James Boyle, from Shamans, Software, & Spleens. Combridge: Harvard UP, 1996.

Proposals and Objections

CHAPTER

obscure disturbing political, economic, and moral consequences, and that it is presently doing just that on an international scale. For one thing, if one conclusively presumes a romantic vision of originality, one is more likely to neglect the importance of the public domain. This neglect means that property rights for "authors" can actually *restrict* debate and slow down innovation—by limiting the availability of the public domain to future users and speakers. The Gay Olympics case, the patenting of software, the *Kinko's* case, and the story of the rosy periwinkle show that this is not merely a possibility but a fact. Our current definitional denial of these consequences merely makes them all the more likely. The table on page 156 provides a summary of my analysis.

In this chapter I deal with some of the more likely objections to my

analysis, and then offer some proposals for change, both political and legal. In most legal scholarship, the detailed proposals for reform are the capstone of the piece, but there are three reasons why I shy away from that position here. First, I am attempting to construct a social theory of the information society. To concentrate only on the specific policy proposals is to lose sight of the larger project. Even if that project is a failure, it is a *large* failure rather than a small one. Durkheim wasn't writing a book about the best height for bridge parapets.

Tensions in an Intellectual Property System

<these problems, the effect of the author-vision is to make the items in the</p> I have arranged these tensions in two vertical sets. Each set is not a list of corollaries; indeed, they are sometimes internally contradictory. Thinking of entries in each column are most likely to be found in popular and scholarly picking four dishes from column B and one from column A. Nevertheless, the created from other artistic works. In fact, any particular portion of an does not commit one to Northrop Frye's view that artistic works can only be the subject of intellectual property as "information" rather than "invention" middle column either disappear or recede in importance. discourse when linked to their vertical neighbors. Under the guise of resolving information regime is likely to "mix and match," like a restaurant patron

Subject Matter	Information	Innovation
Economic	Efficiency	Incentives
Perspective		
Paradigmatic	Transaction Cost Problems: harriers to the free flow of	Public Goods Problems: inadequate incentives for
Problems	information lead to the	future production lead to the inhibition of
	inadequate circulation of information	innovation / inadequate circulation of information
Reward (If Any)	Effort / Investment / Risk	Originality / Transformation
View of the Public Domain	Finite Resources for Future Creators	Infinite Resources for Future Creators
Vision of the Productive	Development Based on Existing Material: "Poetry	Creation ex Nihilo: "Copyright is about
Process	can only be made out of other poems; novels out of other novels. All of this was	creativity that enable an individual to craft <i>out of</i>
	much clearer before the assimilation of literature to private enterprise."	thin air an Appalachian Spring, a Sun Also Rises, a Citizen Kane.'' ^b
Normative Starting Point	Free Speech / Free Circulation of Ideas and	Property Rights: the creator's "natural" right,
	Information	creation, the incentive to produce again

about the intellectual property system, rather than to add to it. number of spuriously scientific and determinist prognostications which the intellectual property system should move, rather than the detailed suggestions I make here are examples of the direction in have curtailed the possibility of democratic dialogue. Thus the more claims to the "technical" and "scientific" status of the subject matter But to a greater extent than with other property systems spurious property systems, intellectual property is a system designed by elites system be opened up to democratic oversight and control. Like most mation economy, it is particularly vital that the intellectual property weaker theoretical basis.) Third, if we are truly living in an inforthe current system, who say they can do exactly that from an even tate the appropriate duration of copyright, would be ridiculous further empirical evidence—set the correct level of incentives, or dicone-sided, account. Still, to claim that my analysis could-without idea of originality. Thus mine is at least a two-sided, rather than a when one builds an intellectual property system around an expanded that undervaluation of the public domain is reflexively produced rangement of intellectual property rights. My analysis pointed out abstract need for some set of incentives with the actual current ardescribed here is wildly overdeterministic in the way it equates the istic and technocratic errors I criticize. The structure of thought I have Second, there is the danger that I would replicate the very determinimperious dictates of "correct" analysis. My goal is to diminish the (Though not quite as ridiculous as the claims of the proponents of

Objections

piecemeal, these responses seek to dismiss the importance of the ausocial construction of knowledge. Rather than taking my points just words." "It has to be this way." "And anyway it's good." thor vision tout court. I have encountered three basic versions: "It's jections I have encountered deal with my focus on ideology and the Apart from the arguments already dealt with, the most common ob-

"It's Just Words": The Rhetorician

talk," but you are mistaken in thinking anyone believes it. The idea of It is true that the regulation of information entails a lot of "author

^{(1991) (}emphasis added) a. Northrop Frye, Anatomy of Criticism, 96-97 (1957). b. Paul Goldstein, "Copyright," 38 Journal of the Copyright Society of the U.S.A. 109, 110

an "original" author or inventor is just a conventional figure of speech, a convenient rhetoric to justify an intellectual land grab.

If it were true that the authorial vision was only used as a rhetorical device, used hypocritically *by* disbelievers *to* disbelievers, I should still think it worthy of study. "Hypocrisy is the homage that vice pays to virtue." By studying a society's sanctimonious rhetoric we can understand its normative orthodoxy. I would certainly be willing to admit that the image of the romantic author is *sometimes* used consciously as rhetoric; when Time Warner enlists Byron, Proust, or even D. W. Griffiths as the champion for their flow of royalties, we may be a little suspicious of the message. But, attractively cynical though it is, I simply do not accept the assertion that the author vision I describe is *only* rhetoric.

cultural assumptions and untouched by its deepest beliefs. I find myentirely above the society that consumes this rhetoric, free from its speak so cynically of mere "rhetoric" portray themselves as being inality is our touchstone—not just our rhetoric. Second, those who in collecting names and numbers for a telephone directory as the happy ensuring payment to the person who invests time and labor an intellectual property system that merely tried to provide adequate the major premise, of our intellectual property system. We could have legitimately attractive idea, an iconic vision of human potential, but into our speechways and our patterns of thought. Not only is it a tude. The idea of the original, transformative creator is coded deep self unconvinced by both the specific assertion and the general attiperson who, after much work, invents something new. Instead, origreturns on investment in information production—one that is just as science, and information production in general it forms the baseline against which we judge other accounts of art First, authorship is not merely a handy argument; it is a premise

"It Has to Be This Way," Response 1: The Resigned Cynic

You may be right in saying that the language of authorship is a central one, but that is just because it serves the interests of the most economically powerful actors. Microsoft, Pfizer, and Time Warner want a certain kind of intellectual property regime and that is the one they get. The system expresses the interests of the most powerful, always has and always will. Consequently, while your project may be very

nice as an academic exercise, it is of no conceivable importance to anyone.

and get enacted into law. (Interestingly, the determinist argument is and that legal regimes are based merely on economic self-interest. In show, while a regime built around the author figure is historically assertion that authorial language is mere rhetoric, just froth and often coupled with the rhetorical argument, to produce the surprising companies" have a single set of interests that they consciously pursue most versions, it adds a relatively crude determinism—that "the big ments in a legal system go to those who are able and willing to pay express similar conclusions, but without the sigh of regret. Entitleputer programmer. Some Chicago School economic analysts of law both irrelevant and inexorable.) I have heard the determinist objection inevitable. In this rather puzzling picture, the authorial paradigm is the most for them—and a damn good thing too. fiction cyberpunk author, a liberal legal historian, an iconoclast comfrom a wide range of people—a Marxist patent law scholar, a science This argument takes the position that ideology is of no importance

Obviously there is some truth to this picture, but as the *sole* explanation of the current situation, I think it substitutes cynicism for analysis. First, it is hard to identify a group of corporations with consistent interests in the intellectual property field, broadly or narrowly conceived. Take computer software as an example, and Microsoft as the hardest case for my argument. Surely at least Microsoft has a simple set of interests in intellectual property? (Namely, "More, More, More,") Yet even here, in the very worst case for my thesis of a complexity of interests, the reality turns out to be a little more complicated. Microsoft wants broad protection of operating systems—but not always too broad, because otherwise Microsoft Windows would be held to have infringed on the "look and feel" of the Apple operating system.

If we look beyond Microsoft, a company that is in the economically enviable position of having copyrighted the alphabet, we find that the complexity increases. When it comes to issues such as decompilation, the large software companies have interests both in the protection of software (their own) and in a *limitation* on the protection of software (their competitors'). More generally, in the absence of a strong ideology of authorship, we might expect attitudes toward in-

enter the market. Even within this generational analysis, we would expect further variation across industries depending on the ease with which investment in research and development can be recouped without intellectual property protection. Some new market entrants may want an expansive conception of the public domain so that they can utilize the accumulated expertise of their predecessors, while others may believe that investment in a new area can only be justified by the possibility of a monopoly rent on the likely results. Differences in risk preference would presumably also play a role. Even with the long-term players, views should shift more over time as market posture shifts. As a participant in a project to break into the operating system market, IBM has a rather different attitude toward intellectual property than it did when its mainframes defined the universe of computers.

If we actually find that corporate lobbying centers on the expansion of intellectual property regimes, both domestically and internationally, does this refute my analysis of the author paradigm, or reinforce it? Given the actual diversity of interest that a more detailed economic analysis reveals, it seems possible that corporations' perception of self-interest is just as often a *result* of the author paradigm as it is a *reason* for it.²

company could "free-ride" on the preservation efforts of others, each existence of their raw materials. Thus we have the classic argument and ethnobiological knowledge for free. But it is in the collective sources, of the public domain. At present it may be in the individual which it was mandatory to devote some proportion of profits to the but it would actually be in the interest of all to shift to a regime in rational tor any one drug company to change the way it operates, will hold back, hoping the others will do the work. It would not be for state intervention to avoid free rider problems; so long as one interest of the companies in the drug industry to ensure the continued interest of the individual drug company to secure biological material the idea of originality, it tends to undervalue the importance of ically irrational results. The "periwinkle effects" detailed in Chapter Failure to do so may signal the uncritical acceptance of a particular ideology maintenance of biological diversity and perhaps cultural survival 11 are a prime example. Precisely because the system is built around Second, and more important, the author-vision produces econom-

of information production rather than a cool-headed pragmatism about self-interest. Again, I would argue that the corporate perception of self-interest is just as often a result of the author paradigm as it is a reason for it. Finally, even if there were no truth in the argument I put forward here—even if all corporations had somehow rationally converged on a monolithic position on intellectual property—we would still want to work out whether the corporate position was in the long-term interest of anyone else. Even the most fatalist of the cynics wants to know something about the reality on which his cynicism is based, if only so he can be assured that his sigh of resignation is perfectly pairtched.

"It Has to Be This Way," Response 2: The Historical Determinist

The author paradigm you describe was an inevitable functional by-product of the development of widespread print technology at the end of the sixteenth century. To talk as if we had any choice among paradigms is profoundly misleading. If, indeed, the author vision is doomed it will be because it does not fit the material realities of contemporary information technology and not because we "decide" it is a bad idea. For example, within the copyright arena narrowly conceived, greater ease of copying will make the authorial paradigm obsolete, if the possibility of levying individual fees for each electronically metered "use" does not make it moot first. Consequently, the attempt to explain the negative effects of this kind of thinking to some imaginary audience is an entirely futile one. Economic and technical changes called the author figure forth and only those forces can lay it to rest.

This is a deeper, but no less enervating, determinism than that of the person who believes that "the big corporations" are the moving hand of history. On a crude level, it has become our orthodoxy that social meaning in general, and law and ideology in particular, are mere adjuncts to technological and economic change. My reaction to this argument is a complicated one. Obviously such change is important, but I fail to see the simple definite correlations between technological change and legal innovation that are so often assumed.³

At first sight, it seems reasonable to believe that the second thing off the Gutenberg press was the romantic author, but both history and analysis tend to clutter the artful simplicity of this thesis. Yes, it

a potential public goods problem in the first place. But what kind of for some kind of "copy"-right.4 The possibility of large-scale profit is plausible that the greater the ease of copying, the more the need dustry such as Elizabethan printing, guild allocation could have fulresolution by the guild. At least within a pervasively regulated into publish certain books, protected by a quasi-legal system of dispute parently functional system of allocating and registering the privilege tions? The Stationers Company in Elizabethan England had an apregime do we have to solve this, built around what kind of assumpfrom books and the possibility of large-scale copying of books arise at would try to horn in on anyone else's literary turf.5 (Think of the the same moment. It is the ease of "copying" that makes information of a copyright regime, but it would also cover the "unoriginal" teleclose to zero marginal cost. This would cover many of the problems goods, one unit of which can satisfy an infinite number of users at protections against competition on allocated routes within the regufilled some of the functions of copyright in guaranteeing that no one driven need to have some legal regime or ideology. of reality. We should uncouple the factitious determinacy of the actual nology and economic organization existed in some Tupperware conquires the authorial-original creator model I describe here—as if techsystems. Why?6 It is unconvincing to say that the printing press rephone directory produced in the Feist case. We have neither of those tor case, giving monopoly property rights to all those who produce prehensive system that simply tracked the public goods problem case lated airline system.) At the other extreme, one could imagine a comlegal regime and ideology we end up with from the technologically tainer that seals out ideology, aesthetics, and the social construction

The determinist makes a category mistake—identifying the concrete social forms produced by the last four hundred years of our history with the abstract *idea* of functional needs. When we turn from history to prognosis, the same thing happens. Yes, developments in information technology will certainly have a huge effect on both the utility and the unintended consequences of our intellectual property regime (though the arrow of influence runs both ways—from technology to ideology *and* back again.) That is one of the premises of this book, after all. But the specific consequences of those technological developments are harder to figure out. Perhaps greater ease of copying will undermine an author-centered regime, or make it seem

Perhaps electronic metering of use will make copyright superfluous, or perhaps it will simply be used to enforce a copyright-based regime. Perhaps the appropriative, cut and paste technology of the Internet will make us question the very idea of originality, or perhaps the Net will remain an electronic ghetto, cut off from the "respectable" world of literary production (no modems in Proust's cork-lined room). *Perhaps* the psychic and ideological attractions of authorship will continue to manifest themselves long after aesthetic theory and information technology have supposedly left them far behind. I have explained why I think so. Whether I am right or wrong, the simple argument from technology fails to move me. The determinist imagines self-interpreting technologies "announcing" their needs to a world of rationally adaptive social institutions. That is an interesting picture, but one that belongs in 1950s science fiction rather than social theory.

"And Anyway It's Good": The Defender of Authorship

How can you deny that there is something noble in authorship and in the larger idea of basing intellectual property rights on originality? There is a difference between originality and mere grunt work, and the former is worthier than the latter—in both Kantian and utilitarian terms. Shakespeare deserves better intellectual property protection than Grisham, let alone a telephone directory; Einstein deserves more recompense than Nintendo. What's more, if anyone ought to believe in property rights based on originality, it is someone who believes—as you seem to—that iconoclasm is to be valued and that the human capacity to wreak great changes in our life plans, our cultures, and our societies is one of the proudest attributes of the species.

Strange as it may seem, I do think that there is something noble in originality in general and authorship in particular. I don't know if anyone takes the caricatured position that it is impossible to distinguish between the cultural contributions of Shakespeare and Grisham. I certainly do not and I would be quite happy rewarding the former more than the latter, based precisely on the degree of original material they added to the public domain (although our current system doesn't, and Shakespeare didn't have any copyright protection at all). Finally, if one is going to be romantic about something, our

ability radically to transform culture, self, and society is a pretty good candidate.

The first problem is that this argument proves too much. In order to have any practical utility, the definition of originality has to be broadened so much it loses much of its romantic appeal. Earlier I quoted Holmes swooping down from the Olympian heights of art to the reality of a circus poster: "The work is the personal creation of an individual upon nature. Personality always contains something unique. It expresses its singularity even in handwriting, and a very modest grade of art has in it something irreducible which is one man's alone. That something he may copyright."

of originality was anything but "thin." not. Useful alphabetical listings are not "original," unlike wholly spumantle of romantic authorship, the artifact will still be covered cases where the gatherer of information can be smuggled under the of "information-public goods" problems I described earlier. In those cidental virtues of the system, one cannot defend it as if its definition rious arrangements of numbers and silly text.) But whatever the actection, whereas the person who compiles a telephone directory will together a book of "lucky lottery numbers" will get copyright protory on any utilitarian ground. (For example, the person who puts though the overall pattern of coverage will be extremely unsatisfacthe regime is not already paralyzed by its inability to cover the kinds it is because the definition of originality has been stretched so far that Bishop. There is nothing wrong with this; quite the contrary. In fact Othello, the manual for WordPerfect as well as the poetry of Elizabeth Intellectual property covers the tax-preparation book as well as

Second, if we *really* cared about originality, we would cover a lot of things that we do not presently cover. Albert Einstein and Stephen Hawking get *no* intellectual property rights for their discoveries of "natural laws," while the inventors of the Slinky and the paper clip can really rake it in (unless their inventions were "obvious"). Suppose for a moment that our intellectual property system really *was* designed to produce an adequate amount of invention and original discovery. One would think that the paradigmatic case for protection would be the foundational discovery which produces no immediately useful product. That is the one that is least likely to be com-

pensated in other ways, after all. Yet that is exactly the discovery we do *not* protect. Strike two against the strong defense of originality.

among us of the raw material necessary to create their next transfora lot more difficult. The tendency of the current system to undervalue an obligation to concede that the current system can make their lives to catch my eye was a letter written to the official publication of the mative artifacts. Examples of this process abound, but the most recent the importance of the public domain can deprive the truly creative and convey few useful benefits for society. The fascinating thing here ents on the grounds that they inhibit innovation, slow down research, the League for Programming Freedom, which opposes software patawards, including Marvin Minsky and Richard Stallman, founder of to "honor property rights, including copyrights and patents." The of Ethics, a clause that announced a "moral imperative" for members The letter was a protest against Clause 1.5 of the ACM's new Code Association for Computing Machinery, Communications of the ACM.8 thor envy." defend: the innovative geniuses and inventors. This demonstrates the is that opposition to extensive intellectual property regimes is coming letter was signed by seven prior recipients of the ACM's highest cluding that all opposition to intellectual property is based on "aufallacy in assuming that creators' interest is only in increasing intelfrom precisely the people that those regimes purportedly honor and lectual property protection. It also should give one pause before con-Third, if one truly worships Great Artists or Inventors, one is under

Proposals

A large portion—the most important portion—of this book is devoted to understanding the various ways we now think about information. It deals with the tensions within our current patterns of thought and the unintended consequences that might occur as we rely—consciously or not—on those patterns to create the legal and institutional frameworks of an information society. But my goal is prescriptive as well as descriptive. The general issues and concrete suggestions that follow are rooted in my analysis of information discourse in the market, the polity, property, and the family. They are

not, of course, *entailed* by that analysis. A more detailed set of suggestions is provided by the Bellagio Declaration (see Appendix B).

seneral Issues

and liberal democracy deal with hard value judgments by aggregatchocolate, should teachers be paid less than missile engineers? ing individual acts of choice. Should vanilla ice cream cost more than tendency toward an egalitarian idea of information. Both the market comes from the fact that it treats each participant's choice equally each person pursues her own life plan. The system's legitimacy one just votes. In the political or economic terrain thus constructed societal valuations—as the result. In the realm of democracy, everywith her dollars, and the self-regulating system produces pricesthe market, everyone makes their rational consumer choices, "votes" society's leaders? Both systems answer that question by addition. In the poor dwarf? How do we decide the government's policies or pick Should human growth hormone go to the rich basketball player or There is, in both classical liberalism and market economics, an ironic doesn't care how you spend it. If you have a vote and a political with formal neutrality. If you have a dollar to spend, the market "voice," you may deploy them as you choose.

Criticism from the left has always focused on the "if's" in the preceding sentence. Freedom to spend one's dollar as one wishes is of little use to the person without the dollar in the first place. The promise of egalitarian democracy is somewhat undercut by the fact that both in voting and in other forms of political behavior wealth is such a significant predictor of success. The general criticism focuses on the aridity of a system that postulates as a formal matter that all are equally free to make the same choices—whatever the distribution of resources. The classic example is that both rich and poor will be punished equally for making the "choice" to sleep under the bridges in Paris. The question of disparate actual resources is not relevant.

There is an irony in these criticisms when we turn to the subject of information—a simple point of great potential significance for the information society. Both the market and liberal democracy use the idea of rational choice as their nostrum for every normative issue, often ignoring the questions of resource distribution that would make that choice a reality. But even the most formally arid system based on rational choice requires

that its participants have one actual resource—information—if the choice is to function as a normatively appealing bedrock. On this one issue, about this one resource, both the market and democracy move from the realm of formal, negative liberty toward that of substantive positive liberty. The journey is not always completed, as my discussion of insider trading illustrated. But as that discussion also showed, the impulse is there.

The second idea of information is in some ways the opposite of the first. Issues ranging from the Bork hearings to the debate over credit records or the analysis of blackmail offered here all testify to the strength of our notion of informational privacy: the idea that there is some kind of natural right to control information about ourselves, to restrict access, (intermittently) to prohibit commodification, and to control dissemination.

One should be careful not to make too much of this. No social results flow automatically from such a picture of the world. Information too can be recharacterized as something all are presumed to have or as a resource about which the system is conclusively indifferent—"Caveat emptor" or "Ignorance of the law is no excuse," for example. When claims of privacy butt heads with the market need for accurate consumer information, privacy often loses. But even at our most carefully qualified and hedged, we would be silly not to realize that when dealing with this resource our society's languages of entitlement are less grammatically hostile to the claims of the dispossessed and the marginalized. This is not just a description of a useful rhetorical ploy; the way we think about the world sets up limits for us. It prepackages certain normative claims as potentially valid, others as marginal, and it prevents still others from even being understood as valid speech acts.

This part of my discussion does not provide a neat set of programmatic proposals. Instead, it is intended as a sort of guidebook for those who are engaging in scholarship, activism, or decision making on a specific information issue. But the moral geography of information issues I described here is important for another reason. It maps out the landscape of "public" and "private" information, the territories that abut the information property issues on which I have spent so much time.

THE PUBLIC DOMAIN

sicians who wish to "sample" other recordings in their songs should gether, the coalitions that have been drawn into the fight over the stand apparently discrete "free speech issues" as being linked to overall picture of the struggle. In just the same way as PEN, Amnesty and even an economic agreement, concealed by the absence of ar the public domain. My analysis here suggests a philosophical, moral on, and so on. At the moment, the doctrinal divisions between difdeveloping nations that object to the patenting of life forms, and so groups in turn should realize that they have interests in common with ists but to the software companies that want the antitrust law ensee their interests tied not only to parodists and appropriationist artthe programmers in the League for Programming Freedom. Rap munalistic fair use in The Nation case need to form common cause with reporters who were outraged by the restrictive meaning given to jourway, there has been little or no coalition politics on this issue. The ketplace of ideas. Despite all the ballyhoo about the information highas a resource for future creators and as the raw material for the mar-We need to show much greater concern for the public domain, both public domain need to understand the connections between their di International, the ACLU, journalists, and teachers' unions underthe individual groups who are seeking to restrict the privatization of ferent areas of intellectual property are mirrored in the isolation of the biologically diverse public domain of seed "land races." These forced against Microsoft and to environmental activists trying to save

Preserving the public domain does not always mean getting rid of property rights. Sometimes the problem is that a property system constructed around the idea of authorship recognizes only certain kinds of contributions, and does so in such a way as to reduce the likelihood that the public domain itself will survive. The discussion of shamanic sources and periwinkle effects in Chapter 11 offers pertinent examples. In these cases, the answer will be not to have fewer intellectual property rights, but rather to have different ones. At this point, a critic might say that my analysis is contradictory. Having spent all this time saying we had too little concern for the public domain and too much intellectual property, I am now arguing for the

author-centered system minimizes the importance of the public docentered system has multiple blindnesses and that we should strive intellectual property rights. Rather, my point is that an authorneed fewer intellectual property rights, or that we always need more case I think I am not guilty of one. My point is not that we always contradictions, some of my best friends are contradictions, but in this creation of new forms of intellectual property. I have nothing against or in the suppression of the interests of the audience or market for often in a way that would curtail the possibility of future production, dervaluation of nonauthorial contributions to the production process main, and conceives of information issues predominantly from the creation of too many intellectual property rights, because a strong to rectify some of them. In general, these blindnesses result in the incentives point of view. But these blindnesses also result in the un-Appendix B), my fellow drafters and I put it this way: the product. In an essay accompanying the Bellagio Declaration (see

Our analysis indicates three overlapping areas of neglect in an overly author-centered vision of intellectual property: neglect of unacknowledged sources and non-authorial modes of scientific and cultural production, neglect of the interests of the "audience," and neglect of the importance of conserving the public domain for the benefit of innovators and consumers alike. Measures designed to counteract these tendencies do not fall neatly into a simple choice to have "more" or "fewer" intellectual property rights. Indeed, one of our criticisms of contemporary discourse about intellectual property is its simplistic binary format. We favor a move away from the author vision in two directions; first towards recognition of a limited number of new protections for cultural heritage, folkloric productions, and biological "know-how." Second, and in general, we favor an increased recognition and protection of the public domain by means of expansive "fair use protections," compulsory licensing, and narrower initial coverage of property rights in the first place.

DATABASES

A reconfigured intellectual property regime would be attentive to the times when the current system provided too little protection as well as too much. For example, the focus on "invention" may well provide too little incentive for the compilation of databases, or may cause socially unproductive labor to be expended in trying to arrange those

databases in an "original" way just to bring them under the mantle of intellectual property. However, there are many ways to finance such information production. The technology itself may provide a method for controlling access; the tax system might offer incentives; and so on.

excellent service, namely, the expense of paying for it? What happens ous costs for privacy.) But what about the more tangible costs of this chased through bad recordkeeping. To the extent that information that one of the greatest protections of privacy is the anonymity purthe privacy objection has been "waived," though it is worth noting to find that he was himself picked up, before he entered public life, check to see if his name was ever mentioned in any newspaper, only onds. Say a state senator gives a speech attacking homosexuals. I worth of the big newspapers in the United States in just a few sec-NEXIS service allows journalists electronically to search fifteen years should to be taken into account. At present Mead Data Central's indirect costs on and generate benefits for public discourse. These too point is that these questions need to be addressed directly, not de nalists even further toward the recitation of disconnected prurient if only the big news media can afford it? Do we need some form of technology makes information instantaneously retrievable, it has obvifor soliciting in a public bathroom. (In this case, we might think that facts, an uneasy hybrid of railway timetable and a peep show? The publicly subsidized service? Or does this form of research push jourfined out of existence, as is often done under our current system. The creation of expensive and useful databases may also impose

SUI GENERIS SYSTEMS

In discussing information economics, I argued that there was no such thing as a generic public goods problem. Instead, there were a host of problems: underproduction, overproduction, diminution of the public domain, and so on. In addition, the different *loci* for intellectual property rights present strikingly different characteristics, yet we tend to cram them all into the same categories in a way that would have made Procrustes proud. The table at the beginning of this chapter could be used as a kind of checklist for each area. In some industries or areas of life, information production might seem as worthy of protection as innovation. Some innovations might offer high returns even in the absence of intellectual property protection, because

of the ability of the innovator to trade on the knowledge of the likely effect the innovation will have on the market. Others might have such a short half-life that the ability to be first to market offers ample rewards. Still others might present us with a dilemma in which every reward for innovation has the direct effect of stifling future innovation.

Obviously, no intellectual property system could be perfectly sensitive to all these market differences, even if we could identify them in advance, or associate them with particular classes of products with a high degree of confidence. That is not the question. Any legal rule ends up covering both too much and too little. The question is not whether the system could solve all these problems, but whether—as seems likely—we could do better than the two-sizes-fit-all scheme we have at the moment. A reasonable place to start would be to study sui generis systems for particular types of information products—software is the most salient example.

INTERNATIONAL EQUITY

One central theme of this book is that many of the "human rights" and even more of the "international development" issues of the twenty-first century will be intellectual property issues. Earlier I described the regressive and inefficient operation of the current international intellectual property system. I am not under the illusion that this expression of sentiments provides an algorithm with which to resolve the world's intellectual property problems. In fact, it raises as many questions as it answers. My hope, however, is that they are better questions. What we have right now is an exponentially expanding intellectual land grab, a land grab that is not only bad but dumb, about which the progressive community is largely silent, the center overly sanguine, and the right wing short-sighted.

It is certainly possible to maintain our faith in the premises of the current system while we fiddle with its effects. Patent systems could have more general transfer of technology requirements built into them; copyright regimes could have compulsory low-cost licensing for educational use in developing nations; "neighboring rights" regimes could make up for some of the current shortcomings in the treatment of sources; and so on. As the prior paragraphs suggest, I

have nothing against incremental progress. I am quite happy to make moderate, reformist suggestions about the protection of databases and the appropriate interpretation of the fair use provisions of the copyright act. Here are some examples of reforms based on the analysis I have put forward.

- Copyright should subsist only for twenty years, with a broadly defined fair use protection for journalistic, teaching, and parodic uses—provided that those uses were not judged to be in bad faith by a jury applying the "beyond a reasonable doubt" standard.
- Software should be covered not by patent law or by copyright, but by a sui generis system that would take more account of the costs of creation, the possible returns in the absence of intellectual property protection, and the extent to which an intellectual property right would concentrate market power and erect roadblocks to further development.
- Drugs derived from the ethnobotanists' pharmacopeia should be subject to a 10 percent tax and the proceeds split equally between the indigenes and a fund to promote biological diversity.
- Patents should be voidable at the instance of any party who can prove that an adequate return would have been provided merely by being first to market, with the state paying the legal fees for successful suits.
- All intellectual property right systems should be subject to periodic auditing by the General Accounting Office, an auditing to test whether—with each type of product—the intellectual property right was providing too high or too low an incentive to future production and research, and to attempt to balance that incentive against the monopolistic and anticompetitive results of intellectual property protection.

Although I give these only as examples of the kinds of reforms that should be considered, I think they are well worth pursuing. I am particularly interested in opposing the worldwide expansion of intellectual property rights, backed with trade sanctions. But my real

concern lies with the general *ideology* of the intellectual property system.

The author-vision that I have described here is not merely a set of mistakes in thinking about the balance between incentives and efficiency, public domain and private right. It is the focal point of a language of entitlement, an ideology every bit as rich and important as that of wage labor and the will theory of contract. Those who are negatively affected by this language of entitlement—be they programmers, satirists, citizens of the developing world, or environmental activists—see only the impact within their narrow bailiwicks. Focusing on effects, they fail to see the structure underlying those effects. Thus they lose the possibility of both theoretical analysis and the practical recognition of common interests. This truth may not set us free, but it is a start.

Proposals and Objections

- 1. Sadly the line is François de La Rochefoucauld's and not my own.
- 2. One response is to say that it must be in the interest of companies to insist on strong intellectual property protection, otherwise they would not have done so. At this point, the argument has become circular.
- Hesse, Publishing and Cultural Politics in Revolutionary Paris, 1789-1810 tween the French and the English treatments of the public domain. Carla ism. For instance, Carla Hesse has shown fascinating differences bedifferences which would lead us to doubt their overweening determinin Germany, France, England, and the United States—particularly those opment—such as the quite different historical development of copyright often ignore important historical and geographical differences of develsystem because it is the one we ended up with." Third, these arguments ently nonfunctional features, this must be the functionally appropriate problems of the time. Despite its apparent alternatives, and its apparsomething like this: "The legal regime is a functional response to the of monopoly capitalism. Second, such arguments tend to move in circles, Very briefly, my theoretical objections are as follows. First, functionalist for that matter, can be portrayed as deeply necessary to the current stage outcome, and thus nothing at all. Both the repression and the encourarguments are often overdeterminative. They can be used to explain any agement of infantile sexuality, a free press, mini skirts, and anything else

- 122–125 (1991). For the best general critique of these errors see Robert Gordon, "Critical Legal Histories" in *Critical Legal Studies*, 93 (James Boyle ed. 1992)
- 4. But even here I would want to cavil slightly at the general form of the proposition. It seems possible that, in some intellectual property fields, ease of copying might be associated with the very technological developments that made it feasible to be rewarded for innovation or for information production, simply by being "the first to market." Thus technology might make copy-right both possible and unnecessary at the same moment.
- is. One answer is that the system cannot have been functional; otherwise it would not have been changed. Not only is this argument obviously circular, but it also manifestly contradicts the evidence of the significant geographical and historical differences in the actual development of European copyright regimes. See Hesse, *Publishing and Cultural Politics*.
- 6. One response to this kind of argument is to say that obviously there were no functional alternatives, because otherwise we would not have ended up with the system we in fact have. At this point, of course, the functionalist argument has again become circular and thus both irrefutable and meaningless.
- 7. Bleistein v. Donaldson Lithographing Co., 188 U.S. 239, 249–250 (1903) (emphasis added).
- 8. Marc Rotenberg, "Communications Privacy: Implications for Network Design," 36 Communications of the ACM 17 (1993).

Conclusion

- 1. In this context, the ambiguity between the two uses of the word "supposed" seems entirely appropriate.
- 2. This is not to say that I am arguing in favor of the labor theory of value. One of the achievements of marginalism in economics and legal realism in property law was to point out the flaws of both the Marxist labor theory of value and the conventional vision of property which it opposed.
- 3. This, I think, is a point that Foucault would have agreed to, even as he would have insisted (again rightly in my view) that the method that grand theory offers to find and criticize this "discourse" is exactly the wrong one.
- 4. See Jaques H. Drèze, "A Paradox in Information Theory," in Drèze, Essays in Economic Decisions under Uncertainty, 105 (1987).
- 5. I have to say that I like the irony of saying this near the end of a book whose myriad footnotes are the fruit of every electronic research service the world has to offer.

- 6. Cf. D. M. Lamberton, "The Emergence of Information Economics," in Communication and Information Economics: New Perspectives, 7–22 (M. Jussawalla and H. Ebenfield eds., 1984): "The emergence of information economics can be seen as response to the deficiencies of economic theory based on perfect knowledge, the failures of policy, or the spectacular advent of intelligent electronics with greatly enhanced capacity for communication, computation, and control. Whichever is the preferred interpretation, it remains a personal judgment whether the battle for recognition and respectability has only just been joined, is well advanced, has been won, or perhaps been lost." Id. at 7.
- Because of the "infinite" vision of information I discussed earlier, we do analysis undecidable on the level of scholarship. As the case of the polon the level of market behavior, and make questions of microeconomic model—may prevent the operation of economic feedback mechanisms its being both part of the model and a good to be traded under the market decisions make so well. Yet the double quality of information oclassical price theory, these kinds of trade-offs are exactly the ones that system of a limited capacity, I will prefer to have a smaller database levels, the practical and the theoretical. luting factory shows, the parallel to welfare economics operates at both process data that I can only find answers 40 percent of the time. In necent of the time but which so overwhelms my abilities to retrieve and more complex database which theoretically would give answers 100 perduced by overproduction. To use a simple example, given a retrieval not as a good, but as the life blood of the public sphere of debate, or the which will give me answers 50 percent of the time rather than a larger, See Drèze, "A Paradox in Information." When we think of information always a good thing. A moment's reflection should confirm the fact that not tend to see information as a good, the maximization of which is not perfect information of a market model, we ignore the constraints prothere are occasions when the unbridled growth of information may actually be hurtful. Some decisions become harder with more information.
- 3. Of course, as I tried to show earlier, the author ideal often does appear in that particular issue, especially when analyzed by Henry Manne.
- 9. I admit that these are abstractions that do not resolve concrete cases, that they frequently contradict each other, and so on, and so on.
- 10. Rust v. Sullivan, 500 U.S. 173 (1991).
- 11. "For of all sad words of tongue or pen / the saddest are these: 'It might have been!' " (John Greenleaf Whittier).

Appendix B

1. There are different ways to explain the nature and protection of authors' rights, which are based on various historical and cultural differences. We

- honor those differences, and we attempt to find common language to express our concerns and aspirations for the international intellectual property system.
- The way of thinking which this exclusive idea of "authorship" supports also has consequences beyond the realm of law. To a greater or lesser extent, we tend to enact this exclusive understanding of the "author" in our practices: for example, as scholars, scientists, teachers, writers, and business people. That effect, however, is beyond the immediate scope of this declaration.