WHAT'S REGULATION? A PLEA

Well over a decade ago, my computer received an odd e-mail, titled "love letter for you." The e-mail contained an attachment. When I opened the e-mail, I learned that the attachment was a love letter. The sender of the e-mail was someone I'd never met—as it happens, an employee at Princeton University Press, the publisher of this very book. I thought I probably should look at this love letter, so I clicked once. But it occurred to me that this might not be a love letter at all, and so I didn't click twice.

I had been sent the ILOVEYOU virus. This was a particularly fiendish virus. If you opened it, you received not only a love note but also a special surprise: your computer would send the same love note to every address in your computer's address book. For many people, this was funny in a way, but also extremely awful and embarrassing—not least for a law professor, finding himself in the position, not exactly comfortable, of sending countless unwelcome love letters to both students and colleagues.

The ILOVEYOU virus was capable of many impressive feats. For example, it could delete files. It was apparently capable of mutating, so that many people found themselves not with love letters but instead with notes about Mother's Day—less intriguing and more innocuous perhaps than a love letter, but also capable of mischief, as when an employee at a random company finds himself sending dozens of Mother's Day notes to friends and colleagues, many of them near strangers (and not mothers). The ILOVEYOU virus was apparently capable of mutating into, or in any case was shortly followed by, its own apparent cure, with matching attachment: "HOW TO PROTECT YOURSELF FROM THE ILOVEYOU BUG!" This attachment turned out to be a virus too.

The worldwide costs of the ILOVEYOU virus went well beyond embarrassment. In Belgium, ATMs were disabled. Throughout Europe, e-mail servers were shut down. Significant costs were imposed on the taxpayers as well—partly because affected computers included those of government, and partly because governments all over the world cooperated in enforcement efforts. In London, Parliament was forced to close down its servers, and e-mail systems were crippled in the US Congress. At the US Department of Defense, four classified e-mail systems were corrupted. The ultimate price tag has been estimated at over \$10 billion. Ultimately, the Federal Bureau of

Investigation (FBI) traced the origin of this virus to a young man in the Philippines.

A COMMON VIEW

My discussion thus far has involved the social foundations of a wellfunctioning system of free expression—what such a system requires if it is to work well. But it would be possible for a critic to respond that government and law have no legitimate role in responding to any problems that might emerge from individual choices. On this view, a free society respects those choices and avoids "regulation," even if what results from free choices is quite undesirable; that is what freedom is all about.

If the claim here is really about freedom, I have already attempted to show what is wrong with it. Freedom should not always be identified with "choices." Of course free societies usually respect free choices. But sometimes choices reflect and can in fact produce a lack of freedom.

Perhaps the argument is rooted in something else: a general hostility to any form of government regulation. This is, of course, a pervasive kind of hostility. A common argument is that legal interference with the communications market should be rejected simply because it is a form of government regulation, and be disfavored for exactly that reason. It is certainly easy to find that claim on Facebook and Twitter.

Many people make such an argument about radio and television. With the extraordinary number of channels, they contend, scarcity is no longer a reason for regulation. Shouldn't government simply leave the scene? Shouldn't it eliminate regulation altogether? The same argument is being made about the Internet, even more forcefully, with the suggestion that it should be taken as a kind of government-free zone. In 1996, free speech activist (and former Grateful Dead lyricist) John Perry Barlow produced an influential "Declaration of the Independence of Cyberspace," urging, among other things, "Governments of the Industrial World ... I ask you of the past to leave us alone. You are not welcome among us. You have no sovereignty where we gather.... You have no moral right to rule us nor do you possess any methods of enforcement we have true reason to fear." That sounds like 1960s' stuff, a kind of My Generation manifesto, opposing the we-who-gather to those of the past. But it resonated in the 1990s. It's still resonating.

With respect for Barlow's clarity and commitment, the story of the ILOVEYOU virus suggests that his argument is absurd. Could any sensible person support a system in which government is banned from helping to protect against computer viruses? From preventing efforts to hack into systems in such a way as to compromise personal privacy and national security? From cyberterrorism? But the story of the ILOVEYOU virus also suggests something subtler and more interesting. The real problem is that opposition to government regulation is incoherent.

There is no avoiding "regulation" of the communications market—of television, print media, and the Internet. The question is not whether we will have regulation; it is what kind of regulation we will have. Newspapers and magazines, radio and television stations, websites, and Facebook and Instagram accounts—all benefit from government regulation every day. Indeed, a system of regulation-free speech is barely imaginable. Those who complain most bitterly about proposed regulation are often those who most profit, usually financially, from the current regulation. They depend not only on themselves but also on government and law. What they are complaining about is not regulation as such—they need it—but instead a regulatory regime from which they would benefit less than they do under the present one.

To see the point, begin by considering the actual status of broadcast licensees in both television and radio for the last decades and more. Broadcasters do not have their licenses by nature or divine right. Their licenses are emphatically a product of government grants—legally conferred property rights, in the form of monopolies over frequencies, originally given out for free to ABC, CBS, NBC, and PBS. In the early 1990s, government went so far as to give existing owners a right to produce digital television—what Senator Robert Dole and many others called a "\$70 billion giveaway." This gift from the public—the grant of property rights via government, and in this case, for free rather than through auction—is simply a highly publicized way in which government and law are responsible for the rights of those who own and operate radio and television stations.

But we don't need any gifts. Many economists think that rights to the spectrum should be allocated through an auction system. And indeed, the Federal Communications Commission has adopted this suggestion, at least to some extent. But even when auctions are involved, owners still benefit from property rights. If you get channel 770 through an auction, no one else can use channel 770 without your consent. The government will protect you. We don't need to speak of the traditional over-the-air broadcast stations, such as CBS and NBC. Showtime, HBO, and your local stations also benefit from property rights, protected and enforced by law. Sure, the operators of any station could hire the equivalent of an online police force, equipped to

prevent any unwelcome intrusions. But that's not exactly easy. Without the law, access to radio and television stations would be a free-for-all, and the current owners would spend a lot more money and a lot more time defending what is theirs.

If you have a Facebook account, you didn't pay for it. But it's definitely yours. If someone commandeers your account and starts posting pictures of Stalin with accompanying text ("the greatest person who ever lived!"), your rights have been violated. You can probably get legal recourse. The same thing is true of your Twitter account. If someone sends out tweets under your name ("qcfgvwav" or "Twitter is Satan's toolbox"), they have intruded on what is, in a legal sense, your property. For both Facebook and Twitter, that's important.

Though many people don't think of them this way, property rights, when conferred by law, are a quintessential form of government regulation. They create and limit power. They determine who owns what, and they say who may do what to whom. They allow some people to exclude others. That's regulation, in a nutshell.

In the case of radio and television broadcasters, property rights impose firm limits on others, who may not, under federal law, speak on CBS, NBC, or Fox unless CBS, NBC, or Fox allows them to do so. It makes no sense to decry government regulation of television broadcasters when it is government regulation that is responsible for the very system at issue. That system could not exist without a complex regulatory framework from which broadcasters benefit.

Nor is it merely the fact that government created the relevant property rights in the first instance. Government also protects these rights, at taxpayers' expense, via civil and criminal law, both of which prohibit people from gaining access to what broadcasters "own." If you try to get access to the public via CBS, to appear on its channels without its permission, you will have committed a crime, and the FBI itself is likely to become involved. There is considerable irony in the fact that for many years, broadcasters have complained about government regulation; such regulation is responsible for their rights in the first place. There is a particular irony in broadcasters' vociferous objections to the modest public interest requirements that have been imposed on them, in the form of (for instance) requirements for educational programming for children, attention to public issues, and an opportunity for diverse views to speak. They purport to object to regulation as such, but they really object to the particular regulations that they don't like. (True, they're hardly the first to do that, and they won't be the last either.)

Of course broadcasters may have some legitimate objections here, at least if they can show that meeting these requirements does little good. But what is not legitimate is for broadcasters to act as if public interest regulation imposes law and government where neither existed before. Broadcasters could not exist in their current form if not for the fact that law and government are emphatically present. It is law and government that make it possible for them to make money in the first place.

What is true for broadcasters is also true for newspapers and magazines, though here the point is less obvious. Newspapers and magazines benefit from government regulation too through the grant of property rights, again protected at taxpayers' expense. Suppose, for example, that you would like to publish something in the Washington Post or Time magazine. Perhaps you believe that one or the other has neglected an important perspective, and you would like to fill the gap. If you request publication and are refused, you are entirely out of luck. The most important reason is that the law has created a firm right of exclusion—a legal power to exclude others—and given this right to both newspapers and magazines. The law is fully prepared to back up that right of exclusion with both civil and criminal safeguards. No less than CBS and ABC, the Washington Post and Time magazine are beneficiaries of legal regulation, preventing people from saying what they want to say where they want to say it.

Now it may be possible to imagine a world of newspapers and magazines without legal protection of this kind. This would be a world without regulation. But what kind of world would this be? Without the assistance of the law—to enforce contracts, protect property rights, and punish those who violate such rights—all sides would be left with a struggle to show superior force. In such a world, people would be able to publish where they wanted if, and only if, they had the power to insist. Newspapers and magazines would be able to exclude would-be authors so long as they had enough power to do so. Who can know who would win that struggle? (Perhaps you have a gun or small private army, and can force the Washington Post to publish you at gunpoint.) In our society, access to newspapers and magazines is determined not by power but instead by legal regulation, allocating and enforcing property rights, and doing all this at public expense.

THE CASE OF THE INTERNET: SOME HISTORICAL NOTES

Despite the widespread claim that the Internet is and should be free of government controls, things are similar online. Here too regulation and government support have been omnipresent. But there are some interesting wrinkles in this context, and they are worth rehearsing here, because they bear on the relationship between regulation and the Internet, and because they are noteworthy in their own right.

Consider history first. This supposedly government-free zone was a creation not of the private sector but instead of the national government. Indeed, the private sector was given several chances to move things along, but refused, and in a way that shows a remarkable lack of foresight. (Puzzling but entirely true.) We are used to hearing tales of the unintended bad consequences of government action. The Internet is an unintended good consequence of government action—by the Department of Defense no less.

Beginning in the 1960s, the US Defense Advanced Research Projects Agency created a new computer network, originally called the Arpanet, with the specific purpose of permitting computers to interact with one another, thus allowing defense researchers at various universities to share computing resources. In 1972, hundreds and then thousands of early users began to discover e-mail as a new basis for communication. In the early 1970s, the government sought to sell off the Arpanet to the private sector, contacting AT&T to see if it wanted to take over the system. The company declined, concluding that the Arpanet technology was incompatible with the AT&T network. (So much for the universal prescience of the private sector.)

Eventually the Arpanet—operating under the auspices of the federal government in the form of the National Science Foundation—expanded to multiple uses. By the late 1980s, a number of new networks emerged, some far more advanced than the Arpanet, and the term "Internet" came to be used for the federally subsidized network consisting of many linked networks running the same protocols. In 1989, the Arpanet was transferred to regional networks throughout the country. A key innovation came one year later, when researchers at the European Organization for Nuclear Research (CERN) near Geneva, Switzerland, created the World Wide Web, a multimedia branch of the Internet. CERN researchers attempted to interest private companies in building the World Wide Web, but they declined ("too complicated"), and Tim Berners-Lee, the lead researcher and web inventor, had to build it on his own.

Hard as it now is to believe, the Internet started to commercialize only in 1992, as a result of the enactment of new legislation removing restrictions on commercial activity. It was around that time that direct government funding was largely withdrawn, but indirect funding and support continues. In 1995, the backbone of the national network (the physical pipes on which data travels) was sold to a private consortium of corporations, and the government gave one company the exclusive right to register domain names (you can now buy names from a range of sellers). Originally created by the government, the Internet is now largely free of ongoing federal supervision—but with the important, background exceptions of guaranteed property rights

and various restrictions on unlawful speech (such as conspiracy, bribery, and child pornography).

Perhaps all this seems abstract. But the basic point lies at the very heart of the most fundamental of current debates about Internet policy. Consider, for example, a revealing online exchange connected with an Internet symposium in the American Prospect magazine in 2000. Eric S. Raymond, a highly influential developer and theorist of open-source software, sharply opposed "government regulation," and endorsed "laissez faire" and "voluntary norms founded in enlightened self-interest." Internet specialist Lawrence Lessig, writing in much the same terms as those urged here, responded that "contract law, rightly limited property rights, antitrust law, [and] the breakup of AT&T" are also "regulations," made possible by "governmental policy."

Answering Lessig, Raymond was mostly aghast. He acknowledged that he had no disagreement if the term "regulation" is meant to include "not active coercive intervention but policies which I and hackers in general agree with him are not coercive, such as the enforcement of property law and contract rights." But to Raymond, who purports to speak for a large "community consensus," the use of the term "regulation" to include this kind of law reflects a deep confusion in Lessig's "model of the world." "Contract and property law contain no proper names; they formalize an equilibrium of power between equals before the law and are good things; regulation privileges one party designated by law to dictate outcomes by force and is at best a very questionable thing. The one is no more like the other than a handshake is like a fist in the face."

Raymond stated a widespread view, but the deep confusion is his, not Lessig's. Property law and contract rights are unquestionably "coercive" and entirely "active." These rights do not appear in nature, at least not in terms that are acceptable for human society. When would-be speakers are subject to a jail sentence for invading property rights, coercion is unquestionably involved. This is not true only for homeless people, whose very status as such is unquestionably a product of law. Even those who create open-source software rely heavily on property law—in fact, they depend on contract law (through licenses) and at least some form of copyright law to control what happens to their software. Anyone who is punished for violating the copyright law, or intruding on the "space" of CBS or a website owner, is coerced within any reasonable understanding of the term.

Nor do contract and property law merely "formalize an equilibrium of power." By conferring rights, they *create* an equilibrium of power—one that would and could not exist without "active" choices by government. In a genuine state of lawlessness, in which everything was left to forcible self-help, who knows what the equilibrium would look like with respect to software on the Internet or anywhere else? Contract and property laws are good, even wonderful things. But to many people much of the time, they are no mere handshake, but much more like "a fist in the face." (What does it mean to be homeless? Among other things, it means that if you try to get access to a home, you get a fist in the face, or something a lot like it.)

It's both true and important that the law of property and contract contains "no proper names." The law does not say that Jones can own property but that Smith cannot, or that Christians can own property but that Jews cannot. (At least the law does not say anything like that now, with narrow exceptions.) That's a massive social achievement. But how many (other kinds of) regulations contain proper names? Let's take some examples of unacceptable regulations-say, a ban on criticism of Congress or the Supreme Court, or a prohibition on objections to a current war effort. There are no proper names there. And when government does something that is regulatory and more acceptable—say, a ban on spreading viruses, or on bribes and extortion-it doesn't need to name names. It follows that both unacceptable and acceptable regulations do not name names, and so any such naming cannot produce a helpful dividing line. Recall Raymond's suggestion that contract and property law "formalize an equilibrium of power between equals before the law ...; regulation privileges one party designated by law to dictate outcomes by force." As a conceptual matter, it is just not possible to make sense of those claims.

I do not mean to deny that Raymond is onto something. There are differences between contract and property law, which help facilitate private ordering and usually leave a lot of flexibility, and more rigid regulatory commands, which tell people (for example) that they must recycle, follow specified emissions limits on their automobiles, or refrain from smoking in public buildings. In regulation itself, flexibility is often a good idea, because it increases freedom and reduces costs. We should refrain from praising contract and property law in the abstract, but in the abstract, they're good. Still, they're forms of regulation. If we deny that point, we'll confuse ourselves.

THE CASE OF THE INTERNET: REGULATION AGAIN

Simply because government creates and enforces property rights online, the Internet, no less than ordinary physical spaces, remains pervaded by government regulation. That's true of social media too. This does not mean that government should be permitted to do whatever it wants. But it does

mean that the real question is what kind of regulation to have, not whether to have regulation.

As a result of the ILOVEYOU and other viruses, considerable attention has been given in recent years to the problem of cybersecurity and the risk and reality of "cyberterrorism"-not only through e-mail attachments, but also when "hackers" invade websites in order to disable them, steal information, or post messages of their own choosing. The problem is one of national security, and it is immensely important. Strong steps must be taken to combat that problem, for which many nations are not adequately prepared. Computer viruses may or may not endanger national security, but according to one (dated) estimate, they cost the United States \$13 billion each year.2 Speaking of cybercrime generally, the costs were estimated in 2016 at \$575 billion annually.3 Some of the costs are not easy to monetize; consider Russia's reported interference with the 2016 presidential election by hacking into the servers of the Democratic National Committee and releasing e-mails. Both private and public institutions are highly vulnerable. It would not be at all surprising if something quite terrible happens in the next ten or twenty vears.

Despite the magnitude of the problem, serious disruptions do not occur as often as one might expect. Why not? Companies devote a lot of time and effort to avoiding them; they are helped by the fact that such disruptions are against the law. A complex framework of state, federal, and international law regulates behavior on the Internet, protecting against intrusions and giving site owners, including those who have accounts on the social media, an entitlement to be free from trespass. These entitlements are created publicly and enforced at public expense. Indeed, immense resources—billions of dollars, including massive efforts by the FBI—are devoted to the protection of these property rights. And when cyberterrorism does occur, everyone knows that the government is going to intervene to protect property rights, in part by ferreting out the relevant lawbreakers, and in part by prosecuting them.

If we want, we might decline to call this government "regulation." But why? That would be a matter of semantics, and it would not be helpful. When government creates and protects rights, and when it forbids people from doing what they want to do, it is regulating within any standard meaning of the term. The Internet is hardly a space of lawlessness, or regulation free. The reason is that governments stand ready to protect those whose property rights are at stake.

In this way the system of rights on the Internet is no different, in principle, from the system of rights elsewhere. But the Internet does present one complication. In ordinary space, it is usually not possible, realistically speaking, to conceive of a system of property rights without a large government presence. Such a system would mean that property holders would have to resort to self-help, as through the hiring of private police forces, and for most property owners, including broadcasters, newspapers, and magazines, this is not really feasible. To be sure, there are some complications here. Distinguished social scientists, including Nobel Prize winner Elinor Ostrom and Yale law professor Robert Ellickson, have illuminatingly explored the existence of "spontaneous orders," in which people succeed in creating stable societies without law. But in most places on the planet, that is not going to happen. Paris, Berlin, Cape Town, Boston, Beijing, and Mexico City all require a strong legal presence.

It is not entirely crazy to think that the Internet might be more like what Ostrom and Ellickson identify. We might think, for example, that government could simply step out of the picture and enable site owners to qualify as such only to the extent that they can use their technological capacities to exclude others. In such a system, regulation would indeed be absent. Amazon.com would be run and operated by Amazon.com, but it would be free from intrusion by outsiders only to the degree that the owners of Amazon.com could use technology to maintain their property rights. Amazon.com, in sum, would have a kind of sovereignty as a result of technology rather than law, and perhaps it could ensure this sovereignty through technology alone. So too, you would have a Twitter account, but people could hack into it, unless you could work with Twitter or other private companies to eliminate that risk.

Because of current technological capacities, this is not an unimaginable state of affairs. Perhaps many people can protect themselves well enough from invaders, cyberterrorists, and others without needing the help of government. But in the end, that's far from adequate and even a bit wild, at least under currently imaginable conditions. It would not make much sense to force people to rely on technology alone in light of the immense value of civil and criminal law as an aid to the enjoyment of property rights. Happily, this imaginary world of self-help is not the one in which we live. The owners of websites and the users of social media benefit from government regulation, and without it, they would have a much less secure existence online.

REGULATION EVERYWHERE, THANK GOODNESS

None of these points should be taken as an argument against those forms of regulation that establish and guarantee property rights. On the contrary, a well-functioning system of free expression *needs* property rights. Such a system is likely to be much better if the law creates and protects owners of

newspapers, magazines, broadcasting stations, websites, and social media accounts. Property rights make these institutions far more secure and stable, and for precisely this reason, produce much more in the way of speech.

In the Communist nations of the Soviet era, communications outlets were publicly owned, and all holdings were subject to governmental reallocation; it is an understatement to say that free speech could not flourish in such an environment. Friedrich Hayek, the greatest critic of socialism in the twentieth century, emphasized the omnipresence of legal regulation every bit as much as I have here. Hayek is often depicted as an advocate of laissezfaire, but he was hardly that. "In no system that could be rationally defended would the state just do nothing," Hayek argued. "An effective competitive system needs an intelligently designed and continuously adjusted legal framework as much as any other." ""

Nor does anything I have said suggest that it would be appropriate, or even legitimate, for government to control the content of what appears in newspapers and magazines (online or otherwise), by saying, for instance, that they must cover presidential elections, or offer dissenting opinions a right of reply. But any objection to such requirements must be based on something other than the suggestion that they would interfere with some law-free zone—that requirements of this sort would introduce a government presence where government had been absent before. Government has been there already, and it is still there, and we are much better off for that. If government is trying to do something new or different, one question is whether what it is trying to do would improve or impair democracy, or the system of freedom of speech. That question cannot be resolved by reference to complaints about government regulation in the abstract.

If government is attempting to regulate television or radio in their contemporary forms, websites or social media, or some future technology that combines or transcends them, it makes no sense to say that the attempt should fail because a free society opposes government regulation as such. No free society opposes that. Government regulation of speech, at least in the form of property rights that shut out would-be speakers, is a pervasive part of a system of freedom that respects and therefore creates rights of exclusion for owners of communications outlets.

Here, then, is my plea: when we are discussing possible approaches to the Internet or other new communications technologies—today, on the horizon, or not yet imagined—we should never suggest that one route involves government regulation and another route does not. Statements of this kind produce confusion about what we are now doing and about our real options. And the confusion is far from innocuous. It puts those who are asking how to improve the operation of the speech market at a serious

disadvantage. A democratic public should be permitted to discuss the underlying questions openly and pragmatically, and without reference to self-serving myths invoked by those who benefit, every hour of every day, from the exercise of government power on their behalf.