal debates about copyright over the last generation have focused on ways to dis-

courage people who own photocopiers or computers from doing with those machines things that the machines are eminently suited to do, that a reasonable and responsible person might very well want to do with them.

But for all the risks copyright holders face, the industry that has arisen around the market for intellectual property is vast and thriving. The great value of copyright continues to lie in linking authorship to reward; in a quintessentially capitalist way, it has given millions the incentive to labor away at articles, plays, and novels that will never be published and has prompted resourceful businesspeople to calculate precisely how best to create “products” that can be marketed. By the early 1990s, US copyright industries accounted for well over \$200 billion in annual business, or about 3.6 percent of the gross national product.⁵ Scholarly and literary publishing accounts for only about half a percent of that total, or perhaps \$1 billion per year,⁶ and public or government information, much of which is freely distributed, plays a small part in this market.

One of the growth areas in the intellectual property marketplace since World War II has been scholarly and, in particular, scientific publishing. The late Robert Maxwell, a buccaneer publishing tycoon, deserves much credit for the dubious achievement of “inventing” the large-scale, for-profit, commercially-published scientific journal. In the early 1950s, when his Pergamon Press first distributed such titles, they were a roaring success story precisely for academic producers and consumers of such information. By accessing a global marketplace, Maxwell brought significant capital into the scientific publishing food chain and assured wide distribution of a vast quantity of scientific literature of unprecedented sophistication and specialization.

It turns out, at least in the United States, that the last generation’s boon is the bane of this generation of libraries and universities. The golden age of scientific research funding—driven by vast quantities of American defense and space dollars and buoyed precisely by the strength of what, it is now quaint to remember, was thought of as “the almighty dollar”—faded in the 1970s and 1980s, and with its fall from glory the commercial science journal became a heavier and heavier tax on the limited funding of research institutions. Research libraries are staggering under increas-

ing costs; they cut back titles judiciously and manage to get by somehow.

Rising prices and spreading technologies have, to be sure, brought publishers and some users to quarrelsome intersections in recent years. Several high-profile legal cases have seen publishers taking legal action against a highly visible agency (the National Library of Medicine, New York University, Kinkos, the Texaco Corporation, and Michigan Document Services being some of the more prominent recent ones) on charges of illicit or excessive photocopying. From both the court decisions and the statutory legislation of our time, users (particularly institutions) have struggled to draw guidelines regarding the use of equipment whose natural and spontaneous use could undermine a piece of the intellectual property economy. The difficulty in such attempts for both courts and users is that it is always hard to measure real damage and to assess its importance. For example, software publishers know that some substantial percentage of users of popular products have not paid for the software they use in the way that the publishers wish, but that market remains robust. At most, software entrepreneurs could argue that the incentive for innovation at the margin is less than it could be, but it is an impossible argument to quantify.

THE US COPYRIGHT ACT

By law, copyright protection begins from the moment of creation, when the work is “fixed in a tangible medium of expression,” which can be writing on a piece of paper, a recording on magnetic tape, keystrokes on a computer screen, or paint to canvas. Copyright can be transferred from the original creator to another entity; normally a publisher requires a full transfer or sufficient assignment of rights in order to bring the creations to market. The 1976 US Copyright Act protects creative works in general, including literature, music, drama, pantomime and choreographic works, pictorial, graphical, and sculptural works, motion pictures and other audiovisual works, sound recordings, and architectural works. Copyright law grants the owners of the expression of an idea five exclusive, or monopoly, rights: to reproduce copies of the work, prepare derivative works, distribute the work, perform it, or dis-

play it. In order to do any of these things, one must have the owner's permission.

At the same time, the law recognizes certain exceptions or limitations on the exclusive rights of owners. Those limitations include:

- **Public domain:** Works produced by federal government employees created on government time (Section 105); works past the copyright period (now, with some exceptions, the lifetime of the author plus fifty years); and those that are explicitly placed in the public domain by their owners (in practice, a minuscule proportion of created works).
- **Fair use:** The 1976 Copyright Act was the first to explicitly address the balance between copyright holders' rights and readers' rights by codifying fair use rights (Section 107). Fair use permits certain kinds of reproduction of copyrighted works without users having to pay or explicitly request owners' permissions, for purposes that include research, teaching, journalism, criticism, parody, and library activities. The primary beneficiaries of fair use are students, educators, researchers, and commentators. Fair use makes it possible for them to go about learning, teaching, engaging in scholarship, and being creative without needing to take the time to ask permission of copyright owners or pay a potentially significant price for using the materials. Fair use is said by many educators and public policy specialists to be the most vital piece of the law that fulfills copyright's constitutional mandate.
- **Archival preservation and the operations of libraries:** Section 108 permits libraries certain privileges to preserve rare or frail works for future readers or to lend books via interlibrary loan, so long as such activities do not systematically undermine owner's revenues. This section enables libraries to act as powerful consolidators of information and to serve a strong societal information mission.
- **Additional definitions and limitations on specific media, formats, and delivery mechanisms** are enumerated in Sections 109–120.

Thus, the copyright law protects ownership and at the same time places limitations on ownership to achieve a balance of inter-

ests that preserves the underlying purpose behind the US copyright law as embodied in the Constitution: “to promote the progress of science and useful arts.”

CAN ELECTRONIC CREATIONS BE OWNED?

The Clinton-Gore campaign of 1992 may be responsible for having first placed the Internet before the general public’s, or at least the popular journalist’s, eye. This administration is extremely committed to rapid development of the National Information Infrastructure (NII) and determined to respond to industry and economic concerns. Part of that commitment arose from a passionate belief (well expressed by Vice President Gore, and more recently taken up in different terms by Speaker Gingrich) that electronic networks create an environment and a set of instruments vital to the overall economic growth of the United States.

In 1993, the Clinton-Gore administration created a number of super-agency committees to define problem areas (e.g., privacy, security, standards, libraries, copyright) and to make recommendations to assure full exploitation of the information superhighway. In mid-1994, the twenty-five-member NII Working Group on Copyright, chaired by Commissioner of Patents and Trademarks Bruce Lehman (and colloquially called the “Lehman Commission”), released a green paper or first draft report, put the draft into play, and actively solicited responses. In September 1995, the Working Group released the final white paper containing a legislative package intended to update the current Copyright Act for the cyber-nineties and beyond. As of the summer of 1996, this package is being debated in the appropriate House and Senate committees.

In short, the Working Group’s commitment to the NII takes the form of a belief expressed thus: “The full potential of the NII will not be realized if the education, information and entertainment products protected by intellectual property laws are not protected effectively when disseminated via the NII.”⁷ The Working Group affirmed strong intellectual property protection in the NII and at the same time was at pains to insist that the recommendations it presented merely “tweak” the law. That characterization is accurate, in the sense that comparatively few sections of the act would

be affected by wording additions, changes, or extensions, and its fundamental organization would remain intact. But in the eyes of many citizens and legal scholars, especially reader/user rights advocates, the Lehman Commission's proposed legislative changes overturn the balance that the current law maintains between the rights of copyright owners and users. The underlying concern is about the paper's unequivocal affirmation that any information alighting in a computer's memory, for any amount of time—however fleeting—is “fixed.” The definition of fixation is important because the Copyright Act governs only those ideas “fixed in a tangible means of expression, when its embodiment . . . is sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration” (Section 101). By this reasoning, copying occurs each time information is transferred between computers. Therefore, the user who transfers copyrighted information between computers through a network without permission of the copyright owner is breaking the law.

If access to electronic materials without payment for every use is to be recognized, then fair use is the area in which bridges can be built between the rights of copyright owners and information users. Fair use may not be the *only* possible bridge, and perhaps it may be replaced one day with more effective concepts, but in the print information world, with its static documents and comparatively easily controlled bottlenecks (at the printing press and book-sellers), fair use is where US society has achieved a great deal of the balance between users' and copyright owners' needs. Fair use concepts exist (though not identically) in the copyright laws of most Western nations.

ENTER THE ELECTRONIC LICENSE

One response to the anxieties of intellectual property owners in an age of electronic copying and transmission has been to seek to change the conditions under which “fixed” creations are protected. Actually, the concept of a license is old and fundamentally transparent. If one owns a piece of property and allows another to use it without transferring title, one may by law of contract stipulate whatever conditions one chooses; if the other party agrees to

them, then a mutually agreeable deal has come into being. A similar transaction takes place in the case of performance rights for films and recordings. The owner of a movie theater rarely owns the cans of film delivered weekly to the cinema, holding them instead under strict conditions of use: so many showings, so much payment for each ticket sold, etc. As with the economic relationship between author and publisher that is sanctioned by copyright, with the right price such an arrangement can be extraordinarily fruitful. But in this type of license the relationships are driven entirely by contract law: the owner of such a piece of property is free to ask whatever price and set whatever conditions on use the market will bear.

Most of our academic contemporaries began to be parties to such license agreements when personal computer software appeared in the 1980s in shrink-wrap packages for the first time. Purchasers of such software may have read the fine print on the wrapper detailing the terms and conditions of use, but for the most part users either did not or have ceased to do so. The thrust of most such documents is simple: by opening the package, the purchaser has agreed to certain terms, terms that include limited rights of ownership and use of the item paid for. One may, perhaps, be allowed to make a copy for personal use or backup only, and if one resells the materials, any copies on the home computer must be deleted. (For a brief time, software producers even coded their disks so as to restrict the number of copies that could physically be made from one original, but sharp customer resistance, a genuine market force, caused them to withdraw those restrictions.)

If the contract created by shrink-wrap is a valid one,⁸ it is also one where no evenhanded arbiter has set out the balance of rights and duties. The owner of the intellectual property, buffeted perhaps by market forces but at the same time often able to control (if rich and successful) some of those forces by his own acts, stipulates the terms on a “take it or leave it” basis. The user has the rights the owner decides to give; there is, on a personal level, no possible negotiation.

In recent years, the concept of the license has gradually extended from covering software to covering the even “softer” ware of content. As material that was traditionally sold in printed form

and distributed under the protection of the copyright statute becomes available in electronic form, particularly in networked electronic form, publishers seeking a return on their investment have not been content to insist that their copyright privileges be recognized. This may be because such publishers sense that on-line text can reproduce itself like the proverbial rabbit and that whatever self-discipline readers of a print text might exercise can easily disappear the moment that reader forwards a copy of an article to an e-mail discussion list with multiple subscribers—in a flash, the publisher fears, a substantial part of the academic market for a given product could receive copies that had never been paid for. Copyright prosecution, moreover, is difficult for a number of reasons and needs to take into account the indisputable statutory rights of users. Litigation under a license agreement, by comparison, is likely to be far simpler and far more favorable to the copyright owner.

So it is that in 1996 the Internet is being inundated with publishers of standard reference works and journals offering electronic versions of their wares on access terms that are strictly contractual. Often these terms appear to obviate all discussion of users' statutory rights by specifying in detail the conditions under which material may be used and copied. Few of the licenses offered to libraries or academics seek to charge for every examination of the published material, but that may be at least partly because as yet no reliable, affordable technologies exist for charging and billing such costs (though they may be expected to become available soon). In the meantime, publishers are peddling their wares, usually both the print and electronic versions (it is worth keeping in mind that such electronic versions rarely "push the envelope" of what is possible in electronic publishing—as long as they are yoked to a print version, they usually do little more than reproduce what the printed page has already offered), at prices that give the user (or the user's library's collections development officer) no economic advantage as a result of efficiencies of production and distribution. Today, for the privilege of access to an electronic version of the print information, libraries pay more rather than less. It remains to be seen whether the boon of improved access will sustain such prices in the market; it seems that if a publisher were willing to forgo printing, binding, bundling, and shipping

costs, the same information might be distributed much more cheaply than before.⁹

THE “TYPICAL” ELECTRONIC CONTENT LICENSE TODAY

So far, it is characteristic of electronic information that it rarely comes to libraries, when they pay for it, as free of “strings” as did print material. The concept of First Sale in the US Copyright Act of 1976 (Section 109, with the equivalent principles in other countries) has given libraries the ability to service and lend all the objects they buy. Book purchasers have the right to keep and preserve their books. Electronic information license agreements, on the other hand, tend to constrain rights in various ways.

- *Potential loss of knowledge.* Libraries generally do not own the material that they are paying for—they lease it for a limited time. If at the end of that time, they cease paying the lease price, prior investment may become worthless if the information is taken away.
- *License restrictions on use and users.* Not infrequently, libraries cannot let all and sundry make reasonable use of materials but rather must employ passwords and user IDs to restrict use to formal members of specified academic or scientific communities. Librarians who are used to defining institutional access policies acutely feel a loss of control at such a moment, a loss of the power to grant wide access to information for the good of our communities and society.
- *Limitations on users’ rights.* In the world of license agreements the licensee generally begins with fewer rights to use information than in the world of print material, and further limitations are then added (the licensee is liable for misuse of the data and for preserving security, while the licensor may take only limited responsibility to assure that the resource performs as advertised). These agreements, indeed, seem to have been designed for commercial rather than educational customers.
- *Loss of browsing.* There are also signs that many producers will begin experimenting with “pay by the drink” systems of information access by electronic network, where every glimpse of the precious metal of information can have a price tag. The threat-

ened end of browsing and serendipity is a worrisome one for all concerned with the free flow of ideas and creativity in scientific and academic settings.

- *Cost.* In general, electronic licenses so far have cost on average one third more than print equivalents. This has been the experience, in any case, for indexing and abstracting services, and research libraries have attempted to find the funding to absorb these increased costs for such valuable bibliographic tools. Now, full text is imminent. For full text, many publishers also have the expectation that higher prices will be asked and should be paid. Publishers are setting surcharges of as much as 35 percent on electronic journals, and libraries simply do not have the capacity to pay such amounts without canceling a corresponding number of the print journals of that particular publisher or dipping into other publishers' journals.
- *The stability factor.* Full-text electronic access licenses offered to customers by publishers are experimental in many ways, and their longevity is far from secure. Many of these licenses are for trial projects. For these titles, libraries are partners in an important experiment with publishers. It is not readily within libraries' power either to cancel the print format altogether (the publisher may cease to maintain the electronic version or maintain it in a hard-to-use or obsolete technology) or to pay higher-than-print prices for such titles.
- *Other stumbling blocks* include prohibitions against using the electronic versions for interlibrary loans, significant liability matters for the institution (if a user infringes, for example), and confidentiality (terms of licenses are often labeled as confidential and are not supposed to be widely shared with colleagues, let alone other institutions).

Institutional licenses are generally negotiable, but negotiations are labor-intensive. Negotiation requires time, and time is a major cost here. How librarians can work together with publishers to encourage a more enlightened form of agreement, with a more equitable balance of rights and responsibilities, is an open question of the greatest importance.

On the positive side, both individual libraries and consortia of libraries have reported negotiating electronic content licenses with

a number of publishers who have been particularly understanding of research library needs. In general, academic publishers are proving to be willing to give and take on license language and terms, provided that the licensees know what terms are important to them. In many cases, librarians ask that the publisher reinstate the "public good" clauses of the Copyright Act into the electronic content license, allowing fair use copying or downloading, interlibrary loan, and archiving for the institutional licensee and its customers.

The comparatively new phenomenon of institutional licensing has evolved in a short time. Initially (perhaps twenty years ago), academic and research libraries began accessing electronic information, at that time primarily indexing and abstracting services, through intermediaries such as Dialog. Different data bases levied different per-hour charges, and for the most part libraries established running accounts to which these searches were charged. Libraries accepted the terms of such services, which were in general nonnegotiable. Next, a number of the indexing and abstracting service publishers, along with others, offered electronic products of their own directly to libraries via CD-ROM or through dial-up, and it was at this point that institutional licenses became recognized as a means to information acquisition or access. Initially there was little back and forth negotiation between providers and libraries, but now, particularly with the advent of consortia (institutions that band together to buy electronic access or content for group prices and enhanced terms), negotiating the content license is a part of library life. As a rule, the consortial license takes longer than the individual license to negotiate, but the economies of scale can be helpful to both publishers and institutional customers.

FUTURE SCENARIOS: A LONG-TERM PROGNOSIS FOR THE ELECTRONIC LICENSE

To clarify the issues and give the reader some ways to move forward along the trajectories suggested here, we conclude with a discussion of two possible outcomes for the information future of libraries under an electronic licensing scheme and the implications of these scenarios. Reality is always messier than any scenario, but

the issues libraries are likely to face will almost certainly emerge along the polarity that links the scenarios described below.

First, consider this extrapolation. Currently, publishers of scientific and scholarly information are actively encouraging and cooperating not only with individual libraries but, lately and enthusiastically, with libraries that gather together in consortia to obtain cost-effective bulk pricing “deals” for the purchase of on-line versions of existing journals and other data bases. A typical negotiation, for example, may involve a number of sizable colleges and universities aggregating all the current subscription dollars paid to a particular journal publisher, counting at the same time to see how many of that publisher’s journals are subscribed to by one or another of all the libraries. For example, an interesting on-line network access arrangement being offered lately to research library consortia by one large publisher of nearly two hundred scholarly journals asks for a price equaling 110 percent of what each member library (of the consortium) now pays for the print journals it takes. For the 110 percent, each library in the consortium will continue to receive its current print subscription and will also have electronic access to *all* the publisher’s journals via the World Wide Web. Because no single library is likely to subscribe to more than two-thirds of that publisher’s list in print form, this is potentially a 50 percent increase in information purchased for only a 10 percent surcharge; on the other hand, the journals not taken at each university are items that have been considered and deemed of lesser value to that community. Currently, then, the mix of benefit and cost for the library customers in this particular arrangement remains unclear even as it and others like it seem to be interesting ones to explore. Meanwhile, the publisher is making a best guess as to the costs of providing the electronic version.

What can we expect next under such arrangements, particularly when they increase in scale to multiple consortia dealing thus with many publishers? We would have a collectivity of subscribers, carefully scrutinizing each others’ journal holdings from each publisher, discussing among themselves the terms of agreement under which they would continue to take the journals when the time comes for annual renewal of the license. This begins to look like a combination of institutional economic interests working together where before there has been disunity. Certainly one weakness of

the traditional library faced with publishers' price lists has been the isolation of the individual subscribing library, coupled with antitrust restrictions placed on library associations to prevent consumer boycotts, and the like. But now the buying power of a number of large and influential customers is being aggregated. Will such an aggregation bring with it a shift of power from the producer to the licensees?

Take this further example. Some publishers are advocating what they call a "national site license"—a single fee that is paid to them by the research-funding authorities of a given country (in the United States, this is more likely to be a "state" site license, and a number of such state-wide library consortia are rapidly emerging), in return for which all patrons in that country (or state) have free access to the electronic publishing output of the publisher with whom the wide area site license has been arranged. Such a national or state-wide relationship suddenly seems like a boon to all the students, faculty, and researchers in a given jurisdiction. The information becomes akin to a public good, and it certainly betokens a simplified way to do business for the publisher: one price, one server, no hassles, and an assured income stream.

Extend such a wide-area licensing scenario five years into the future, and then imagine that research funds, for some reason, become tight; a new government has taken office and is squeezing the spigots wherever possible. Users in the meantime have become accustomed to accessing various publishers' wares as a kind of common good. The publishers have become beneficiaries of state subsidy and then the subsidy is threatened. By that time, will certain players in the publishing industry have found themselves subtly transformed into a dependent arm of the state? Instead of a cutback in local institutional subscriptions, as would happen in today's print and copyright regime—selectively, prudently, based on real need for information but discouraged by researchers' outrage at the loss of precious material—might there instead be a draconian 15 percent cut to deal with? How might the affected publishers respond to such a situation? Would they cut prices? Cut back on their offerings? Go out of business? Who benefits? Who loses? Who manages the outcomes?

It is too early for answers to such questions, but they need to be pondered if they are eventually to be addressed. The point here is

to highlight some of the positive characteristics of our *present* system of publishing, for example, its decentralized, research-driven nature and distributed funding, which thus follows research and use but does not dictate to it. The larger the scale on which licensing takes place, the more control shifts to those who fund publication: in practice, libraries and their funding sources. On the one hand, both researchers *and* publishers may object to such an outcome. On the other, the potential for good should not be underestimated. A fundamental criticism of current ways and means of publishing is that there is little disincentive to a proliferation of publishing outlets and published articles—too much published, insufficient material of significant value. Could the large-scale license, then, become the thin end of a wedge that will leave in place the valued freedoms of inquiry and information but allow some form of more rational assessment of needs and abilities, or will it forever alter publishing as we have known it?

Let us now take a second tack. What licensing agreements have in common with copyright is that both accept the fundamental underlying idea of the nature of intellectual property inherent in a given work of authorship. Where they differ is only in the vehicle by which they seek to balance users' rights and authors' (and, to be sure and of greater economic importance here, publishers') rights and to regulate the economy that springs up around those rights. Copyright represents a set of regulations negotiated through statutory enactment, where the power of concentrated economic interests has been modulated by the original constitutional objective of copyright (to promote progress in science and the useful arts) and the voices of various interests in legislative lobbies and before committees. Licenses, on the other hand, represent a market-driven approach to this regulation. The marketplace is imperfect, especially where a fairly small number of large publishers based in one economic environment (for example, the European Union) face a diverse number of customers based in another (for example, the United States), but it is still a place where interests meet, deals are struck, and working arrangements between parties are negotiated and revised over time. In fact, it is possible for libraries and publishers to negotiate licenses that incorporate the precepts of copyright (such as fair use) in the agreement.

The confrontation between the models that copyright and license offer, moreover,¹⁰ further changes the imperfect market relationship in a way that potentially gives users some advantages. Users know what their rights are under copyright statute, and that puts them in a relatively stronger position to negotiate license deals. Users (their institutional aggregators being the libraries) already have *something*, so what they seek from publishers is an incentive to transcend statutory obligations and privileges in a different relationship. One way publishers can seek to influence this negotiation, of course, is by pursuing litigation to enforce their own copyright privileges in a way that encourages the public to think of copyright as a restricted and less advantageous umbrella compared to what a possible license agreement might provide.

This is one underlying explanation for the ongoing series of copyright court cases by which some representatives of the scholarly publishing communities seek to define “fair use” with restrictive interpretations. One need not be a legal soothsayer and foresee how these cases and their successors will play out in order to identify the economic incentives that both readers and publishers will have when they negotiate license agreements.

It is surely not unreasonable to suggest that the gap between the two ways of doing business (copyright-governed and license-governed) will narrow over time in a kind of dialectical relationship. If they seem at odds at the moment, the true interpretation is that legal and market forces are still scrambling to keep up with the changes in users’ habits driven by empowering new technologies. It would not be reasonable to expect such great changes in media to arise without consequent disruptions in long-stable patterns of economic and legal relationships.

The lesson to be drawn from these meditations is perhaps no more elaborate than this: that in a time of rapidly changing technologies and uses of technologies, haste in the prescriptive reconstruction of legal and economic relationships is inappropriate. Room needs to be left for experimentation and exploration. Both publishers and academic libraries understandably have real fears about the security of their economic livelihood in the short term—and the larger they are, the more fears they are likely to have. Both groups are relatively vulnerable to the risks of short-term fluctuations in what they can expect from the other, but

both—in a curious kind of prisoner’s game—may be less vulnerable if together they work pragmatically towards mid-term, modest solutions to pressing difficulties, leaving ambitious reengineering to a later time.

Our greatest need is to sustain and, where possible, enhance the truly remarkable system of communication that we have built up over the centuries. Ezra Pound wrote, “Properly, we should read for power. Man reading should be man intensely alive. The book should be a ball of light in one’s hand.” We should think of how bright that light can be if we understand copyright on the way to doing our licensing work well. Fire and ice both have the power to dazzle and thwart our vision.

ENDNOTES

- ¹Colin Day, Director of the University of Michigan Press, after his presentation on “Cost Recovery in an Electronic Publishing Environment: Issues and Perspectives,” at the Association of Research Libraries/Association of American University Presses’ symposium, *Scholarly Publishing on the Electronic Networks; Filling the Pipeline and Paying the Piper*, Washington, D.C., 5–7 November 1994.
- ²James Gleick, “Dead as a Dollar,” *New York Times Magazine*, 16 June 1996, 26ff. Gleick shows that electronic cash is already seriously in play, traces the history of money, and speculates on its next instantiation.
- ³Mark Rose, *Authors and Owners; The Invention of Copyright* (Cambridge, Mass.: Harvard University Press, 1993).
- ⁴Lynn Hunt, ed., *The Invention of Pornography: Obscenity and the Origins of Modernity, 1500–1800* (New York and Cambridge: Zone Books, 1993). Hunt shows just how far one could, with great difficulty, conceal responsibility for a printed book, but only when the offended party was merely public taste and decency, not an outraged competitor.
- ⁵Ann Okerson, “Who Owns Digital Works?” *Scientific American* (July 1996): 80–84. The electronic version of this essay can be found on the World Wide Web at URL: <<http://www.sciam.com/WEB/0796issue/0796okerson.html>>
- ⁶Estimate by Joseph J. Esposito, President of *Encyclopaedia Britannica*, in the Flair Conference at the Humanities Research Center, University of Texas, November 1994. These remarks were subsequently published in both the conference proceedings and in *ARL: A Bimonthly Newsletter of Research Library Issues and Actions*, January 1995, p. 1–2.
- ⁷*Intellectual Property and the National Information Infrastructure: The Report of the Working Group on Intellectual Property Rights*, September 1995. Available on the World Wide Web at URL: <<http://www.uspto.gov/web/ipnii>>

⁸In the recent decision (20 June 1996) in *ProCD v Zeidenberg*, the Seventh Circuit responded to the question, "Must buyers of computer software obey the terms of shrink-wrap licenses?" The judges overturned the ruling of the lower court by answering the question in the affirmative. Part of their rationale was that the purchaser could read the license upon opening the box and if the terms were unacceptable, the merchandise could be returned. Additionally they commented that copyright and licenses are very different: copyright is "a right against the world. . . contracts, by contrast, generally affect only their parties." This decision can be found on the World Wide Web at URL: <http://www.sgpdlaw.com/case/procd_op.html.>

⁹*Scholarly Journals at the Crossroads: A Subversive Proposal for Electronic Publishing. An Internet Discussion about Scientific and Scholarly Journals and Their Future*, ed. Ann Shumelda Okerson and James J. O'Donnell (Washington, D.C.: Association of Research Libraries, June 1995). This volume presents the diverse points of view of scientists, librarians, and publishers on the following topic: Can the costs of scholarly journal publication be significantly reduced (by as much as 70 percent) by fully employing the capabilities of electronic authoring and distribution?

¹⁰Copyright lawyers and those who are interested enough to discuss copyright electronically on lists such as cni-copyright@cni.org from time to time raised the important topic of whether a license that disallows provisions of the Copyright Act (such as, say, fair use) can be preempted by the Act itself. For a sound introduction to this particular question, see Trotter Hardy, "Contracts, Copyright and Preemption in a Digital World," *Richmond Journal of Law & Technology* (17 April 1995). This electronic journal can be found on the World Wide Web at the URL: <<http://www.urich.edu/~jolt/v1i1/hardy.html>.>