this STEAL ARTICLE

Does the age of virtually free communications and digital reproduction mean that intellectual property rights have become meaningless? Or is convergence making IP more valuable than ever? Paulina Borsook explores the cultural battles that will determine what intellectual property will mean in the next millennium.

THIS ARTICLE IS BEING published both in print and on-line. Perhaps you downloaded a free copy off the Web. So what is the value of this work?

A few intellectual property (IP) radicals, such as Esther Dyson of the Electronic Frontier Foundation and software inventor Richard Stahlman, say digital reproduction has rendered IP meaningless. Some IP mercantilists, such as The Walt Disney Co. and *The New York Times*, whose new "we-get-rights-in-perpetuity/you-don't-get-any-additional-compensation" contract for freelance journalists caused outrage last year, want to leverage and hold onto all possible IP rights, present and future, and will go after anyone who might remotely try to infringe and extort from content creators. How is it that intellectual property, at this particular historical moment, can simultaneously be judged worthless and infinitely precious?

This is the paradox of intellectual property. Some of this paradox is due to the mixing together of cultures that have until now been distinct. The models and folkways that have evolved, for example, in the world of traditional publishing don't necessarily translate very well to computer software. At the very least, the paradox is a sign of disorganized markets that have not yet created mechanisms to deal with changes in technology and the merging of once-

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ILLUSTRATION BY WIKTOR SADOWSKI

separate lines of business such as words, music, images and computer software.

Furthermore, the meme floating around many software companies—charge little for initial product and make money off upgrades, custom versions and support—makes little sense for a piece of music. As Judith Saffer, assistant general counsel for performance-rights organization BMI, New York, says, "You can upgrade software, not music."

means, to some IP freethinkers, that the value of IP has some correlation with the cost of the distribution. Steve Arbuss, hacker and lawyer with the Century City, Calif., firm of Pircher, Nichols and Meeks, for example, feels that since "copyright doesn't come from God and the Constitution and recoup costs are almost zero, [we should] make copyright only last from 18 months to three years," as opposed to the U.S. convention—the life of the author plus 50 years.

about naughty knockoffs of "Snow White and the Seven Dwarfs" circulated in underground comics of the 1960s or the Minnie Mouse-themed restaurant in Cambodia that Braun once happened upon. Or, put more succinctly, again by Braun, "George Lucas [of "Star Wars" fame] said, 'All the assets I have are my characters.' He makes more money licensing Yoda crap than [he does from] all of his movies." In other words, art may

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The same difficulty exists for a striking photograph. Or a novel. Proposing to Thomas Pynchon that he should be compensated for his literary skills by writing stories on demand—say, to commemorate a child's bat mitzvah—reveals a lack of understanding that art is not information and must be handled differently. In the age of computers, that mistake seems to be made with unconscious regularity. Not all novels should be serialized nor all music composed in sound bytes, downloadable in neat increments.

The IP paradox, therefore, stems in part from the overturning of the relationship between the costs of production and reproduction. Jessica Litman, professor of law at Wayne State University in Detroit, notes that when the first photocopy machines came out, they were expensive and books were cheap. But that's changed, and what's happened to photocopying technology is similar to what's happened to digital technology. And no one knows what to do about it.

At the very worst, the IP paradox is a sign that we have become a society more consumed with exploiting than with creating. There is more charge; more incentive and more societal anxiety about profiting from creation than there is in fostering the conditions that lead to creation.

DISTRIBUTING ART

The enticements implicit in the Net's pseudo-freebie distribution system contribute to the muddle. The costs of tree plantations and Secaucus warehouses and the fluctuating prices for truck diesel (ignoring the costs of network routers, hydroelectric power and sysops) are obviated in getting IP out on the Net. That

"One year in Net terms is 25 years in the real world," Arbuss says. "The on-line environment is different in terms of the value of information, directly related to freshness." Never mind that an ideal IP product can sell year after year—like the backlist that is the financial mainstay of so many publishing houses.

Consultant Mark Anderson, editor of the on-line computer-industry newsletter *Strategic News Service*, Friday Harbor, Wash., puts it this way: "If copyright is about distribution now, it's not about trucks. So you need to charge on the basis of something else: who uses it, how widely, what type of distribution, what uses are made. It's not cost-of-goods based."

But there are some very shaky joints in these models: Most fundamentally, it seems that either copyright exists or it doesn't, regardless of whether the work is widely distributed, like "The Simpsons;" narrowly distributed, such as a Dataquest report; or not distributed at all, like Kafka's works, secreted in the Czech writer's possession until their posthumous publication by a friend. Joining distribution to the valence of copyright strikes a blow at its very meaning.

And there's another conceptual solecism: that is, the ongoing confusion of art and information. Jeff Braun, CEO of Maxis Inc., the Orinda, Calif., corporation best known for its "Sim" series of electronic games, is in an unusual position in that he heads a software company and yet plays in the field of more traditional kinds of IP, such as those under the purview of entertainment companies. "IP has a life of its own and carries through for generations onto new media," he says.

That's true whether you're talking

last and information doesn't, necessarily.

And it may not be useful to borrow schemas from the digital metaverse—a world in the habit of thinking of revs of operating systems, enhancements to hardware and limited market windows. It's also a world predominantly populated by those neither familiar nor comfortable with the potentially eternal subjective validity of a work of art.

Jeff Newman, partner in the San Francisco law firm of Farella Braun and Martel, which handles many local multimedia startups, poses the question: "Are there software classics? You have to assume obsolescence and copying. In the computer business, anything that's been around two years is dead!" That's true even of the underlying hardware configuration, including the amount of RAM, quality of sound and speed.

SPEED KILLS

Velocity also contributes to the IP paradox. Barry D. Rein, partner in the IP law firm Pennie & Edmonds, New York, notes that there are "different rates of propagation for different parts [of the IP paradox]. Technology goes at one rate; the technology to protect IP at another; and the law at a totally different rate. And patent law may be too blunt an instrument" for young companies and technologies.

And there's the cultural commonplace—the derivatives of Moore's Law and Toffler's *Future Shock*. "Technology moves so fast legislatures can't keep up, whether state or federal," says attorney Newman. "So there will be lots of litigation until things get figured out."

In addition to the problem of velocity (or the lack thereof), there's a difference in

MUSIC LESSONS

Perhaps it's because the music business has been coping with the problems and pleasures of digital reproduction for decades, or because it makes its money from the increasingly wired demographic of high-school and college-age kids.

Whatever the reason, it seems that, of all the traditional intellectual property rights holders, the folks behind Joni Mitchell's "star-making machinery" are the farthest along in experimenting with new approaches to the IP paradox. The music industry has historically leveraged IP with ferocity, and is technologically au courant at the same time.

"We don't know if 30-second downloaded music excerpts are copyright infringements," says Mame McCutchin, manager of Internet and Online Services for BMG Entertainment, New York, one of the six major record companies, "or if music broadcast over the Net should be treated as performances or as copies. But I don't think for a minute that we'll go out of business."

That, despite the rise of technology that makes copying ever easier. Larry Kenswil, executive vice president of MCA Entertainment Group, Universal City, Calif., suggests that the rise of high-quality audio replication technologies for the Net, such as Xing and Real Audio, could gut the heart of the music business. "There has to be a sale in the first place, and there's no assurance the first copy will ever get sold."

But people will continue to buy music, no matter how many snippets they'll be able to download off the Net—just as they can now record from the radio or from borrowed CDs. "Shopping is a social event, particularly for heavy-duty music fans," adds McCutchin.

The new music packaging will require some new thinking. Norman Beil, former agent and general counsel for Geffen Records, Los Angeles, and now a computer-game entrepreneur, believes in "adding value: a thicker CD booklet, better packaging, an accompanying video. Give people a reason to buy the analog version."

Increased cross-licensing of music with the new forms of entertainment is another possible resolution of the IP paradox as it applies to the music industry—but at lower rates than have traditionally been charged for use in television, movies or commercials. There is some overlap, for example, with markets vying for the attention of adolescent boys: "Who buys video games? Who buys Metallica records?" asks Jeffrey Light, partner in the law firm of Myman, Abell, Fineman, Greenspan and Rowan, Brentwood, Calif. Light believes that synergy and rethinking the equations for extracting revenue from music are the ways to cope with the IP paradox, rather than charging a huge fee.

Light—whose clients have included Electronic Arts Inc., San Mateo, Calif., and the Geffen Records band White Zombie—cites a case where a White Zombie band member named a CD track after a Japanese cartoon character. When Japanese megacorp Sanrio Co., Tokyo, came knocking, demanding zillions of dollars' compensation for the unlicensed use of its character, Light pointed out that Sanrio couldn't buy the kind of free advertising it was getting. The case was amicably settled through payment of modest legal fees.

The synergy among these IP rights is still in its infancy. Beil notes that the $5 billion-per-year movie business spends $100 million annually for rights to recordings from other media, such as records, but the $10 billion-per-year interactive software business spends under $1 million for such rights. And, he adds, it wasn't that long ago that the movie business discovered the value in licensing. One enlightened approach taken by Geffen Records is to give the IP rights themselves to individual artists to do with as they choose, as is done in the music-publishing part of the business. The record company then has a narrower sense of its IP stake. It's a more graceful tactic than making all IP rights part of the entertainment company's portfolio (the Sony approach). That's because artists, out of enlightened self-interest, tend to make the reasonable trade-offs between return on investment, copyright protection and community good. The notion of artists retaining the IP rights to their work is generally called "moral rights" in Europe, where it is given far more credence than in the U.S.

Light agrees that artists would do a better job of handling their own IP rights. "It's difficult for traditional IP weasels to understand that by giving away [some IP rights], you create further demand." Or as BMG Entertainment's McCutchin says, "OK, so we share a backyard. We don't lose anything, and the value of the franchise is enhanced."

After all, the music business long ago accepted the 15-20 percent loss of revenue from home copying—which is a lot less than what holds in the traditional computer business, where, as MCA's Kenswil says, "the software business gave up on copy protection years ago."

Kenswil anticipates that technological barriers, rather than creative changes in

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the IP marketplace, may preserve the revenue stream that keeps artists creating. He is glad that not everybody has a T1 line. So consumers may choose to spend money on a CD, rather than wait six hours for the music to download, or spend the thousands of dollars needed to buy the storage capacity for huge audio downloads. Kenswil also believes in the inevitability of encrypted subcodes that either monitor and charge for—or destroy after one or two uses—downloaded music.

Another naysaying voice, this time from the other side of the IP spectrum, is that of Negativland, the media-pranking/culture-jamming political rock band that ran into trouble with Island Records a few years ago with its pastiche appropriation of the Irish band U2's song, "I Still Haven't Found What I'm Looking For." Sly and populist cultural thinkers, members of Negativland believe in what they call "free appropriation" and go by the slogan, "Copyright infringement is your best entertainment value." Negativland's book, *Fair Use: The Story of the Letter U and the Numeral 2* (Seeland, 1995), documents its trials and theories on copyright, and is irreverent, tonic reading, an antidote to TPTB (The Powers That Be) thinking that pervades Big Entertainment.

The arts have survived technology advances before. "In 1978, with the invention of the VCR, the movie industry said, 'The sky is falling!' " says Light. "Now, of course, they love it. In 1984, with the invention of the CD, the $3.1 billion music industry thought the sky was falling. Now with CDs, it's worth $12 billion. Anything that gets people using a property is good for business. It's the executives who do nothing for their $300,000 per year, who don't want to lose their jobs, who are worried about all this."

Or, as McCutchin jokes, she'll only get worried "when low-cost CD burners come along."—*P.B.*

the customary time lines between traditional kinds of IP and computer products.

Creators of movies and records, which take time, huge budgets and a cast of thousands of workers, both technical and artistic, to build, have worked out a way to be compensated for the value of their creations. "Things that cost a lot of money to develop need a means to be controlled," agrees David Hayes, chair of the IP practice at Fenwick and West, Palo Alto, Calif. "But most information on the Net has been the kind that wants to be free, created without any cost, read widely and expected to be disseminated widely. It doesn't need fair use. There's implied license in facts and circumstance." Fair use, according to section 107 of the U.S. Copyright Act, allows reproduction of copyrighted materials for teaching, news reporting, criticism and other instinctively nonripoff purposes.

But how can the Internet reconcile its traditional free-for-all culture with the art marketplace? Should the CD-ROM market take its cues from low-rent but computer-centric Net culture rather than mass media? Even if new content creators want to split their rights and royalties, the accounting procedures of the entertainment world may not fly with multimedia products. Further complicating the matter is that the rights (and profits) of multimedia products usually have to be shared among many people, the permissions process is slow, and production budgets are often low.

One remedy might be to rebuild the economic models from scratch to mesh with the nature of the medium, says Hayes. "In multimedia, a one-second look [at a few film frames or a sample of a piece of music] is not the same as its appearance in the TV mass market. It's nonlinear, too: A hundred people may view it, or no one may view it, or they may view for 10 minutes or 100 times or not at all." Like the world itself, the solution will have to be complex and not binary, and will have to exist comfortably with shades of gray.

Strategic News Service's Anderson takes a contrarian view to the speed problem: "What's lagging is not the law, but technology." In other words, if the proper Net accounting, incremental royalty and cybercash mechanisms were in place, then the IP paradox would sort itself out.

True enough; but that's not so different than thinking about all the great stuff that could happen if we had an unlimited, cheap, nonpolluting energy source. There is one: It's called the sun. We only need the technology to tap it. Yet implementation, engineering, standardization and widespread market acceptance of solar power still haven't happened in the decades we've worked on it.

As always, engineering and implementation is everything, but its importance is criminally minimized, downplayed compared to the glamour and allure of Big Ideas. As Maxis' Braun says, "Ideas are nothing. What I care about is implementation. If someone comes to me with the idea for 'Sim Laundromat,' I want to know if it's a product. Can it spin? Dry? Is there a change machine?" Since the mythopoetic age of Icarus, people have dreamed of mechanical flight, but it took a zillion small and large changes in technology and mind-set to get to the flight of the Wright Brothers. Will it take any fewer to make the solution to the IP paradox fly?

ABORIGINALS AND COLONIZERS

Another part of the IP paradox comes from the influx of new cultures into the Internet forest. Hal Abelson, professor of computer science and engineering at MIT and chair of the 1996 Computers, Freedom and Privacy conference, has taught classes on ethical issues in technology. One of his students wrote a paper comparing longtime Internet users to Native Americans (with little concept of real estate, or harvesting buffalo as quickly as they could be hunted down), and newer Net commercializers to colonists (fencing off and exploiting to the max). The analogy seems to hold.

In this regard, Wayne State's Litman worries about the effect these

Net colonizers (i.e., the traditional content providers) will have. "Instead of thinking, 'How can we contribute to this community?' they engage in a kind of imperialism: 'Here's a nice piece of real estate—which we'll import our rules to,' " says Litman. "An attitude among IP lawyers is to extract that last dredge of royalty. The lawyers trained to think about software are copyright lawyers, who made efforts to expand copyright protection. No one sat down and thought, 'What makes sense?' Instead, content owners automatically assumed more protection is better."

The public stance of the colonists displays "no consideration of public interest," says Jonathan Rosenoer, lawyer with the Western Region of Lexis Counsel Connect and publisher of the "Cyberlaw" column. With a distribution list of four million, "Cyberlaw" is available on America Online and over the Internet.

There may be a warped, backhanded version of public interest at play, with the U.S. government as the player. "U.S. trade issues have gotten mixed in with IP policy," says Litman. "The idea is to get more IP revenues than our partners. We had terrible trade deficits, but a surplus in IP. So the idea was to figure out more and more ways to get more out of IP. Everyone wants our movies and software."

But it's not clear that licensing IP more tightly and bearing down on all potential copyright infringements will create more incentives for creators—or gain more revenue for copyright holders. Enforcement of guaranteed-to-be-unenforceable rules is guaranteed to be costly.

NO SOILING THE HANDS WITH TECHNOLOGY

You don't hear much about C.P. Snow's two cultures anymore. His notion, first put forth in the 1940s, was that science and the rest of the world were going to suffer from an increasing lack of mutual understanding.

The cultural split continues, in spite of the proliferation of bad computer art. What's more, says Litman, "Those who aren't familiar with technology feel they don't need to be, and all copyright applies [in the same way it always has]. A lot of

THE INFAMOUS WHITE PAPER

The Information Infrastructure Task Force, part of the Clinton administration's National Information Infrastructure plan, thinks it has the problems of IP solved. Its *Report on the Working Group on Intellectual Property Rights* was overseen by Bruce Lehman, a former lobbyist for the Software Publishers Association, Washington D.C., an organization better known for its aggressive stand on software piracy than for furthering the state of the art of intellectual property.

The Task Force is wrong. The White Paper pretty much outlaws browsing, says only copyright holders can transmit documents, extinguishes traditional notions of fair use, does away with secondary or resale markets, fosters the development of Net copyright police, outlaws encryption and decides that a realistic strategy is to teach kids to "Just Say Yes" only to books, articles and music that have been properly licensed. Never mind the previous success in telling kids to "Just Say No" to using drugs.

"It's basically deceptive, a very one-sided and disingenuous interpretation of copyright law," says Hal Abelson, professor of computer science and engineering at MIT and chair of this year's Boston-based Computers, Freedom and Privacy conference.

The approach is simple. White Paper proponents say they just want one small thing: to extend copyright protection to electronic transmission. Protecting the ability to transmit a work "doesn't mean copyright goes away," insists Eric Raymon, vice president and deputy general counsel for publisher Simon and Schuster, New York. "What copyright protects is creative work. Fair use applies to exchange of ideas." Further, he contends, technology is up to the task. "Computers can easily track thousands of transactions and keep track of royalties," he says.

Never mind that no one has yet figured out Net-based accounting mechanisms or incremental nanobucks. Or that anyone who has ever tried to keep giant databases groomed, sturdy and accurate knows that this is no small task.

This interpretation of fair use is also highly unusual. "A lot of what they are talking about makes no sense at all technically," says Abelson. As anyone familiar with computers and communications knows, "the network is greater than the sum of its parts." The multiplier effects of networks on art and information are inobvious, unpredictable—and more vast than content creators and copyright holders can imagine.

Jessica Litman, Wayne State University law professor, is also concerned that courts not only look at the words of enacted laws, but background intent. Enacting strong protectionist legislation, as the White Paper asks, is "insanely dangerous" for the precedent it would create.

Besides, the kinds of laws the White Paper is pushing for are no more enforceable than the 55-mph speed limit. "People don't obey laws they don't believe in, and after a while the government stops enforcing these laws, and then repeals them," says Litman.

No wonder the computer culture is up in arms. Digital Future Coalition (DFC), for example, is a 26-member Washington, D.C., group formed to try to stop the adoption of the White Paper's recommendations as law, specifically the Information Infrastructure Copyright Act (S 1284 and HR 2441).

DFC maintains that the recommendations of the White Paper do damage by:

- Favoring established companies with large IP holdings over startups;
- Threatening education, and quashing long-distance learning and browsing;
- Stunting the development of computer interoperability by placing overly restrictive constraints on reverse engineering;
- Ignoring the concerns of actual IP creators, such as artists and writers; and
- Putting a damper on the creation of new digital technologies, such as multimedia Net search engines.

What remains in question, though, is whether groups like the Modern Language Association, the Art Libraries Society of North America, the Electronic Frontier Foundation and the Computer and Communications Industry Association can stop legislation designed with the special interests of old-line content providers in mind.

As Abelson says, "What I really don't like about the White Paper is that it says IP issues are not complicated." They are! —*P.B.*

DFC's Web site is at http://home.worldweb.net/dfc.

See also UPSIDE's Web site at http://www.upside.com.

these statements come from copyright lawyers, who are very conservative. All they've seen on the one hand is what their kids are doing, and on the other hand, a demo at the Library of Congress."

This clash is revealed in the scuffle surrounding the White Paper (see sidebar "The Infamous White Paper," page 87), a report by the Clinton administration's Working Group on Intellectual Property Rights, part of the Information Infrastructure Task Force. The White Paper is a colonist manifesto writ large.

Bernie ("I have two goose quills on my desk—and no computer") Sorkin, senior counsel for Time Warner Inc., New York, might be described as a traditional IP lawyer of the colonist stripe. To him, the measure of the goodness of a society is "the extent it offers protection to the endeavors of the mind." Sorkin says he "doesn't want to destroy the system [the Net] but doesn't want to destroy IP" and he agrees with the White Paper's proposal—what's permitted is limited and nothing is free.

But like many colonists, Sorkin doesn't understand what he doesn't understand—namely, the technology. The heavy-handed, dampening solution put forth by the colonists stems more from fear of the Net than from knowledge of its effect (mostly harmless) on commerce and morality. Analogous, perhaps, to the fact that fears of child pornography on the Net are really a displacement of the fear of the unknown that the Net represents.

In contrast, cyberish aboriginal Rosenoer says, "We know what an acceptable level of fudge is. We can put things on the Net precisely because copyright is enforceable; courts know not to go after private use. The system [of IP] works." And some content providers have already figured this out.

Jan Constantine, general counsel of News America Publishing Inc., New York, the Murdoch content and pipeline provider (Internet MCI/Delphi), is another aboriginal sympathizer—to her, Sorkin's position doesn't make intellectual sense. Specifically, the idea of holding on-line service providers responsible for anything other than the most overt and witting copyright violations isn't intellectually practical. "How can you screen for copyright unless [you know everything, including] the chapter on cetology in *Moby Dick*?" Constantine asks. "Or, what if someone posts a Grateful Dead lyric in a chat?" No human, cyborg or AI agent, can or should be charged with these panoptic and encyclopedic responsibilities.

But that's irrelevant to the colonists, probably for reasons along the lines of "Ignorance of the law is no excuse." Sorkin stands by the White Paper. "The owner of IP rights wants to be able to retain control. You can't rationalize denying copyright protection, even if the copy doesn't damage the original."

Still, Litman says, "Lots of the very diametrical stuff is posturing—there's a rhetorical advantage that can create rules for the future." Setting the terms of the argument gives an advantage to anyone anticipating being in a long-term debate, which is surely what the fight over the future valence of IP will be.

THE PUBLIC STANCE OF THE *copyright* COLONISTS DISPLAYS "NO *consideration* OF PUBLIC INTEREST."

LET THE MUSIC MOVE YOU

There are tentative experiments with different models for IP, but evolution, of necessity, comes slowly to copyright. "Copyright law was written on a book model," says Litman, "but always fit music and the visual arts less well. And the music industry always knew it had to be taken less literally." (See sidebar, "Music Lessons," page 84.)

Abelson would agree. He is mindful that "symbiosis has always existed between underground tapers and musicians—and musicians understand this. They know [the music underground] is not parasitic." In fact, many musicians use the underground culture as a way to start their careers, knowing the existence of the tapes helps to widen their fan base.

BMI's Saffer advocates some of the more balanced approaches the music industry might have to offer. She believes that with patience and cool heads, a system can be established that responds to the new demands of the Internet. "We need to set up different models, such as the paying of flat fees, as in an annual or site license; taking a percentage of profits or a percentage of cost of producing; or with a copyright holder as a partner in venture, taking on part of the risk and sharing in the rewards; or having startups pay more down the line."

As for what's next, perhaps the solution is not to speed up, but to slow down. "There's lots of energy being put into how to cut the pie before the pie is made," says Abelson. "If people relax a little bit and let the business models evolve," everyone will benefit. And Litman believes people will always find ways to charge for value and profit. Interrupting gestation cycles creates strange monsters; trying to overdetermine the solution to the IP paradox may lead to techno-commercial congenital defects, stillbirths and unhappy mutants, such as selective prosecution of on-line service providers who don't watch their subscribers' e-mail like hawks.

Abelson says the next step in dealing with the Internet's IP problem is multimedia search engines that use video and audio. "It will be hard to do; but if there start to be IP fences, it will delay these engines for years."

As for the IP radicals who think the concept will increasingly lose meaning, attorney Hayes disagrees. "There is one thing cyberspace ignores: not everything about life will go on-line. Lots of people want the physical. They won't take their laptop to read with in bed." The physical world is analog—and many of the things we hold most dear in it depend on sound preservation of the spirit of IP.

Those same pleasures also rely on the rewarding of creation more than leveraging. In that vein, Braun may have the neatest take on the IP paradox: "I'm an IP farmer, more worried about my field being fallow, or a drought, than about a few apples being stolen on the way to market." ■

The work of San Francisco writer Paulina Borsook (loris@well.com) is appearing in an upcoming Seal Press anthology on women and cyberspace, and in the MIT Press publication "Leonardo." This is her first article for UPSIDE.

See UPSIDE's Web site, http://www.upside.com