Reds in Suits

Reviewed by Randy E. Barnett

THE FUTURE OF IDEAS: The Fate of the Commons in a Connected World

By Lawrence Lessig

352 pp., New York, N.Y.: Random House, 2001

awrence Lessig's first book, Code: And Other Laws of Cyberspace (Basic Books, 1999), was a big hit, and that may be too bad. For Code had serious shortcomings as a book. Its one big insight — that the architecture of the Internet, which made it difficult to regulate, was artificial and in danger of being changed for the worse — did not need a book-length treatment to demonstrate. And his policy recommendation was vacuous — what is needed is just the right regulation, not too much and not too little. He then failed to describe either what the right regulation of the Internet should be, or any reason to be sanguine that it would be forthcoming from those he

would empower to regulate.

To the extent that others reacted to *Code* the way I did, its enormous popularity may lead them to take a pass on his new book, *The Future of Ideas: The Fate of the Commons in a Connected World.* That would be a shame, because *Future* is everything *Code* should have been but was not. The new book combines a theoretically sub-

stantive and challenging thesis with policy recommendations that are not only specific, but generally wise. There is still the problem of implementing his proposals, but an author can only do so much and, in *Future*, Lessig does quite a bit indeed.

Randy E. Barnett is the Austin B. Fletcher Professor of Law at the Boston University School of Law where he teaches Internet law. Among several other books, Barnett is the author of *The Structure of Liberty: Justice and the Rule of Law* (Oxford University Press, 1998). He can be contacted by e-mail at rbarnett@bu.edu.

The Internet commons The primary theoretical insight of this work can (to its credit) be stated simply: While the "tragedy of the commons" rightly argues for allocation of most physical space by means of private property, the Internet is different. Lessig writes:

In particular, to the extent a resource is physical — to the extent it is rival-rous — then organizing that resource within a system of control makes good sense. This is the nature of real-space economics; it explains our deep intuition that shifting more to the market always makes sense. And following this practice for real-space resources has produced the extraor-dinary progress that modern economic society has realized. (p. 115)

With the Internet, however, the usual physical constraints that make private property necessary are either absent or

greatly diminished, and the value of a commons is greatly increased. Lessig explains, "There is, for example, no tragedy for nonrivalrous goods left in the commons— no matter how many times you read a poem, there's as much left over as there was when you started" (p. 22). As he shows in considerable detail, the digital world of the Internet makes

many goods — from literature to music, to pictures, to software — nonrivalrous for all practical purposes. For that reason, "we cannot jump from the observation that a resource is held 'in common' to the conclusion that 'freedom in a commons brings ruin to all" (p. 22).

His central claim "is that there is a benefit to resources held in common and the Internet is the best evidence of that benefit" (p. 23). What, according to Lessig, are the benefits from goods held in common?

They are a resource for decentralized innovation. They create the opportunity for individuals to draw upon resources without connections, permission, or access granted by others. They are environments that commit themselves to being open. Individuals and corporations draw upon the value created by this openness. They transform that value into other value, which they then consume privately. (p. 85)

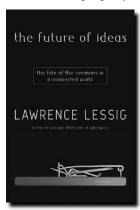
When commons are not subject to the physical constraints that engender overuse and neglect, they should be favored as advancing rather than retarding liberty. "Fencing" or "privatizing" or "propertizing" such a commons makes people worse off rather than better.

Lessig contrasts the world of rivalrous physical things with the world of nonrivalrous ideas:

The digital world is closer to the world of ideas than to the world of things. We, in cyberspace, that is, have built a world of ideas that nature (in Jefferson's words) created: stuff in cyberspace can "freely spread from one to another over the globe, for the moral and mutual instruction of man and improvement of his condition," because we have (at least originally) built cyberspace such that content is "like fire, expansible over all space, without lessening [its] density at any point, and like the air in which we breathe, move, and have our physical being, incapable of confinement, or exclusive appropriation. (p. 116, his emphasis)

That benefit should be obvious to anyone who has used even a fraction of the Internet's potential.

Privatization threat Lessig contends here, as he did in *Code* but now even more persuasively, that the Internet's beneficial commons is being threatened on many fronts by increased privatization. Here, I cannot do justice to his examination of the cable and wireless industries and the degree to which the central managers of companies



are seeking to take control over the Internet by changing its architecture. Perhaps his main targets are the legal challenges to Internet freedom being asserted by large commercial interests and increasingly accepted by Congress and the courts. Those challenges largely concern the law governing so-called "intellectual property" (IP) both patent and copyright — that is being enforced with a vengeance and in such a manner as to stifle rather than advance what the Constitution refers to as "the progress of Science and the useful Arts." His tales of copyright "bots," CPHack, DeCss, iCraveTV, MP3, Napster, and HTML books

describe an ever more ambitious and oppressive regime of control, the consequences of which is to stifle both personal and commercial creativity. (Aside: I believe the cumulative success of those legal challenges more than anything else is what caused the collapse of the technolo-

gy sector that will not revive completely until the jackboot of IP law is off its neck.)

Lessig's thesis should be of particular interest to libertarians not only because he labels his approach "libertarian" in several places — and in private conversation so characterized it to me — but also because he pushes libertarians to better understand their own principles. As the most ardent proponents of property rights around, libertarians have been pretty good at realizing that just because property rights are a good thing does not mean that more "property" rights are necessarily better than fewer. To the contrary, in other areas libertarians have been quick to see that an expansion of "rights" or entitlements undermines the very property rights that are so vital to human freedom and wellbeing. Obviously, if someone has a right to welfare or health care, that right can only be exercised at the expense of the property rights of those whose resources must make good those claims. If one has a right to view the sunset then the enforcement of that right will limit the property right of my neighbor to add a second story to his home. Libertarians see all of that clearly.

When it comes to so-called intellectual property, however, libertarians are divided. More than a few view one person's use of his own physical property as "theft" of another's intangible property. Because of so-called intellectual property, the property owner cannot fully use what he reasonably thought was his; he cannot copy music from one of his CDs onto his computer and then move the files onto his MP3 player. He cannot make photocopies of a book that he owns, and then hand those copies to a friend or a class of students. He cannot use his own guitar to play particular notes or his voice to sing particular lyrics in public. In that manner, the long arm of IP law reaches right into the privacy of everyone's homes and tells them what they can or cannot do

Property rights are a good thing, but more "property" rights are not necessarily better than fewer.

with what belongs to them.

True, IP advocates will say that there are more limits than people realize to their right to use their own property. (Lessig shows how recent those restrictions really are.) As a normative claim, that response reveals that "intangible" intellectual property rights are the enemy of traditional tangible private property rights, rather than their extension. If Leftists had tried to impose those sorts of restrictions on our use of our own property, conservatives and libertarians would have howled. But because it is coming, not from the Red Army, but from "Reds in suits" out in Hollywood (and compliant judges and Congress) and calls itself "property," some libertarians find themselves favoring the most onerous (non war-related) legal restrictions on personal and economic liberty that this country has ever witnessed.

Property and ideas Lessig's analysis should push libertarians to better understand the basis of their commitment to property rights. As I have explained in The Structure of Liberty: Justice and the Rule of Law, decentralized "several property rights" are part of a solution to the social problems of knowledge, interest, and power. Lessig's analysis strongly suggests that those problems simply do not apply in the same way, if at all, to ideas. If that is the case, then property rights should not be extended to an area where they do not belong. I have contended that, because they justify the use of coercion, rights themselves are a necessary evil and that argues for a parsimony of rights. Although I have been criticized from the Left for so limited a view of rights, Lessig clearly sees the cost of private rights and the benefit of preserving free space where the problems that make property rights necessary and beneficial are absent. IP proponents on the Right should take similar heed.

Of course, many libertarians are IP skeptics. For example, Lessig quotes with approval the "conservative economist" F.A. Hayek:

It seems to me beyond doubt that in [the fields of patent and copyright] a slavish application of the concept of property as it has developed for material things has done a great deal to foster the growth of monopoly and that here drastic reforms may be required if competition is to be made to work.

Of course, Hayek presciently wrote that before the Internet and the explosion of so-called intellectual property claims.

Libertarian IP skeptics instinctively realize that their private property rights in physical resources — which are essential to solving the serious problems of knowledge, interest, and power — are jeopardized rather than advanced by extending the concept of "property" to ideas or content. They are properly suspicious here, as all libertarians are elsewhere, that the need to provide incentives for creativity justifies those restrictions on private property in physical goods.

Ultimately, the entire case for IP rests on "incentives" — an argument that is insufficient to lead libertarians to favor propertizing other vital aspects of human endeavors. As Lessig writes,

It is a hard fact for lawyers to understand (protected as they are by exclusionary rules such as the bar exam), but most production in our society occurs without any guarantee of government protection.... [I]n the vast majority of cases in a free economy,

one person's great idea is open for others to take. Burger King and McDonald's; Peet's Coffee and Starbucks; Peapod and Webvan. (p. 70-71)

Moreover, as he argues, even were those incentives needed (which I, for one, doubt), they could be provided by welfare to content creators in the form of compulsory regulated licenses rather than granting them full-blown property rights.

Indeed, Lessig is correct to point out that welfare, not property rights, is all the Constitution actually authorizes (unless you water down what you call a property right). Calling that form of government welfare "property" was a masterstroke for its recipients. "By simplifying the nature of the rights that IP law protects, by speaking of it as property, just like the ordinary property of cars and homes, our thinking is guided in a very particular way," Lessig writes. "When it is viewed as property, we see endless arguments for strengthening IP and few for resisting that increase" (p. 237). And that view roped in many libertarians.

Abolition, not refinement Unfortunately, Lessig is a trimmer when it comes to IP law, not an abolitionist. "I am not against copyright law (I agree with Hollywood: if you simply copied the whole of this book, you are a thief); in the ordinary case, the scope of its monopoly ought to be respected" (p. 215). A thief? However libertarian his analysis may be in this book, Lessig has no problem with the welfare that IP represents as long as it is calibrated properly. Libertarians, however, need not follow him down that middle path. Though he favors just the right amount of IP, the case he makes leads to a more radical abolitionist conclusion than he apparently realizes.

That brings me to my most serious theoretical disagreement with Lessig. It is more one of framing than result, of conceptualization rather than policy. His central message, reflected even in the title of his book, is to pose property rights as the antithesis of "the commons" and to contend that the propertization of the commons in cyberspace is a bad thing. "We assume," he writes, "that creativity and innovation and growth will occur only where private property and markets function most strongly" (p. 238). What he fails to real-

ize is that the propertization of cyberspace is a restriction upon private property in physical space and upon the free market as much as any other regime of property regulation.

False claims of property rights are the enemy of genuine property rights. Consider chattel slavery in which some claimed a property right in other persons, thereby depriving slaves of their right of self-proprietorship — the inalienable property right that each person has in himself or herself. Consider an old libertarian hypothetical in which the Rockefellers are granted private property in the land defined by the boundaries of New York State while the Kennedys get Massachusetts. Such a scheme of private property would violate the several property rights of millions. IP is no different. Time-Warner and Microsoft and countless other remote corporations now claim to own a piece of your PC, your LPs and CDs, your VCR, your DVD player, and your MP3 player. The courts and Congress have bought their claims. That is very bad.

By invading our homes and businesses to tell us what to do with what is ours. and what of ours we can freely trade with each other without going to jail, IP is as much a restriction on classical liberal property rights as wage and price controls or designating historic districts that restrict how you can remodel your house. All the benefits Lessig sees from the Internet commons are a product of private persons applying their minds to devise new uses for what is theirs and trading those possessions with others. That commons — if "commons" is the right way to conceive of it — is the epitome of private property and the market, not its antithesis.

At a few junctures, Lessig himself finds it hard to maintain his private property/public commons dichotomy. For example, he acknowledges that the Internet is running on private property:

Though running on other people's property, this commons invited anyone to innovate and provide content for this space. It was a common market of innovation, protected by an architecture that forbade discrimination." (p. 85)

That "common market of innovation"

was protected as well, I would add, by the private property rights that allowed its participants control over their own PCs and servers.

Lessig's failure to realize that is a shame, for it would affect very little of his conclusions to acknowledge that the very Internet commons whose virtue he gallantly wrote two books to preserve is almost entirely a product of private property rights. Despite his conceptual error, he advances the intellectual ball here by provoking libertarians to better explain how commons and private property truly relate and how commons can be viewed as an aspect of liberty that is protected, rather than opposed, by private property rights.

Internet exceptionalism There is considerable irony in Lessig now making so strong a case for the exceptionalism of the Internet. Code was properly viewed by many as a refutation of the Internet exceptionalism that had been claimed quite loudly by such "netizans" as John Perry Barlow and (less loudly) by David Post and Declan McCullagh. In The Future of Ideas, we are told that the Internet is different after all. Different, he now contends, not because it is somehow immune from government regulation (which he still denies), but because it is a "commons" that ought not be regulated in the same manner as privatized physical space. The irony is that Lessig was right the first time. Even at the conceptual level, the Internet is not exceptional. The problem with IP is ubiquitous but merely accentuated in the context of the Internet —which is why enforcement efforts are so visible, intrusive, and ubiquitous now. Not only, then, has the Internet proven susceptible to misregulation, it is being misregulated by a body of IP law that is generally the antithesis of private property.

My disagreements with Lessig in no way undermine the importance both of this book and of how much his own ideas have evolved for the better. Here we find an analysis that is more nuanced, sophisticated, and refined — wholly aside from being more libertarian — than in Code. If nothing else, The Future of Ideas shows that, despite all the acclaim he received for Code, Lessig was not entirely content with the past of his own ideas — a quality of intellectual character too rarely seen in a scholar of his stature.

Defending Speech from 'Reformers'

Reviewed by George C. Leef

MONEY TALKS: Speech, Economic Power, and the Values of Democracy

By Martin H. Redish 319 pp., New York, N.Y.: New York University Press, 2001.

midst the chatter over the collapse of Enron, the voices of campaign finance zealots have been heard loudly, attempting to capitalize on that colossal business blunder to promote their agenda. Senator John McCain (R-Ariz.), et al., have declaimed that Enron's large contributions to candidates and parties somehow proves that their "reforms" are imperative and will give us "clean" government. Enron's escapades will soon be forgotten, but the advocates of campaign finance undoubtedly will persist in pushing their schemes to restrict freedom of expression and expand federal regulation of speech.

Fortunately, the besieged First Amendment has a new champion: Northwestern University Law professor Martin Redish. In his book *Money Talks*, he takes a thorough and devastating look at the whole range of expression-controlling laws and proposals. Redish works those restrictions over the way a good trial attorney might work over a hostile witness who is telling a fabricated story. By the time he's done with the arguments of the speechlimiters, they lie in ruins.

The book tackles three main issues:

- Should certain communications lose their First Amendment protection because they are of a commercial nature?
- Should there be a lower level of

George C. Leef is director of the Pope Center for Higher Education Policy. He is also book review editor for *Ideas On Liberty*. Leef can be contacted by e-mail at qeorgeleef@aol.com.

First Amendment protection for communications made by corporations?

Should the government attempt to neutralize the impact of money on our political discourse by enacting campaign finance rules and other measures that would redistribute speech "access"?

Redish is unwavering in his negative reply to all three questions. He writes that his goal "is to refute both the conclusions and the underlying theoretical rationales of those who believe that money and economic power cause significant harm to the systems of free expression and democracy" (p. 2). He concludes that, far from improving society, "governmentally imposed restrictions on expressive expenditures

and profit-motivated expression cause serious harm both to the interests of free expression and to the values of democracy, on multiple levels" (p.2).

Speech and advertising

The Supreme Court has long chosen to give commercial speech — advertising — a lower level of constitutional protection than other kinds

of expression. Governments can ban, for example, advertising for products that they do not like, such as tobacco. But Redish finds all the stated rationales for such government action to be unsatisfactory, if not outright dangerous. He writes, "Just as...political speech facilitates the process of self-government by making the individual a more informed voter, so too does commercial speech facilitate the process of private self-government by making individuals better informed in making private life-affecting choices" (p.19). Thus, Redish rejects the fashionable notion that the First Amendment should be interpreted to place political speech on a marble pedestal while relegating commercial speech to the basement.

Consider tobacco advertising. Antitobacco activists have succeeded in obtaining legislative bans on the advertising of tobacco products — a maneuver that has aroused almost no disinterested opposition. Redish finds a deep and dangerous flaw in such legislation: "Selective governmental suppression of speech on the basis of government's perception of the speech's wisdom or persuasiveness undermines the basic premises of governmental epistemological humility, without which the First Amendment cannot survive" (p.57). That is to say, once the government is empowered to ban speech that it determines to be wrong or undesirable, the First Amendment dictate that "Congress shall make no law..." might as well be erased. Speech regulation will become a legislative free-for-all just as business regulation has.

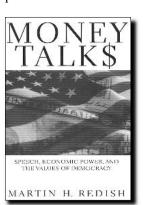
But what about corporations? According to some commentators, "artificial persons" do not merit the same kind of protection under the First Amendment as do real individuals or lobbying organizations. Some scholars even contend that it is con-

stitutionally permissible to stifle corporate communication (e.g., by outlawing corporate sponsorship of advertisements for candidates or ballot issues) because, in the words of C. Edwin Baker, it "fails to foster the values of personal liberty and selfexpression that exclusively underlie the free speech right." Redish demolishes that argument, pointing out that a

corporation is "merely one form of voluntary association, an aggregation of talent and resources, consciously entered into by individuals" (p. 78). General Motors, in other words, has as much right to speak as does the Sierra Club or John Q. Citizen.

But, critics of corporate speech say, will corporations not "drown out" the pathetic little voices of their opponents? That is a common misconception among those who favor restrictions, Redish contends. The argument falsely assumes that there is a scarcity of speech opportunities and that there is no point of diminishing returns when it comes to the efficacy of communications. It also erroneously assumes that all corporations have the same interests and would speak with the same voice.

Money and politics The book's most important contribution is its treatment of the supposed need for campaign finance regulation. Redish addresses and refutes numerous arguments advanced



by campaign finance reform proponents.

First, he tackles the question of whether monetary contributions should be equated with speech. To some, placing limits or prohibitions on campaign contributions is just a property rights regulation that has nothing to do with the First Amendment. Redish responds with a good law school hypothetical:

Imagine the following laws: (1) one that prohibits the payment of money for books or newspapers; (2) one that prohibits publishers from paying their workers who print or distribute the final product; and (3) one that prohibits would-be picketers from purchasing material to be used in signs or sound amplification equipment. Assume that none of the hypothetical laws in any way prohibits or penalizes the specific acts of expression.... Nevertheless, there can be little doubt that the laws in question violate the First Amendment guarantee of free expression. Under these circumstances, protection of only the narrowly defined right of communication would be a hollow protection indeed. (p. 123)

Redish thus grasps a key libertarian insight that most law professors overlook: Property rights and "civil" or "fundamental" rights are necessarily intertwined.

Next, there is the voting analogy argument — that just as the government must not allow anyone to cast more than one vote, so too must it not allow anyone to unduly influence the political process with "too much" money. Redish calls that argument "misguided and dangerous" (p. 137). The Founders did not intend to sacrifice open, uninhibited speech to an egalitarian idol, and we should not either. Redish points out that if we were to take the argument seriously, we would have to ensure that all speakers have the same amount of time to speak and take many other measures to attempt to equalize their influence on the political debate. He writes, "Such a result, however, would no doubt destroy the flow and spontaneity that is essential to the expressive system" (p.137).

Redish also attacks the stale platitude that "reform" is essential to stop the corrupting influence of money on politicians. Here, he counters that the proposed regulations are unconstitutionally overreaching and that there are already bribery statutes that could be used to deal with the rare instances of overt deals between contributors and politicians.

Rationing speech The last section of the book challenges the arguments of theorists like the University of Chicago's Cass Sunstein who argue that the government should enact laws to equalize "access" to speech. Supposedly, our public discourse suffers when individuals and organizations with considerable wealth use their money to exert greater influence than those with little wealth. According to the theorists, the government should therefore ration speech to give the nation the benefit of a more level playing field.

In response, Redish argues that the result of such rationing would probably be to diminish the quantity of cogent public speech and replace it with "rambling or unreasonable statements or arguments" (p.166). Furthermore, those who would have the government "equalize" speech would put power into the hands of politicians that is certain to be abused. Redish here shows his familiarity with the "public choice" literature in economics, which posits that public officials can be expected to act in their own interests. Politicians, if empowered to ration speech, will sooner or later use that power to help themselves and their allies. Consequently, freedom of speech could come to depend on who happens to have won the last election — a thought that should frighten everyone.

The constitutional rights of Americans have been eroding for many decades as the Supreme Court has defined the Commerce Clause, General Welfare Clause, and other provisions to satisfy the legislative desire for the power to fashion dirigiste policies. More recently, the battle has widened to encompass the First Amendment. Martin Redish's accomplishment is that he not only has written a strong critique of the proposals to extend governmental regulation of free speech, but he has also given First Amendment defenders a base from which to attack existing restrictions on communication. Money Talks illustrates and upholds why the Founders prohibited Congress from making any law that abridges the freedom of speech.

An Economic Theory Shortage

Reviewed by Andrew N. Kleit

HUBBERT'S PEAK: THE IMPENDING WORLD OIL SHORTAGE

By Kenneth S. Deffeyes 285 pp., Princeton, N.J.: Princeton University Press, 2001

enneth Deffeyes' book Hubbert's Peak has gained a wide audience in the oil production community. One wonders why. As a work of literature, it is highly tendentious; the reading is not easy, and the chapters appear to be connected only loosely. Much of the book deals with the basics of petroleum exploration, and not in a manner that is likely to be pleasing to the reader. The tie to any type of economic conclusion from Deffeyes' text is tenuous, at best.

The book's core (which is hidden in the appendix and beyond) deals with predicting world oil production and when it will slow because of scarcity. While the math can be a little complicated, the analysis is based upon the assumption that production per year is shaped like the standard normal distribution function. Given that assumption, the author seeks to find when the peak of that normal distribution will occur, and when we will start "running out" of oil.

Deffeyes' approach is based on the work of M. King Hubbert, who predicted in 1956 that U.S. production would peak in the early 1970s. Deffeyes' prediction for world production, not surprisingly, is that we will soon near the peak — perhaps as soon as 2003. The author thus concludes, "There is nothing plausible that could postpone the peak until 2009. Get used to it" (p. 158). After the peak, of course, the price of oil will rise, economies will slow drastically, and we

Andrew N. Kleit is a professor of energy and environmental economics at The Pennsylvania State University. He can be contacted by e-mail at <a href="https://dx.nuber.

will all have to change our lifestyles, somewhat for the worse. Yes, you have heard it before.

Information without theory is useless. The exercise Deffeyes undertakes is wholly without theory. It simply assumes that oil production over time takes the approx-

imate shape of a normal distribution. So not only will we eventually reach a peak, but the "backside" of the distribution will look just like the front side. Deffeyes does not spell out why that should be the case.

Hubbert may (or may not, the data are unclear) have gotten the peak (though not the backside of

the distribution) right for the United States, but even a stopped clock is right twice a day. Without an appropriate theory, the mathematical models Deffeyes presents simply do not allow for a substantive conclusion.

Scarcity and equilibrium To see the difficulties with what Deffeves presents, think about what it would mean if the Hubbert-Deffeyes theory is correct. It implies that very soon the price of oil will be sky-high. If you knew this, what would you do? As for me, I would buy oil, in all its relevant forms, as soon as I could. (Indeed, I would not waste my time writing this review). Likewise, if Deffeyes' conclusion were correct, the world's oil companies would now be busy buying

up oil reserves. But, as Deffeyes himself notes, there is no evidence that the oil companies are doing such buying. Nor is anyone else for that matter.

Consider Hotelling's theory of natural resource depletion, which is based on the theory of equilibrium. If a firm sells oil

> today, it implies that such action is profit maximizing for that firm. Carrying that forward a little, it implies that the "rent" — which equals the price minus the cost, adjusted for the time value of money — will be constant across time for the marginal barrel of oil in each time period. In other words, the rent on the marginal barrel

of oil will rise only at a rate equal to the real interest rate. If we have low prices today but we are "sure" there will be high prices in the future, then we have disequilibrium. Producers will react by holding oil off the market today in order to sell it at higher prices tomorrow,

until we reach a new equilibrium with higher prices today. Since that obviously is not happening, something is terribly wrong with the Hubbert-Deffeyes story.

Will we run out of oil? According to Hotelling's theory, we might, but it will not be so bad. We gradually will switch over in a "soft landing" to alternative sources of power. As Deffeyes notes in a chapter at the end of the book, there are a number of alternatives sources. Today, most alternative sources (with the exception of nuclear power, with its potential environmental problems) are too expensive. But that situation may well change in the future.

For those not persuaded by theory, here is a little empirical evidence: The number given for the size of the world's proven oil supply keeps growing and growing. Why? It obviously is not because the physical amount of oil (and natural gas) in the earth is growing. Rather, the economically available amount of oil keeps growing. Geologists are learning new ways of discovering what is under the ground and the ocean. Engineers are learning less expensive ways of getting it out of the ground. The result is that the

We have heard doomsayers since Thomas Malthus, and none of them understood resource economics.

> cost of producing oil, given the source, continues to fall.

> The field of energy economics has been full of doomsayers since Thomas Malthus at the beginning of the nineteenth century. None of them understood resources economics, and almost all of them have been proven to be wrong. Deffeyes' book is no different.



Looking for an article in a back issue of Regulation? Visit our website:

www.regulationmagazine.com