AGAINST "AGAINST CYBERANARCHY"

By David G. Post[†]

I. INTRODUCTION

It makes me indignant when I hear a work
Blamed not because it's crude or graceless but
Only because it's new . . .
Had the Greeks hated the new the way we do,
Whatever would have been able to grow to be old?¹

Professor Jack Goldsmith's *Against Cyberanarchy*² has become one of the most influential articles in the cyberspace law canon. The position he sets forth—what I call "Unexceptionalism"—rests on two main premises. The first is that activity in cyberspace is "functionally identical to transnational activity mediated by other means" (e.g., "mail or telephone or smoke signal"). The second is that, as a consequence of this functional identity, the "settled principles" and "traditional legal tools" of the international lawyer are fully capable of handling all jurisdictional and choice-of-law problems in cyberspace. Thus, the "choice-of-law problems implicated by cyberspace are not significantly different from those [of] non-cyberspace conflicts," and we therefore need make no special provision for these problems when they arise in *cyberspace*.

I beg, in what follows, to differ. I remain an unrepentant Excep-

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^{1.} HORACE, THE EPISTLES OF HORACE 117 (David Ferry trans., Farrar, Straus and Giroux 2001) (n.p., 14 b.c.).

^{2.} Jack L. Goldsmith, *Against Cyberanarchy*, 65 U. CHI. L. REV. 1199 (1998) [hereinafter *Against Cyberanarchy*].

^{3.} Id. at 1240.

^{4.} *Id*.

^{5.} *Id.* at 1200.

^{6.} Id. at 1233-34.

tionalist. Communication in cyberspace is not "functionally identical" to communication in realspace—at least, not in ways relevant to the application of the choice-of-law and jurisdictional principles under discussion. Furthermore, the jurisdictional and choice-of-law dilemmas posed by cyberspace activity cannot be adequately resolved by applying the "settled principles" and "traditional legal tools" developed for analogous problems in realspace.

Unexceptionalism in cyberspace

Border-crossing transactions have always presented the international legal system with difficult and challenging jurisdictional questions: Whose law applies to such transactions? Which sovereign(s) have jurisdiction to prescribe law for transactions that originate in one country and terminate elsewhere? When and to what extent is extraterritorial regulation permissible?

In Against Cyberanarchy, Jack Goldsmith asked us to consider

the predicament of one of the scores of companies that offer, sell, and deliver products on the World Wide Web. Assume that the web page of a fictional Seattle-based company, Digital-book.com, offers digital books for sale and delivery over the Web. One book it offers for sale is Lady Chatterley's Lover. This offer extends to, and can be accepted by, computer users in every country with access to the Web. Assume that in Singapore the sale and distribution of pornography is criminal, and that Singapore deems Lady Chatterley's Lover to be pornographic.

Assume further that Digitalbook.com's terms of sale contain a term that violates English consumer protection laws, and that the publication of Digitalbook.com's Lady Chatterley's Lover in England would infringe upon the rights of the novel's English copyright owner. Digitalbook.com sells and sends copies of Lady Chatterley's Lover to two people whose addresses (say, anonymous@aol.com and anonymous@msn.com) do not reveal their physical location but who, unbeknownst to Digitalbook.com, live and receive the book in Singapore and London, respectively.⁷

This scenario, Goldsmith acknowledged, raises some difficult problems: Does English law, Singaporean law, or both, apply to Digitalbook.com's conduct? Would application of either of these bodies of law

^{7.} *Id.* at 1204-05.

constitute "impermissible extraterritorial regulation of a U.S. corporation"? If Digitalbook.com "cannot limit its cyberspace information flows by geography," would application of English or Singaporean law cause Digitalbooks.com to remove *Lady Chatterley's Lover* from circulation (or, at the very least, to "raise its price" thereby "adversely affect[ing] the purchasing opportunities of parties in other countries"? And if so, are these "negative spillover effects" of national regulation "illegitimate [and] unfair" —especially given that "Digitalbook.com had no way of knowing that it sold and delivered a book to consumers in these countries"?

Goldsmith's position—what I term "Unexceptionalism"—is straightforward. However difficult and complicated Digitalbooks.com's problems may be, they are no *more* difficult or complicated because the underlying transactions take place "in cyberspace." As Goldsmith puts it,

[t]ransactions in cyberspace involve real people in one territorial jurisdiction either (i) transacting with real people in other territorial jurisdictions or (ii) engaging in activity in one jurisdiction that causes real-world effects in another territorial jurisdiction. To this extent, activity in cyberspace is functionally identical to transnational activity mediated by other means, such as mail or telephone or smoke signal.¹⁵

To the Unexceptionalist, whether a transaction occurs in cyberspace or realspace does not matter. The questions of jurisdiction and choice of law posed by Digitalbooks.com's conduct are not "unique to cyberspace" 16

- 8. Id. at 1205.
- 9. *Id*.
- 10. See id.
- 11. *Id*.
- 12. Id. at 1205.
- 13. Id.
- 14. *Id*.

15. *Id.* at 1239-40 (emphasis added); *see also* Jack L. Goldsmith, *The Internet and the Abiding Significance of Territorial Sovereignty*, 5 IND. J. GLOBAL LEGAL STUD. 475, 479 (1998) [hereinafter *The Abiding Significance*] ("Internet activities are functionally identical to these non-Internet activities. People in one jurisdiction do something—upload pornography, facilitate gambling, offer a fraudulent security, send spam, etc.—that is costly to stop at another jurisdiction's border and that produces effects within that jurisdiction deemed illegal there."); Allan R. Stein, *The Unexceptional Problem of Jurisdiction in Cyberspace*, 32 INT'L LAW 1167, 1180 (1998) ("The Internet is a medium. It connects people in different places. The injuries inflicted over the Internet are inflicted by people on people. In this sense, the Internet is no different from the myriad of ways that people from one place injure people in other places....").

16. Against Cyberanarchy, supra note 2, at 1234.

because "identical problems arise all the time in real space." After all, people have been communicating and transacting with other people in other territorial jurisdictions for a long time, well before the Internet raised its head. Thus, the questions created by Digitalbook's conduct may be complex and challenging, but they are "no more complex or challenging than similar issues presented by increasingly prevalent real-space events such as airplane crashes, mass torts, multistate insurance coverage, or multinational commercial transactions, all of which form the bread and butter of modern conflict of laws." ¹⁸

Over the past century or so, a number of important principles of law and analytical tools have evolved to resolve the jurisdictional problems posed by border-crossing transactions. These traditional principles and tools, though developed to deal with realspace phenomena, do not spontaneously disintegrate or misfire when we apply them to phenomena on the global electronic network. Cyberspace transactions "are not significantly less resistant to the tools of conflict of laws, than other transnational transactions," and it would therefore be a mistake to "underestimate the potential of [these] traditional legal tools and technology to resolve the multijurisdictional regulatory problems implicated by cyberspace." 20

Those who think otherwise—Goldsmith calls them "regulation skeptics," though I prefer the less loaded and more symmetrical term "Exceptionalists"—believe that cyberspace is somehow different, that it matters, for purposes of understanding these jurisdictional questions, that Digitalbooks.com is operating on the World Wide Web and not in a brick-and-mortar realspace storefront. Exceptionalists, in Goldsmith's view, are skeptical of the "potential of traditional legal tools and technology to resolve the multijurisdictional regulatory problems implicated by cyberspace." They believe that "the application of geographically based conceptions of legal regulation and choice of law to a-geographical cyberspace activity either makes no sense or leads to hopeless confusion," and that because "cyberspace transactions occur 'simultaneously and equally' in all national jurisdictions, regulation of the flow of this information by any particular national jurisdiction illegitimately produces significant

^{17.} *Id.*; *see also* Stein, *supra* note 15, at 1191 ("Jurisdiction in cyberspace is not unproblematic. My point is that it is not *uniquely* problematic.") (emphasis added).

^{18.} Against Cyberanarchy, supra note 2, at 1234.

^{19.} Id. at 1201.

^{20.} Id. at 1200-01.

^{21.} Id. at 1199.

^{22.} *Id.* at 1200-01.

^{23.} Id. at 1200.

negative spillover effects in other jurisdictions."24

The problem with Exceptionalism, Goldsmith tells us, is that it is "in the grip of a nineteenth century territorialist conception of how 'real space' is regulated and how 'real-space' conflicts of law are resolved."²⁵ This outdated and discredited territorialist conception—"Hermetic Territorialism,"²⁶ he calls it—involves a belief that there must be "a *unique* governing law for all transnational activities,"²⁷ a "*single* legitimate governing law for transborder activity based on discrete territorial contacts."²⁸ Hermetic territorialism directs us to identify one body of law applicable to Digitalbooks.com's behavior, and to define the "discrete territorial contact" which is a necessary prerequisite to the application of local law to its conduct.

Hermetic territorialism, though it held sway for several hundred years, was repudiated as part of a "revolution[] [in] conflict of laws in the second half of [the 20th] century." Many factors—including "[c]hanges in transportation, communication, and in the scope of corporate activity [leading] to an unprecedented increase in multijurisdictional activity" led directly to an "expansion of the permissible bases for territorial jurisdiction." The result is that in "modern times[,] a transaction can legitimately be regulated [not only] . . . by the jurisdiction where the transaction occurs" and "the jurisdictions where the parties burdened by the regulation are from," but also by "the jurisdictions where significant effects of the transaction are felt."

Under "current conceptions of territorial sovereignty," a sovereign "is allowed to regulate extraterritorial acts that cause harmful local effects

- 24. Id.
- 25. Id. at 1205.
- 26. Id. at 1206.
- 27. Id. at 1208 (emphasis added).
- 28. Id. at 1206 (emphasis added).
- 29. Id. at 1208.
- 30. *Id.* at 1206 (noting that these "significant changes in the world" led to an "unprecedented increase in multijurisdictional activity" and "put pressure on the rigid territorialist conception").
- 31. *Id.* at 1207; *see also* Stein, *supra* note 15, at 1169 ("As people and transactions became more mobile, jurisdictional rules based solely on the current location of the defendant were strained. Courts increasingly had a need to assert authority over persons not currently within their borders, and improvements in communications and transportation rendered travel to a distant judicial forum less onerous than it once had been.").
 - 32. Against Cyberanarchy, supra note 2, at 1208.
 - 33. *Id*.
 - 34. Id. (emphasis added).

unless and until it has consented to a higher law (for example, international law or constitutional law) that specifies otherwise."³⁵ If that means, as it often does, that "more than one jurisdiction can legitimately apply its law to the same transnational activity,"³⁶ so be it; under the modern view, there is no need to find the single discrete territorial event on which to base the application of any single body of law.

As a result of this change in viewpoint and the repudiation of Hermetic Territorialism, extraterritorial regulation is "commonplace in the modern world." Both customary international law and the U.S. Constitution "permit a nation to apply its law to extraterritorial behavior with substantial local effects." It is, for instance "relatively uncontroversial" that a newspaper publisher "is liable for harms caused wherever the newspaper is published or distributed." There is "nothing extraordinary or illegitimate" about this "unilateral regulation of transnational activity that affects activity and regulation in other countries." Therefore, neither Singapore's nor England's regulation of Digitalbook.com is "less legitimate than the United States' regulation of the competitiveness of the English reinsurance market, which has worldwide effects on the availability and

^{35.} Id. at 1240. See id. at 1239 ("[A] nation's right to control events within its territory and to protect its citizens permits it to regulate the local effects of extraterritorial acts."); Id. at 1208 (noting that it "seems clear that customary international law . . . permits a nation to apply its law to extraterritorial behavior with substantial local effects"). See also RESTATEMENT (THIRD) OF FOREIGN RELATIONS § 402(1)(c) (1987) (concluding that unless "unreasonable," a state has jurisdiction to prescribe law with respect to "conduct outside its territory that has or is intended to have substantial effect within its territory"); Goldsmith, supra note 15, at 479 ("The effects criterion tells us that it is legitimate for a nation to apply its regulation to an extraterritorial act with harmful local effects."); Neil Weinstock Netanel, Cyberspace Self-Governance: A Skeptical View from Liberal Democratic Theory, 88 CALIF. L. REV. 395, 491 (2000) (criticizing as "fundamentally incorrect as a matter of positive international law" the notion that a sovereign "cannot properly legislate or otherwise prescribe law" that applies to extraterritorial conduct); id. at 490 n.395 (noting a sovereign "has a right to prohibit . . . speech if [speakers] can be said to have communicated their speech within [the sovereign's] territory or, ... if [the] speech is deemed to occur entirely [elsewhere] but nevertheless has substantial effect within [the sovereign's territory]") (emphasis added) (citing 1 SIR ROBERT JENNINGS & SIR ARTHUR WATTS, OPPENHEIM'S INTERNATIONAL LAW 460, 472-76 (9th ed. 1992)).

^{36.} Against Cyberanarchy, supra note 2, at 1208.

^{37.} Id. at 1239.

^{38.} Id. at 1208.

^{39.} Id. at 1230.

^{40.} *Id*.

^{41.} Id. at 1240.

price of reinsurance.",42

The bottom line? "It is settled with respect to realspace activity" elsewhere Goldsmith refers to this as one of two "uncontested assumptions" that a nation's right to control events within its territory and to protect its citizens permits it to regulate the local effects of extraterritorial acts." Thus,

prevailing concepts of territorial sovereignty permit a nation to regulate the local effects of extraterritorial conduct even if this regulation produces spillover effects in other jurisdictions[, and that] . . . such spillover effects are a commonplace consequence of the unilateral application of any particular law to transnational activity in our increasingly interconnected world. 46

And if all that is "settled with respect to realspace activity," why would we think that cyberspace is any different?

III. SETTLED PRINCIPLES

The core of the Unexceptionalists' argument thus contains a simple, but very powerful, syllogism:

Transnational activities of an ordinary, brick-and-mortar bookstore—"Analogbooks, Inc."—are subject to "settled principles" of "customary international law."

These settled principles hold that if Analogbooks' realspace activities produce "substantial local effects" in Singapore, or in England, those activities can "legitimately be regulated" by those governments.

Digitalbooks' activities are "functionally identical" to Analogbooks' activities.

Therefore, if Digitalbooks' cyberspace activities produce "substantial local effects" in Singapore, or in England, those activities can "legitimately be regulated" by those governments. The logic is unassailable: If X is true in environment 1, and if environment 2 is "functionally identical"

^{42.} *Id*.

^{43.} Id. at 1239.

^{44.} *Id.* at 1212.

^{45.} *Id.* at 1239.

^{46.} Id. at 1212.

to environment 1, then X is true in environment 2. The argument, however, is not quite as persuasive as it might appear at first glance.

Take, for instance, the Unexceptionalists' reliance upon settled principles of customary international law. Even accepting Professor Goldsmith's assertion that these principles "are settled"—in particular, the "uncontested assumptions". that, at least in modern times, transactions "can legitimately be regulated by . . . the jurisdictions where significant effects of the transaction are felt," and that "a nation's right to control events within its territory and to protect its citizens permits it to regulate the local effects of extraterritorial acts". it is clear that this "modern view" of international jurisdiction is itself the product of profound changes in the world over the past century or so (as Goldsmith himself points out 50).

These now-settled principles were, in other words, once themselves in conflict with then-settled principles. It was once "settled" law that a state *cannot* regulate extraterritorial acts, the "substantial local effects" of those acts notwithstanding, and that therefore Analogbooks' activities could not "legitimately be regulated" in either Singapore or England. The Unexceptionalists of one hundred, or even fifty, years ago might have made an argument very much like Goldsmith's, arguing that rail transport, the telephone, or radio broadcasting, would (and should) have no effect on our analysis of jurisdictional problems. We can imagine the following colloquy:

Scene: A New York street corner, circa 1900. Two law professors, Professor E and Professor U, meet.

Professor E: "Have you noticed? This telegraph thing changes everything! I can step inside a Western Union office in New York and execute a contract in San Francisco *instantaneously*! Incredible, eh?"

Professor U: "Well, I suppose it is. But what of it?"

E: "What of it? Surely you jest. The world as we know it will never be the same. We're going to need new principles of law to deal with this phenomenon. Our jurisdictional principles—especially the one that requires *physical presence* for the exer-

^{47.} *Id*.

^{48.} Id. at 1208.

^{49.} *Id.* at 1239.

^{50.} See supra notes 29-31.

cise of 'jurisdiction to prescribe'—must yield to this new context, no?"

U: "Not at all. Transactions completed by telegraph are functionally identical to those completed by mail or by smoke signal; they all involve real people in one territorial jurisdiction either (i) transacting with real people in other territorial jurisdictions or (ii) engaging in activity in one jurisdiction that causes real-world effects in another territorial jurisdiction. It is settled law that the people of California *cannot* reach people and transactions occurring outside of its borders. Why would we need to adjust those principles now?"

Life, Kierkegaard said, must be lived forwards, but it can only be understood backwards. Looking backwards, of course, we know that events proved *those* Unexceptionalists wrong. Though it was surely difficult to see at the time, the world was changing profoundly, and settled understandings were becoming unsettled because of that change. How would Professors U and E have known that this unsettling was occurring before their very eyes? How would *we* know if the world was again changing, unsettling *our* settled understandings? In retrospect, it may be easy to identify such seismic shifts in the legal landscape, phase transitions between different ordered states of an entire domain of legal thought and practice. But in prospect, that may not be so easy.

The world, sometimes, does that—changes profoundly. When it does, settled understandings sometimes change with it. Unless we think that for some reason this cannot happen again, questions about the legitimate scope of a nation's jurisdictional reach cannot rest on the notion that those questions are somehow already, and forever, "settled."

IV. FUNCTIONAL IDENTITY

That the world *can* change so as to unsettle settled principles does not, of course, mean that it has done so in ways that are relevant to the questions at hand. The Unexceptionalists say that it has not; activity in cyberspace is "functionally identical to transnational activity mediated by other means, such as mail or telephone or smoke signal."⁵²

What could that possibly mean? It does not take a great deal of insight

^{51.} See 1 SOREN KIERKEGAARD'S JOURNALS AND PAPERS 450 (Howard V. Hong & Edna Hong eds., 1967).

^{52.} Against Cyberanarchy, supra note 2, at 1240 (emphasis added).

or deep thinking to come up with ways in which activity in cyberspace is functionally not identical to activity in realspace. For example, in cyberspace, I can communicate an offer to sell some product or service

- instantaneously (or nearly so);
- at zero marginal cost (or nearly so);
- to several million people;
- with near-zero probability of error in the reproduction or distribution of that offer;
- which can be stored, retrieved, and translated into another language by each of the recipients (instantaneously, and at zero marginal cost); and
- to recipients who have the capability to respond to my offer (instantaneously, and at zero marginal cost).

I surely cannot engage in a transaction having *all* of those features using mail, telephones, or smoke signals.

The Unexceptionalists are intelligent and sophisticated thinkers; how could they possibly think that activity in communication in cyberspace is "functionally identical"—not, mind you, merely functionally similar, or even roughly equivalent, but *identical*—to realspace communication?

Asking whether realspace and cyberspace transactions are identical to or different from one another is like asking whether life on land is identical to or different from life in the ocean. The answer is that it is, and it must be, simultaneously, both; it depends entirely on the questions you are asking. The second law of thermodynamics, gravity, and the principle of

Letter from Thomas Jefferson, Third President, United States of America, to John Adams, Second President, United States of America. THE ADAMS-JEFFERSON LETTERS: THE

^{53.} Confronted with the assertion "that in all the vast countries of America, there is but one language," Thomas Jefferson pondered the question: "what constitutes identity, or difference, in two things, in the common acceptation of sameness?" This, he wrote, is a question of definition, in which every one is free to use his own . . . All languages may be called the same, as being all made up of the same primitive sounds, expressed by the letters of the different alphabets. But, in this sense, all things on earth are the same, as consisting of matter. . . . [and] it may be learnedly proved, that our trees and plants of every kind are descended from those of Europe, because, like them, they have no locomotion, they draw nourishment from the earth, they clothe themselves with leaves in spring of which they divest themselves in autumn for the sleep of winter, etc. Our animals too must be descended from those of Europe, because our wolves eat lambs, our deer are gregarious, our ants hoard, etc.

natural selection work identically in the two environments; the mechanics of sound propagation, buoyancy, and chemical diffusion do not. For the purpose of answering some questions (e.g., about the mechanics of genetic recombination in mammals, energy transmission within food webs, or the relative advantages of sexual and asexual reproduction) we ignore the differences between the two environments and lump terrestrial and oceanic organisms together. For the purpose of answering other questions (e.g., about social communication within animal populations, the mechanics of oxygen transport, or the design of the mammalian forelimb) we must distinguish between terrestrial and oceanic organisms, because for these purposes the two environments are very different indeed.

It is true that events and transactions in realspace and cyberspace are identical in many ways, and can be treated identically for many purposes. Transactions between human beings are still transactions between human beings, whether they take place via e-mail, postcards, telegraph, or smoke signal. Whatever it is that motivates human beings to engage in one transaction or another—love, hate, greed, curiosity, fear, etc.—remains the same, on or off the Internet. A dollar is still a dollar, whether it is earned by a seller of goods from a showroom transaction or a transaction at www.i'vegotstuffforsale.com.

Digitalbooks.com and Analogbooks will thus have many identical characteristics. Digitalbooks.com, like Analogbooks, provides: a forum where buyers and sellers can exchange consideration for goods; a system for making sure that those goods get shipped from seller to buyer after a transaction is consummated; rules for identifying the winners and losers of individual auctions; and means for obtaining payment for its services, accounting for those payments, and transferring money to its suppliers.

Therefore, questions about how Digitalbooks.com and Analogbooks spend the money they earn—for example, questions about the investment strategies of book dealers, and the laws regulating those investment strategies—can surely lump cyberspace and realspace earnings together.

However, it is also true that events and transactions in realspace and cyberspace are *not* identical in many other ways. For example, transactions in cyberspace can take place at much greater physical remove; they are consummated by means of the movement of bits rather than atoms; they are digitally encoded; they are unaffected by the participants' sense of smell; they are embedded in and mediated by computer software; they travel at the speed of light, etc.

COMPLETE CORRESPONDENCE BETWEEN THOMAS JEFFERSON AND ABIGAIL AND JOHN ADAMS (Lester Cappon ed., Univ. North Carolina Press 1959) (May 27, 1813).

Transactions in cyberspace involve real people in one territorial jurisdiction either (i) transacting with real people in other territorial jurisdictions or (ii) engaging in activity in one jurisdiction that causes real-world effects in another territorial jurisdiction. To this extent, activity in cyberspace is functionally identical to transnational activity mediated by other means, such as mail or telephone or smoke signal.⁵⁴

Now I get it: to that extent, but only to that extent, cyberspace and real-space transactions are identical. To the extent that our question requires us to ask whether "real people in one territorial jurisdiction [are] transacting with [other] real people in other territorial jurisdictions," 55 cyberspace and realspace transactions are, for that purpose, identical. To the extent that our question requires us to ask something else—whether, say, they involve bits and software, or instantaneous communication with enormous numbers of people across the global network, etc.—they are not.

The question we need to be addressing, then, is this one: are Digital-books.com's and Analogbooks' transactions identical—or, at least, sufficiently similar—to one another with respect to the relevant principles of international choice of law and prescriptive jurisdiction? If so, it is reasonable to ignore the many differences between them; if not, it is not.

V. SCALE

To the Unexceptionalist, Digitalbooks.com's and Analogbooks' transactions *are* identical with respect to the relevant principles of international choice of law. The issues raised by application of these principles and prescriptive jurisdiction to Digitalbooks.com's cyberspace transactions, they say,

... are no more complex than the same issues in real space. They also are no more complex or challenging than similar issues presented by increasingly prevalent real-space events such as airplane crashes, mass torts, multistate insurance coverage, or multinational commercial transactions, all of which form the bread and butter of modern conflict of laws. Indeed, they are no more complex than a simple products liability suit arising from a two-car accident among residents of the same state, which can implicate the laws of several states, including the place of the accident, the states where the car and tire manufacturers are head-

^{54.} Against Cyberanarchy, supra note 2, at 1239-40 (emphasis added).

^{55.} Id. at 1239.

quartered, the states where the car and tires were manufactured, and the state where the car was purchased.⁵⁶

This may well be true. Digitalbooks.com's sale of an individual book to a customer in Singapore, in isolation, is no more "complex or challenging" as a matter of international law than Analogbooks' sale of the same book to the same customer.

To stop the analysis there, however, is to miss the forest for the trees. Scale matters; the biologists and the engineers know this. A rose is a rose is a rose; three roses, or three hundred roses—a garden—is a different, a more "complex and challenging," phenomenon. Network protocols that can manage one thousand transactions may not be able to handle one million, or one billion. The tree is one thing; the forest, though it is nothing more than a large number of trees, is another, more "complex and challenging," phenomenon. The movement of a single clump of dirt down a slope is one thing; an avalanche, though it is nothing more than the movement of lots of individual pieces of dirt down a slope, is another, more "complex and challenging," event. The motion of a single pendulum—which has been understood with great precision since Galileo's day—is one thing; connect a number of pendulums together and you have a much more "complex and challenging" phenomenon. The movement of the forest for the trees.

You get the idea: the anthill is more "complex and challenging" than the ant. Ignoring the anthill when making rules for the ant—ignoring the ways in which the individual ant's behavior is embedded within a complex system of large numbers of other individuals—would be odd indeed.⁵⁹

Therefore, although Digitalbooks.com and Analogbooks each may be doing the "same" things, the *systems* within which they operate are not

^{56.} *Id.* at 1234 (emphasis added).

^{57.} For an extensive discussion of the complex ways in which avalanches propagate through sandpiles, see PER BAK, HOW NATURE WORKS chs. 3-4 (1996); STUART KAUFFMAN, AT HOME IN THE UNIVERSE 235-43 (1995).

^{58.} The chaotic dynamics of coupled pendulums are discussed in BAK, *supra* note 57, at 39-48; JAMES GLEICK, CHAOS: MAKING A NEW SCIENCE 39-44 (Viking, 1987); David Tritton, *Chaos in the Swing of a Pendulum, in* EXPLORING CHAOS: A GUIDE TO THE NEW SCIENCE OF DISORDER 22-33 (N. Hall ed., 1991). A more technical treatment can be found in D. D'Humieres et al., *Chaotic States and Routes to Chaos in the Forced Pendulum*, 26 PHYS. REV. A 3483 (1982).

^{59.} See Stein, supra note 15, at 1191 ("The Internet geometrically multiplies the number of transactions that implicate more than one state. But it is a problem of quantity, not quality.") (emphasis added); Against Cyberanarchy, supra note 2, at 1237-38 (discussing the "dramatic increase in the number and speed of transactions" in cyberspace in the context of "a nation's incentives to regulate" and the efficacy of regulation).

necessarily the same as a consequence of that identity. *Scale matters*. Differences in degree sometimes become differences in kind; quantitative changes can become qualitative changes.⁶⁰ Rules and principles that may be quite reasonable at one scale may become incoherent and unreasonable at another.

Consider the following example of the ways in which the scale of activities in cyberspace can unsettle settled legal principles. In 1995, Dennis Erlich, a former-minister-turned-critic of the Church of Scientology, took the texts of a number of works authored by Scientology founder L. Ron Hubbard and, using the services of Netcom On-line Communication Services. Inc., distributed them to the Usenet newsgroup alt.religion.scientology. Netcom, for its part, reproduced each of those documents dozens, perhaps hundreds or thousands, of times in the course of transmitting Erlich's messages (and the files he included in those messages) to other Usenet sites. Hubbard's works were protected by U.S. copyright law, and the owner of the copyright in Hubbard's works— Religious Technology Center—appeared in Judge Ronald Whyte's courtroom in the Northern District of California to enjoin Netcom's violation of its statutory rights.⁶¹

Judge Whyte, I think it fair to say, found this case somewhat unsettling. On the one hand, one would be hard-pressed to find a case in the federal reporters where the law, and the application of the law to particular facts, was more straightforward than this one. There was a nice, "settled" principle of law to work with: it is an infringement of copyright to "reproduce" a copyrighted work of authorship "in copies" without the copyright holder's authorization. 62 It was hard to deny that Netcom had done just that.

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^{60.} The repudiation of "Hermetic Territorialism" was a kind of "phase transition" in the law—one orderly arrangement of the interlocking parts of a complex system gives way, rather suddenly, to an entirely different arrangement. Think of the transformation of liquid water into solid ice. As the temperature falls, the individual components of the system—the hydrogen and oxygen atoms and the bonds between them—slowly change, releasing small quanta of energy, while retaining the orderly arrangement that defines the "liquid" state. But at the freezing point, the system abandons gradualism, changing abruptly into a different kind of orderly arrangement of its atoms, an entirely different configuration. We do not know, I would submit, very much at all about phase transitions in the law—how small changes in the many interlocking doctrines, judicial decisions, statutory provisions that underlie any particular legal domain can lead to a systemic reconfiguration of those interlocking parts.

^{61.} Religious Tech. Ctr. v. Netcom On-line Servs., Inc., 907 F. Supp. 1361 (N.D. Cal. 1995).

^{62. 17} U.S.C. § 106 (2002).

It was true, of course, that Netcom did not *know* that it was making copies of the copyrighted works, ⁶³ that the "copies" it made were merely transient arrangements of bits on its disk drives, ⁶⁴ that it had not taken any "affirmative action . . . other than by installing and maintaining a system whereby software automatically forwards messages received from subscribers onto the Usenet, and temporarily stores copies on its system" to carry out its copying activities, ⁶⁵ and that it was only doing exactly what thousands of other Usenet servers around the globe were doing with the documents that Erlich had posted. ⁶⁶

All true, and all, under the settled law of 1995, irrelevant. The Copyright Act is a "strict liability statute";⁶⁷ because infringement "does not require intent or any particular state of mind,"⁶⁸ whether Netcom knew of the infringing nature of the messages it was transmitting was of no consequence. Given a Ninth Circuit decision squarely on point,⁶⁹ there was also "no question,"⁷⁰ that (1) the transient collections of bits on Netcom's disk drives constituted "copies" within the meaning of the Copyright Act;⁷¹ (2) while the infringing messages remained on Netcom's system "for at most eleven days," they were nonetheless "sufficiently 'fixed' to constitute recognizable copies under the Copyright Act";⁷² (3) although one could argue that "there *should* still be some element of volition or causation"⁷³ in a copyright claim, there was no such element; and (4) the defense of "lots of other people are doing what I'm doing, so you should not hold me liable," was not established in copyright law.

On the other hand, imposing liability on Netcom for these activities somehow "does not make sense," in Judge Whyte's words. The individual acts on the basis of which Netcom was charged with infringement were "functionally identical" to any number of things we had seen before.

^{63.} *Religious Tech. Ctr.*, 907 F. Supp. at 1374 (noting "no question of fact as to whether Netcom knew or should have known of Erlich's infringing activities" prior to receipt of notification from plaintiffs).

^{64.} Id. at 1368.

^{65.} Id.

^{66.} Id. at 1373.

^{67.} Id. at 1370. See also id. at 1367 ("[K]nowledge is not an element of direct infringement.").

^{68.} Id. at 1367.

^{69.} MAI Sys. Corp. v. Peak Computer, Inc., 991 F.2d 511 (9th Cir. 1993).

^{70.} Religious Tech. Ctr., 907 F. Supp. at 1368.

^{71.} *Id*.

^{72.} Id.

^{73.} *Id.* at 1370 (emphasis added).

^{74.} Id. at 1372.

After all, whether you are operating a photocopying machine, a CD-burner, or a Usenet server, you are making a copy of a document, hardly an unfamiliar activity. But the system within which those acts were embedded had changed, and application of the settled law to the *aggregate* of those individual actions somehow needed to change along with it.

The file storage and reproduction activities in which Netcom was engaged were "necessary to having a working system for transmitting Usenet postings to and from the Internet."⁷⁵ If Netcom were deemed liable for copyright infringement, "any storage of a copy that occurs in the process of sending a message to the Usenet [would be] an infringement,"⁷⁶ and "every single Usenet server in the worldwide link of computers transmitting Erlich's message to every other computer"77 would be liable. Carried to its "natural extreme" -scaled up, we might say—application of settled law in this case "would lead to unreasonable liability." It "does not make sense," Judge Whyte wrote, "to adopt a rule that could lead to the liability of countless parties whose role in the infringement is nothing more than setting up and operating a system that is necessary for the functioning of the Internet."80 A theory of infringement that holds every Internet server worldwide liable for activities that each of them was undertaking thousands of times a second was not "workable." Because there was no "meaningful distinction . . . between what Netcom did and what every other Usenet server does," ⁸² Judge Whyte found that Netcom "cannot be held liable for direct infringement."83

Settled law, in other words, did not *scale*. So Judge Whyte unsettled it.

^{75.} Id. at 1368.

^{76.} *Id.* at 1370 (emphasis added).

^{77.} Id. at 1369.

^{78.} Id.

^{79.} Id. (emphasis added).

^{80.} Id. at 1372.

^{81.} *Id.* at 1372 (emphasis added).

^{82.} Id. at 1373.

^{83.} *Id.* A different judge—a less creative, or a less courageous judge, perhaps—would have taken the time-honored route of obfuscation, twisting the "fuzzball factors" of the fair use doctrine to fit the facts at hand. *See* Frank E. Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. CHI. LEGAL F. 207, 208 (1996); *see also Religious Tech. Ctr.*, 907 F. Supp. at 1378-81 (holding that Netcom's copying was not a "fair use" as a matter of law).

VI. EFFECTS

[A] nation's right to control events within its territory and to protect its citizens permits it to regulate the local effects of extraterritorial acts.84

[P][P][[revailing concepts of territorial sovereignty permit a nation to regulate the local effects of extraterritorial conduct even if this regulation produces spillover effects in other jurisdictions[, and] . . . such spillover effects are a commonplace consequence of the unilateral application of any particular law to transnational activity in our increasingly interconnected world.⁸⁵

We live in a world of inter-connected and geographically complex causes and effects; a butterfly flapping its wings in Beijing can change weather patterns in New York, the presence of poisons in the soil in Central Asia can affect the abundance of fish in the Gulf of Mexico, a local currency trader, or bolt manufacturer, in Hong Kong can cause the crash of markets, or automobiles, in Frankfurt.

Imagine for the moment something we might call an "effects map." To construct such a map, we mark the location of every event taking place at any specific moment, the "effects" of which will be felt in, say, Singapore. An "effects map" would look something like the familiar nighttime satellite images of "The Earth from Space" seen in Figure 1. Each point of light on the effects map, however, would represent not an actual source of illumination but rather the location of an event or transaction whose effects were felt by some person, or institution, in Singapore.

^{84.} Against Cyberanarchy, supra note 2, at 1239.

^{85.} Id. at 1212 (emphasis added).

Figure 1



Consider an effects map depicting a moment in 1450. Inasmuch as the effects of most activity taking place in 1450 declined rapidly with increasing geographical distance, most events or transactions having an effect in Singapore would themselves take place in, or around, Singapore. Our effects map would therefore show the territory around Singapore itself as a dense concentration of points, a small patch of intense light, with the remainder of the globe in almost total darkness.

An effects map for 1950 would undoubtedly show greater relative "brightness" *outside* of Singapore's borders, reflecting changes in communication and transportation technologies over the past several centuries, and the increased numbers of border-crossing events and transactions with widely dispersed geographical effects—"airplane crashes, mass torts, multistate insurance coverage, or multinational commercial transactions."

But the 1950 map would, I submit, retain its geographical coherence because the effects of most human activity in 1950, notwithstanding "mail, the telephone, and smoke signals," remained geographically constrained. There would still be a bright cluster of points down on the southern tip of the Malaysian peninsula. On the basis of this patch of relative brightness alone, we would probably be able to reconstruct those boundaries with reasonable accuracy without too much trouble, even if Singapore's actual political boundaries were omitted from our effects map.

However, an effects map plotting events and transactions taking place

today in *cyberspace* would look very different from this. A plot of the location of all events and transactions taking place in cyberspace that have an effect on persons and property in Singapore will have virtually no geographical structure at all; points of light will be wildly scattered about the map, seemingly at random. It is a cliché, but it is true nonetheless: On the global network all points are (virtually) equidistant from one another, irrespective of their location in real space, and the effects of the butterfly on the website in Beijing can be felt as strongly in Philadelphia as in Shanghai. *All* transactions in cyberspace are potentially border-crossing, *all* have geographically indeterminate effects, *all* resemble the "airplane crashes, mass torts, multistate insurance coverage, and multinational commercial transactions" of realspace. We would have much, much more trouble reconstructing Singapore's actual boundaries from a map limited to cyberspace events and transactions in 2002 than in any of our previous maps.

With respect to the "Effects Principle" at the heart of the Unexceptionalist argument—the principle that "a nation's right to control events within its territory and to protect its citizens permits it to regulate the local effects of extraterritorial acts" —the world *has* changed, rather dramatically. Border-crossing events and transactions, previously at the margins of the legal system and of sufficient rarity to be cabined off into a small corner of the legal universe ("airplane crashes, mass torts, multistate insurance coverage, or multinational commercial transactions" have migrated, in cyberspace, to the core of that system.

A world in which virtually *all* events and transactions have border-crossing effects is surely not "functionally identical" to a world in which most do not, at least not with respect to the application of a principle that necessarily requires consideration of the distribution of those effects. A world in which the Effects Principle returns the result "No Substantial Effects Outside the Borders" when applied to the vast majority of events and transactions is not "functionally identical" to a world in which application of the same principle to the vast majority of events and transactions returns the opposite result. A world in which, on occasion, bullets are fired from one jurisdiction into another ⁹⁰ is not "functionally identical" to a world in which all jurisdictions are constantly subjected to shrapnel from a

^{87.} Id. at 1234.

^{88.} Id. at 1239.

^{89.} Id. at 1234.

^{90.} See RESTATEMENT (THIRD) FOREIGN RELATIONS LAW OF THE UNITED STATES § 402 cmt. d (1987) ("The effects principle is not controversial with respect to acts such as shooting or even sending libelous publications across a boundary.").

thousand different directions.

To paraphrase Judge Whyte: carried to its "natural extreme," application of the (settled) Effects Principle is not "workable." Like Judge Whyte, I "cannot see any meaningful distinction . . . between what [Digitalbooks.com does] and what every other [website does], and subjecting all websites to dozens, or perhaps hundreds, of different and possibly conflicting legal regimes "does not make sense." Like Judge Whyte, I "do[] not find workable" a theory of prescriptive jurisdiction that would hold Digitalbooks.com (and all website operators) responsible for complying, simultaneously, with the laws of all jurisdictions worldwide. Like Judge Whyte, I think that, "carried to its natural extreme," the Effects Principle leads to "unreasonable liability."

VII. CONSENT

If governments "deriv[e] their just powers from the consent of the governed," how can Singapore, or England, legitimately exercise law-making power over Digitalbooks.com?

The Unexceptionalists are not unduly troubled by this question, because they believe, apparently, that settled principles of international law have already resolved it: While consent may be a prerequisite for the legitimate exercise of *private* power, it is no longer a prerequisite for the legitimate exercise of *governmental* power. 99 Thus, Goldsmith writes, it is

- 91. Religious Tech. Ctr., 907 F. Supp. at 1369.
- 92. Id. at 1372.
- 93. Id. at 1373.
- 94. Id. at 1372.
- 95. *Id*.
- 96. Id. at 1369.
- 97. Id.
- 98. THE DECLARATION OF INDEPENDENCE, pmbl. (U.S. 1776).
- 99. See Stein, supra note 15, at 1176 ("Unlike the law of sovereigns, the scope of... private ordering is limited to persons who have consented to the particular rules in question.") (emphasis added); Against Cyberanarchy, supra note 2, at 1216 (concluding that because there are many "[c]yberspace activities for which ex ante consent to a governing legal regime is either infeasible or unenforceable," these activities "are not amenable to private ordering") (emphasis added); id. at 1215 ("[I]t remains an open question how to generate consent across cyberspace networks."); id. at 1216 ("[P]rivate legal ordering... has the potential to resolve many, but not all, of the challenges posed by multijurisdictional cyberspace activity.") (emphasis added); id. ("Consent-based legal orders are limited by a variety of national mandatory law restrictions."); see also Netanel, supra note 35, at 410, 492-93 (acknowledging the argument that application of foreign law to Digitalbooks.com's website "belies the liberal democratic principle of 'government by con-

an "uncontested assumption" of the international legal order that the "need to demonstrate consent" to assertions of sovereign power "begins from the premise that *in its absence, national regulation of local effects is a legitimate incident of sovereignty,*" ¹⁰⁰ that "in the *absence* of consensual international solutions, *prevailing concepts of territorial sovereignty permit a nation to regulate the local effects of extraterritorial conduct." ¹⁰¹*

The Effects Principle itself, in other words, is, as a normative matter, a source of sovereign authority, independent of the consent of the governed. Transactions "can *legitimately* be regulated [by] the jurisdictions where significant effects of the transaction are felt," whether or not the parties engaged in or affected by those transactions have consented to the application of the laws of those jurisdictions.

Though I find this view of the relationship between the Consent Principle and the Effects Principle normatively unappealing, this is not the place to engage in that argument. Though I happen to believe, contra Goldsmith et al., that the former principle should take precedence over the latter in the event of a conflict between them, I raise the issue here merely to suggest that scale may matter here as well, that the way we resolve this conflict at one scale, in the conditions of realspace, does not necessarily dictate how we should resolve it at a different scale, in cyberspace. I suggest, in other words, that cyberspace is, for these purposes and with respect to this question, different.

Consider an expanding balloon. Molecules at the surface of the balloon are giving off prodigious amounts of heat (per molecule) as the energy from the inrushing air causes some of the bonds between the balloon's atoms to shear apart (releasing small quanta of energy in the form of heat). As the expanding surface rubs up against outside air molecules, it causes the production and release of more heat through friction. Fortunately for whomever is holding the balloon, not all molecules are exploding in this way, or the balloon would quickly become too hot to handle.

The legal system is the balloon. There has been friction at the surface,

sent of the governed," but concluding that because consent is only one "side of the liberal democracy equation," where "foreign resident conduct has substantial effect within the legislating country and runs strongly against that country's fundamental public policy, the prescriptive outcome of the legislating country's democratic process should prevail").

^{100.} Against Cyberanarchy, supra note 2, at 1241 (emphasis added). That is an odd, though telling, formulation; I would have thought that the need to demonstrate consent "begins" with the "self-evident truth" that governments "derive their just power from the consent of the governed." THE DECLARATION OF INDEPENDENCE pmbl. (U.S. 1776).

^{101.} Against Cyberanarchy, supra note 2, at 1212 (emphasis added).

^{102.} Id. at 1208 (emphasis added).

border-crossing events and transactions—"airplane crashes, mass torts, multistate insurance coverage, or multinational commercial transactions"—where the Consent Principle and the Effects Principle collide, setting off small explosions. As long as these remain on the surface—at the margin—the system as a whole is stable. If, however, these collisions start to occur throughout the entire volume of the balloon, no longer confined to a narrow band at the surface, the heat generated becomes overwhelming and the balloon explodes.

All conduct in cyberspace has geographically far-flung effects on people and institutions around the world; on this Unexceptionalists and Exceptionalists agree. In cyberspace, there will continually be conflicts between a principle that permits sovereigns to regulate on the basis of those effects, and a principle that sovereigns can only regulate where they have the consent of the regulated. The "prevailing concepts of territorial sovereignty" evolved in a world in which these explosions between the Effects Principle and the Principle of Consent only presented themselves at the margins of the legal system, impacting a relatively small number of transactions. A world in which *all* actors, and *all* transactions, at *all* times, are subject to rules to which they have not consented, is not "functionally identical" to that world. We have a different problem before us now.

VIII. CONCLUDING THOUGHTS

Against Cyberanarchy has been one of the most influential and oftcited pieces in the cyberspace law canon. ¹⁰³ I remain, however, unper-

¹⁰³ Against Cyberanarchy has been called, among other things, a "trenchant" and "withering" critique of the regulation skeptics' claims, Netanel, supra note 35, at 402, and a "decisive response to the widespread view that cyberspace is not regulable." CASS R. SUN-STEIN, REPUBLIC.COM 204 (Princeton Univ. Press 2001). As of this writing (March, 2002) it has been cited, according to a LEXIS search (LEXIS, Lawrev Library), nearly one hundred times. It has also become a staple of cyberspace law courses. For just a small sample of the courses for which Professor Goldsmith's article is required reading, see, e.g., Andrew L. Shapiro, Harvard Law School, New Media, Law, and Democracy, Syllabus (Fall 1999 Semester) http://cyber.law.harvard.edu/columbia/cgi/syllabus.cgi; University of Melbourne Law School, Electronic Commerce Law, Reading Guide (Spring 2001 Semester) available at http://graduate.unimelblaw.com.au/gradlaw2002.nsf/docs/4H33EB355; Susanna Fischer, Catholic University of America, Columbus School of Law, Cyberlaw, Syllabus (Spring 2000 Semester) available at http://faculty.cua.edu/fischer/cyberlawsyl.htm; Pamela Samuelson, University of California at Berkeley, Boalt Hall School of Law, Cyberlaw, **Syllabus** (Fall 2000 Semester) available http://www.law.berkeley.edu/institutes/bclt/courses/fall00/cyberlaw/cybersyllabus.html; Michael Froomkin, University of Miami School of Law, The Internet and the State (Fall

suaded—an unrepentant Exceptionalist. I think it does matter that Digital-books.com is "in cyberspace," I think that the questions raised by its conduct are indeed different, and more difficult, than the analogous questions raised by its realspace counterpart, and I do not believe that we can resolve the jurisdictional dilemmas posed by Digitalbooks' transactions by applying the "traditional legal tools" developed for similar problems in realspace.

The problem of "jurisdiction," as generations of law students can testify, can glaze over even the most attentive eyes. At its core, though, it reaches fundamental questions of order and legitimacy; lest we forget, we fought a revolution over the jurisdiction to prescribe. ¹⁰⁴ Cyberspace should give us pause, and I am not quite ready to throw in the towel just yet. Settled law, and received principles, are worthy of respect; but at times they need to be reconsidered. This is one of those times.

2000 Semester) available at http://www.law.miami.edu/~froomkin/inet00/syllabus2.htm; Darren Charters, Arts at the University of Waterloo, School of Accountancy, Course Schedule, Cyber Law: Legal Issues in a Digital Business Age (Fall 2001 Semester) available at http://www.arts.uwaterloo.ca/ACCT/courses/acc415.

Among the "[f]acts . . . submitted to a candid world" to substantiate "repeated injuries and usurpations" to which the King of England had subjected the American colonists, was that the King had "combined with others to subject us to a jurisdiction foreign to our constitution, and unacknowledged by our laws; giving his Assent to their Acts of pretended Legislation" The Declaration of Independence para. 15 (U.S. 1776).