"The Free Use of Our Faculties": Thomas Jefferson, Cyberspace, and the Language of Social Life[1]

David G. Post [2]

I. WHERE I LEFT OFF

Many of the debates swirling around "law and cyberspace" are familiar ones. Questions about whether, and how, to regulate conduct on the global network tend to revolve around familiar themes, and those of us who participate in these debates arrange ourselves along familiar axes, settling into our accustomed roles as though sinking into our favorite easy chair: libertarians and liberals, interventionists and free-marketeers, economic conservatives and social conservatives, and the like.

Some things about these debates, though, are not so familiar and make them seem less like an easy chair and more like a medieval rack. Settled understandings are morphed and transformed into something less comfortable, more challenging, and much more interesting.

One year ago, I wrote a response to Lawrence Lessig's book *Code and Other Laws of Cyberspace*.[3] Lessig helped us to see something very important: that law, in cyberspace, will increasingly depend upon, and increasingly be intertwined with, Net "architecture"—the codes and protocols that together define and determine how bits are permitted to move about the network. Code, in this place, *is* law—or at least it is "like law," or "more effective than law," or "competing with law," or all of the above. It is the code that has been primarily

---

 This Article was delivered at *The Constitution and the Internet* symposium at Drake University Law School, February 18, 2001; many thanks to the organizers of that symposium, and most especially to Tom Baker for the invitation to participate. Thanks also to Dawn Nunziato, David Johnson, and Susan Crawford, who read and commented upon earlier drafts, and to Esther Bodek, Josh Stein, Susan Smolens, and Lisette Young, who provided valuable research assistance. Financial support for this research was provided by a summer research stipend from the Temple Law School. A modified version of this Article will be part of a forthcoming book on Thomas Jefferson and cyberspace law, tentatively titled *Jefferson's Moose: Notes on the State of Cyberspace*.

2. Associate Professor, Temple University Law School, and Senior Fellow, The Tech Center, George Mason University School of Law; Dpost@vm.temple.edu.

3. David G. Post, *What Larry Doesn't Get: Code, Law, and Liberty in Cyberspace*, 52 STAN. L. REV. 1439 (2000) (available at <http://www.temple.edu/lawschool/dpost/Code.pdf>).

responsible for regulating speech in cyberspace, or the ways that information is reproduced and distributed, or the amount of personal information collected at Web sites, not the First Amendment, or the Copyright Act, or the rules of the Federal Trade Commission.

It is a simple point, but a profound one. The "*architecture* of these cyberplace(s) . . . determines what they *are*, and the architecture of those places is constituted by their code."[4] The architecture determines what you can and cannot do, who you can and cannot be, and it is the underlying code that makes the architecture what it is, or perhaps we should say it is the underlying *codes* that make the architectures what they *are*. These architectures, therefore, *matter*, and they matter deeply for the kind of life we can live there and for the experiences we can have there. Different codes embed different *values*, different visions of the good. The codes of cyberspace can make people disappear; they can determine how many people can gather in one place, and whether you can be one person or many people, and visible or invisible. Particular code and particular architectures allow certain values to flourish while making others difficult or impossible to achieve; they enable certain ways of living and disable others; they give expression to some human potentialities and silence others.

Because the Net has no ideal or "true" form—because we *build* these architectures—we have choices to make, choices that matter. We are all systems engineers now. The law will and should constrain these choices, precisely because they *do* matter. How do we see to it that values that are important to us—of privacy, of freedom—are protected and enhanced here? What are the best architectures, and how do we find and implement them? How are we best to guide these choices? Who controls these codes?

We need, Lessig argued, a plan,[5] and we need politics:

> Ordinarily, when we describe competing collections of values, and the choices we make among them, we call these choices "political." They are choices about how the world will be ordered and about which values will be given precedence.
>
> Choices among values, choices about regulation, about control, choices about the definition of spaces of freedom—all this is the stuff of politics. Code codifies values, and yet, oddly, most people speak as if code were just a question of engineering. Or as if code is best left to the market. Or best left unaddressed by government.
>
> But these attitudes must be mistaken. Politics is that process by which we collectively decide how we should live. . . . Politics is the process by which we reason about how things ought to be. . . .

---

4. *Id.* at 1445.
5. LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE 222 (1999).

> [W]e should not accept the idea that any part of what defines the world as it is, is removed from politics.[6]

I was not persuaded. Some things, I suggested, make their way best *without* a plan, without politics, without being made subject to collective decision-making, without *reason*. Languages—I used the example of English, though any language would serve for this purpose—are such things.[7] Languages are "the original, and still probably the most powerful, value-laden code/architecture of them all[,]. . . [their] semantic and syntactic structures are deep *architectural* constraints on our social life,"[8] means by which, and within which, we construct social reality, and they embed important and often fundamental values throughout.[9] We build them, too, but it is "obvious," I suggested, "that we do not, and that we should not, subject [the] semantic and syntactic structures [of English] *to the collective* for decision-making."[10]

> English will evolve best not by subjecting it to a series of decisions by the collective empowered to impose its will on all, but by an aggregated series of individual and sub-group decisions. We do not have, and we do not want, the Ministry of Semantic Propriety, or our elected representatives, or a specially constituted board of experts, or even the law professors, to make a "plan" about the proper direction(s) that English may take or to make decisions for us in accordance with that plan. We do not, in fact, have or need a "plan" at all. We are, and should be, deeply suspicious of those who claim to have such a plan, and positively terrified of those who assert that they need to enlist the coercive powers of the State to implement that plan. If there is a serious alternative to the invisible hand that is suitable for this task, I am not aware of it.[11]

Obvious perhaps, but some things, it turns out, are simultaneously obvious and interesting. The more I pondered the "obvious" point I had tried to make, the more interesting it seemed. Why *don't* we have a plan for English? Why don't we subject the grammatical rules of English to collective decision-making? What would happen if we did?

And the more I thought about it, the more useful the language metaphor seemed to become for thinking about the questions presented by cyberspace. Indeed, I'm not at all sure that "metaphor" is the right word to describe the relationship. The global network is so bound up with language that we

---

6. *Id.* at 59.
7. Post, *supra* note 3, at 1456-58.
8. *Id.* at 1456 (emphasis in original).
9. *Id.* at 1456-58.
10. *Id.* at 1457 (emphasis in original).
11. *Id.*

sometimes fail to see the connections clearly. We don't just "build" cyberspace, we *write* it. What we call cyberspace is nothing more than a collection of texts, an immense stockpile of stories, each written in a particular language—HTML, or C++, or Java, or PERL, or some combination. A Web page, an online brokerage system, Internet "business methods," Amazon.com, America Online, eBay—they're all just texts. They are what they are because someone *wrote* them to be that way—someone who sat down in front of a blank sheet of paper, or a blank screen, and conjured them into being.

The Internet itself is just one way of communicating these stories to one another with, as the Copyright Act puts it, "the aid of a machine or device."[12] I can read and understand the texts of cyberspace because of another language, the Internet Protocols (IP). The IP is a grammar, a set of syntactical rules that allows packets of information consisting of inherently unintelligible and arbitrary units to carry meaning and to be understood by other speakers, a common syntax that prescribes the ways that messages must be structured if they are to be transmitted and understood.[13] It is a kind of pidgin[14]—designed precisely for the purpose of allowing the exchange of information between entities whose "native languages"—the operating system languages in which the programs that they ordinarily run must be written—are mutually unintelligible.

Cyberspace, in other words, is an entirely *imagined* world, conjured up by and out of the new languages that we have programmed our computers to "speak"—a "consensual hallucination," as one observer nicely put it.[15]

What are we to make of this? I know it sounds like I've lost my mind, but what can I do? How do we regulate a world of texts? What laws will be best for the stories of cyberspace? How do we think about law and governance in an imagined world like this, a world in which there is nothing *but* speech, and in which every issue of law and policy implicates the language(s) we can speak, or must speak, or will be prohibited from speaking? What kind of copyright law would best stimulate creative activity? How many top-level domains do we need? What should we do about data mining, preference matching, "Carnivore,"

---

12. *See* 17 U.S.C. § 102 (1994).

13. Cliff Green, *An Introduction to Internet Protocols for Newbies* <http://www.halcyon.com/cliffg/uwteach/shared_info/internet_protocols.html> at 2 (accessed Apr. 3, 2001).

14. Pidgin is "an auxiliary language that has come into existence through the attempts by the speakers of two different languages to communicate and that is primarily a simplified form of one of the languages, with a reduced vocabulary and grammatical structure and considerable variation in pronunciation." THE RANDOM HOUSE DICTIONARY OF THE ENGLISH LANGUAGE 1465 (2d ed. unabridged 1983). Interestingly, the word "pidgin" appears to have been derived from the Chinese word for "business." *Id.*

15. *See* Leon Forde, *The Guardian, Roadmaps for the Superhighway Route*, <http://www.guardianunlimited.co.uk/online/story/0,3605,337511,00.html> (June 29, 2000).

the Secure Digital Music Initiative, peer-to-peer file-sharing technologies, geographical filtering, patents for Internet business methods, and clickwrap licenses?

I am not at all sure, to be honest, and I am a bit suspicious of anyone who is. We can, I suppose, just ignore it all and get on with things. We can simply declare that cyberspace interactions and transactions are really "no different" than their real space counterparts, that cyberspace interactions are "functionally identical" to "activity mediated by other means, such as mail or telephone or smoke signal."[16] But I think that somehow we would be missing something important if we did that.

"Life," Kierkegaard said, "must be lived forward, but it can only be understood backwards."[17] These are new things—if they are not, I have no idea what the word "new" means—and thinking about new things is hard because we only really can understand old things. We *never* know what is coming over the next hill; anyone who pretends otherwise is a fool. And sometimes what is coming is something that really is new, something we have not seen before. I think this is one of those times.

How are we to look forward, how are we to live forward, in this imagined world?

II. LOOKING BACKWARDS

"[D]oubt is wisdom. . . ."[18] "Ignorance is preferable to error; he is less remote from the truth who believes nothing, than he who believes what is wrong."[19]

I need a guide to help me think this through. Another thing Lessig said that I liked: in this place, we need to listen to the lunatics and the crazies.[20]

---

16. *See* Jack L. Goldsmith, *Against Cyberanarchy*, 65 U. CHI. L. REV. 1199, 1239-40 (1998) (arguing that cyberspace regulation is legitimate because, like real space activity, it involves "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").

17. SOREN KIERKEGAARD, CONCLUDING UNSCIENTIFIC POSTSCRIPT TO PHILOSOPHICAL FRAGMENTS pt. 2, 187 (Howard V. Hong & Edna H. Hong eds. & trans., 1992).

18. Letter from Thomas Jefferson to Marquis de Chastllux (June 7, 1785), *reprinted in* 5 THE WRITINGS OF THOMAS JEFFERSON 3, 7 (Andrew A. Lipscomb & Albert Ellery Bergh eds. 1905) (discussing the theory that animals degenerate in the New World).

19. THOMAS JEFFERSON, NOTES ON THE STATE OF VIRGINIA, *reprinted in* THOMAS JEFFERSON, WRITINGS 123, 156 (Merrill D. Peterson ed., 1984) (discussing theories accounting for the appearance of fossilized sea shells in the mountains of Kentucky); *see also* Letter from Thomas Jefferson to James Madison (July 19, 1788), *reprinted in* 7 THE WRITINGS OF THOMAS JEFFERSON 73, 74 (Andrew A. Lipscomb & Albert Ellery Bergh eds., 1905) ("It is always better to have no ideas than false ones and to believe nothing than what is wrong.").

> I find impossibly difficult the range of new questions raised about monitoring action in cyberspace—profiling, and preference matching, and cookie collection, and experience tailoring—these are hard questions because in an important sense, they are new questions. . . .
>
> In this context, what we need—we, who aspire to be academics, who aspire to work things out—is permission to work things out freely. We need a space where we can experiment with ideas without condemnation reigning down around us. . . . [T]his is cyberspace, where no one has the right to declare truth is on their side; and where no one should claim the right to condemn. This is a space where we need the space to try out different, and even heretical, ideals. In this space, the heroes will be lunatics[21] . . . or crazies[22] . . . . We need to imagine these problems differently, and we need to encourage people to imagine them differently. . . .[23]

The problem with lunatics and crazies, though, is that sometimes they're just lunatics and crazies—only on rare occasions are they prophets. Which lunatic should we listen to? Which crazy is telling us something important, and which crazy is just crazy?

Thomas Jefferson will serve as the "lunatic" from whom I will seek some guidance. Not a lunatic, you say? The "moonshine philosopher of Monticello" was a very odd character in many ways, his intellectual pursuits so varied—and, frankly, so bizarre—that we sometimes tuck them out of sight because they are so difficult to reconcile with the Jefferson with whom we are on more familiar terms. Pick up *Notes on the State of Virginia* sometime if you don't believe me.[24] *Notes* was the only book Jefferson published in his lifetime, and it is a most peculiar work, filled with astonishingly detailed descriptions of the New World's flora and fauna, the condition of its fisheries, the state of its soils, the depth of its rivers, and the height of its mountains.[25] Jefferson devoted twenty pages alone to comprehensive descriptions of the rivers of Virginia:

> [The] *Patowmac* is 7½ miles wide at the mouth; 4½ miles at Nomony bay; . . . 1¼ at Alexandria. Its soundings are, 7 fathom at the mouth; 5 at

---

20. Lawrence Lessig, *Foreword*, to Symposium, *Cyberspace and Privacy: A New Legal Paradigm?*, 52 STAN. L. REV. 987, 999 (2000).

21. "[L]unatics like David Brin [argue] that, in the transparent society, we give up on the tradition to hide . . . ." *Id.* (citing DAVID BRIN, THE TRANSPARENT SOCIETY 250-52 (1998)).

22. "[C]razies like Simson Garfinkel, who in a wonderful new book, *Database Nation*, is crazy enough to argue that a national databank run by the government might protect privacy better than a world without regulation of personal information." *Id.* (citing SIMSON GARFINKEL, DATABASE NATION 13-15 (2000)).

23. *Id.* at 998-99.

24. *See generally* JEFFERSON, *supra* note 19, at 123.

25. *See id.* at 127-325.

> St. George's island; . . . 3 at Swan's point, and thence . . . to the falls . . . 13 miles above Alexandria. These falls are 15 miles in length, and of very great descent, and the navigation above them for batteaux and canoes, is so much interrupted as to be little used.[26]

He catalogued all the known native plants of the New World, dividing them into four categories of his own devising—medicinal, succulent, ornamental, and those "useful for fabrication;" he compiled a list of the 101 species of birds known to live in Virginia—cross-referenced to the description of each species in the zoological works of Catesby and Buffon, and accompanied by profuse apologies for omitting other species which had not yet been described or classified; he tabulated five years of daily rainfall and temperature data from Williamsburg—along with an analysis of wind patterns during the same period; he listed all of the Indian tribes then known to be inhabiting Virginia and its environs, along with estimates of the population of each tribe, their location, and an extended comparative analysis of their languages.[27]

He filled his house up with all sorts of stuff—the world's largest and most complete private collection of plant seeds and animal skulls, for example.[28] He could, and at the drop of a hat would, expound for hours about the cultivation of the olive tree, or the soil preferences of the new varieties of grapes and rice that he introduced into the New World.[29] While serving as Ambassador to France, he had the complete carcass and skeleton of a moose shipped to him, where he had it reassembled in the ornate lobby of his residence at the elegant Hotel de Langeac.[30] He personally compiled grammars and vocabularies for over fifty Native American languages.[31] He painstakingly kept over five years of daily temperature, wind, and humidity readings at Monticello.[32] He recorded every year for over fifty years the date of the first appearance in the Spring of dozens of species of bird and bug.[33] He took three months off, while serving as America's first Secretary of State in the cabinet of George Washington, to go on a botanizing excursion in New England with his friend James Madison; he and Madison exchanged lengthy correspondence about the genitalia of the mole.[34] He was—and he said he was to anyone who asked—more excited about becoming President of the American Philosophical Society in 1796 than he was

---

26. *Id.* at 131.
27. *See id.* at 150-216.
28. *See, e.g.*, SILVIO A. BEDINI, THOMAS JEFFERSON: STATESMAN OF SCIENCE 362-66 (1990) (discussing the vast scientific material sent to Jefferson by the Louis & Clark expedition).
29. *See id.* at 169-71.
30. *Id.* at 149-51.
31. *Id.* at 376-77.
32. *See generally* JEFFERSON, *supra* note 19, at 200.
33. *See generally* BEDINI, *supra* note 28, at 468.
34. *See id.* at 220-21.

about becoming Vice-President that same year—more interested in tending his garden than serving as Chief Executive of the United States.[35]

On July 4, 1776, the only entry in his diary was the purchase of a new thermometer.[36]

He is *this close* to being a madman. If we did not know that this was the primary author of the Declaration of Independence, the founder of the University of Virginia, the first leader of America's first political party, and the third President of the United States, we would think he *was* a madman. Jefferson is like the brilliant, though eccentric, uncle who lives up in the spare room on the third floor, surrounded by all his junk, and we think about him, if we think about him at all, with a kind of bemused awe: Jeez! Look at all this stuff up here, willya! This guy's unbelievable!

But he was not, of course, *just* a madman. There was, as the cliché has it, method to his madness. Jefferson had a way of looking forward into a "new world" that looked as bizarre, and into a future that looked as incomprehensible, as they do today. It is easy to forget that Jefferson was born about forty miles from the edge of the known world; neither he nor anyone else on this side really knew what was on the other side (of the Blue Ridge Mountains). Jefferson, himself, thought that there were wooly mammoths—which had in fact been extinct for 10,000 years—roaming the forests of Ohio.[37] Many people—reasonable, intelligent people—believed there were cannibals out there, or perhaps Amazons, or buried cities of gold, or tribes that had uncovered the secret of eternal life.

If we are looking forward, thinking about how we should be making law in our new place, this language-place-that-is-no-place called cyberspace, we could do worse than to look backward to see how Jefferson looked forward, into his New World.

III. NEOLOGY AND ITS ENEMIES

Jefferson, it turns out, was enormously interested in, and had a great deal to say about, human language and about the control of human language.[38] No surprise there—Jefferson was enormously interested in, and had a great deal to say about, just about everything. But in a crowded field of contenders for the

---

35. *See generally id.* at 273-76, 307.
36. *See generally id.* at 73.
37. JEFFERSON, *supra* note 19, at 176-77; BEDINI, *supra* note 28, at 96.
38. Adrienne Koch, *Introduction* to THOMAS JEFFERSON, AN ESSAY ON THE ANGLO-SAXON LANGUAGE 152, 152 *in* THE LIFE AND SELECTED WRITINGS OF THOMAS JEFFERSON (Adrienne Koch & William Peden eds., Random House, Inc. 1944) (1798).

title "the subject about which Jefferson cared most," the study of language stands out—not, certainly, at the top of the list, but reasonably high up.

He was, among other things, America's first serious comparative linguist, one of the first people on either side of the Atlantic, for instance, to study the Anglo-Saxon language in a systematic way.[39] While a student at the College of William and Mary he began tracing the Anglo-Saxon roots of English words and arranging those roots alphabetically to produce a kind of Anglo-Saxon/English dictionary—the first of its kind.[40] His interest in Native American languages was, if anything, more intense. He devoted an entire chapter of *Notes on Virginia* to a preliminary comparative analysis of the Amerindian languages, distinguishing the different original stocks of Indians on the basis of their languages and establishing the connection of the American Indians with the inhabitants of eastern Asia,[41] and he compiled, over a thirty-year period, what was, without question, the most comprehensive collection of American Indian

---

39. THOMAS JEFFERSON, AN ESSAY ON THE ANGLO-SAXON LANGUAGE (1798), *reprinted in* THE LIFE AND SELECTED WRITINGS OF THOMAS JEFFERSON 157-170 (Adrienne Koch & William Peden eds., 1944) (1798).

40. *Id.* at 152. "I pretend not to be an Anglo-Saxon scholar," he wrote,

> [b]ut from an early period of my studies, indeed, I have been sensible of the importance of making it a part of the regular education of our youth . . . I was led to set a due value on the study of the Northern languages, and especially of our Anglo-Saxon, while I was a student of the law, by being obliged to recur to that source for explanation of a multitude of law-terms . . . and at different times, as leisure permitted, I applied myself to the study of it, with some degree of attention. But my life has been too busy. In pursuits of another character to have made much proficiency in this.

Id. at 168; *see also* BEDINI, *supra* note 28, at 48 (stating Jefferson "was among the first in the American colonies and in the English-speaking nations to make a study of the Anglo-Saxon language. After tracing thousands of English words to their ancient sources in Old English, he arranged the resulting roots alphabetically to form the first Anglo-Saxon dictionary").

41. *See* JEFFERSON, *supra* note 19, at 218-32. Jefferson concluded, based upon the large number of "radical tongues" found on the American continent, that the American Indians might, in fact, be more ancient than the Asiatic peoples and that, accordingly, the original home of mankind might have been in America. *Id.* at 227.

> [I]mperfect as is our knowledge of the tongues spoken in America, it suffices to discover the following remarkable fact. Arranging them under the radical ones to which they may be palpably traced, and doing the same by those of the red men of Asia, there will be found probably twenty in America for one in Asia, of those radical languages, so called because, if they were ever the same, they have lost all resemblance to one another. A separation into dialects may be the work of a few ages only, but for two dialects to recede from one another till they have lost all vestiges of their common origin, must require an immense course of time . . . .

Id.

vocabularies then in existence[42]—although a bizarre and unfortunate turn of events prevented him from completing and publishing his analysis of these vocabularies.[43]

---

42. *See* Letter from Thomas Jefferson to Benjamin Hawkins (Mar. 14, 1800), *reprinted in* 11 THE WRITINGS OF THOMAS JEFFERSON 161 (Andrew A. Lipscomb & Albert Ellery Bergh eds., Thomas Jefferson Mem'l Ass'n 1905).

> I have . . . never failed to avail myself of any opportunity which offered of getting their [American Indian] vocabularies. I have now made up a large collection, and afraid to risk it any longer, lest by some accident it might be lost, I am about to print it. But I still want the great southern languages, Cherokee, Creeks, Choctaw, Chickasaw.

Id.

> Very early in life . . . I formed a vocabulary of such objects as, being present everywhere, would probably have a name in every language; and my course of life having given me opportunities of obtaining vocabularies of many Indian tribes, I have done so on my original plan, which though far from being perfect, has the valuable advantage of identity, of thus bringing the languages to the same points of comparison . . .

Letter from Thomas Jefferson to John Sibley (May 27, 1805), *reprinted in* 11 THE WRITINGS OF THOMAS JEFFERSON 79-80 (Andrew A. Lipscomb & Albert Ellery Bergh eds., Thomas Jefferson Mem'l Ass'n 1905).

43. In 1809, Jefferson returned to Monticello from Washington, D.C., having served his two terms as President of the United States. In a letter to Dr. Benjamin Barton, who had written to Jefferson requesting information on the grammars and vocabularies of certain Native American tribes, he described the "irreparable misfortune" that made it impossible to send Barton "any part or the whole of the Indian vocabularies which I had collected." Letter from Thomas Jefferson to Benjamin Barton (Sept. 21, 1809), *reprinted in* 12 THE WRITINGS OF THOMAS JEFFERSON 312-13 (Andrew A. Lipscomb & Albert Ellery Bergh eds., Thomas Jefferson Mem'l Ass'n 1905).

> I have now been thirty years availing myself of every possible opportunity of procuring Indian vocabularies to the same set of words; my opportunities were probably better than will ever occur again to any person having the same desire. I had collected about fifty, and had digested most of them in collateral columns, and meant to have printed them the last year of my stay in Washington.

Id. at 312. The final piece of this work was going to be the vocabularies for the Western tribes that Meriwether Lewis had compiled on the Lewis and Clark expedition.

> But not having yet digested Captain Lewis's collection, nor having leisure then to do it, I put it off till I should return home. The whole, digest as well as originals, were packed in a trunk of stationary, and sent round by water with about thirty other packages of my effects. [W]hile ascending the James River, this package, on account of its weight and presumed precious contents, was singled out and stolen. The thief being disappointed on opening it, threw into the river all its contents, of which he thought he could make no use. Among these were the whole of the vocabularies. Some leaves floated ashore and were found in the mud; but these were very few, and so defaced by the mud and water that no general use can ever be made of them.

Id. at 312-13. He had, after receiving Barton's letter, looked through the salvaged material:

> [A]nd I was very happy to find, that the only morsel of an original vocabulary among them, was Captain Lewis's [vocabulary] of the Pani language, of which you

Jefferson also had strong views about what was a major intellectual debate over language in the eighteenth century. He was, he declared, "no friend to what is called Purism, but a zealous [friend] to the Neology which has introduced these two words"—that is, "purism" and "neology"—"without the authority of any dictionary."[44]

> I consider [Purism] as destroying the nerve and beauty of language, while [Neology] improves both, [and] *is the only way to give to a language copiousness and euphony.* Without it we should still be held to the vocabulary of Alfred or of Ulphilas; and held to their state of science also; for I am sure they had no words which could have conveyed the ideas of oxigen (*sic*), cotyledons, zoophytes, magnetism, electricity, hyaline, and thousands of others expressing ideas not then existing . . . .[45]

A language, he wrote, "cannot be too rich. The more copious, the more susceptible of embellishment it will become."[46] He practiced what he preached;

> say you have not one word. I therefore enclose it to you as it is, and a little fragment of some other, which I see is in his hand writing, but no indication remains on it of what language it is. It is a specimen of the condition of the little which was recovered.
>
> I am the more concerned at this accident, [because,] of the two hundred and fifty words of my vocabularies, and the one hundred and thirty words of the great Russian vocabularies of the languages of the other quarters of the globe, seventy-three were common to both, and would have furnished materials for a comparison from which something might have resulted. Although I believe no general use can ever be made of the wrecks of my loss, yet I will ask the return of the Pani vocabulary when you are done with it. Perhaps I may make another attempt to collect, although I am too old to expect to make much progress in it.

Id.

44. Letter from Thomas Jefferson to John Waldo (Aug. 16, 1813), *reprinted in* THOMAS JEFFERSON, WRITINGS 1294 (Merrill D. Peterson ed., 1984) [hereinafter Letter, Jefferson to Waldo (Aug. 16, 1813)].

45. *Id.*; Letter from Thomas Jefferson to John Adams (Aug. 15, 1820), *reprinted in* THOMAS JEFFERSON, WRITINGS 1440 (Merrill D. Peterson ed., 1984).

46. Letter from Thomas Jefferson to J. Evelyn Denison, M.P. (Nov. 9, 1825), *reprinted in* THOMAS JEFFERSON, WRITINGS 1502 (Merrill D. Peterson ed., 1984). Today we would call this phenomenon "positive feedback"—a term not in use in Jefferson's time—the more language is embellished, the more susceptible it becomes to embellishment; the more it grows, the more it can grow, and so on. The paradigm for Jefferson was ancient Greek, a language that he considered the most "ductile and copious" of all because it was "modifiable almost *ad infinitum.*" Letter from Thomas Jefferson to John Adams (Aug. 15, 1820), *reprinted in* 15 THE WRITINGS OF THOMAS JEFFERSON 272 (Andrew A. Lipscomb & Albert Ellery Bergh eds., 1905).

> Their rule was, that whenever their language furnished or adopted a root, all its branches, in every part of speech, were legitimated by giving them their appropriate terminations. {adelphos} ["brother"], {adelphe}["sister"], {adelphidion} ["little brother"], {adelphotes} ["brotherly affection"], {adelphixis} ["brotherhood"],

this "zealous friend to Neology" was himself a neologist of the highest rank.[47] The Oxford English Dictionary (OED) credits Jefferson with the first recorded use of over sixty words, including such beauties as: Anglophobia, authentication, belittle, bibliograph, catenary, countervailing, doll-baby, indecipherable, inheritability, post-note, public relations, reticulate, sanction, and vomit-grass.[48]

Proclaiming oneself a "friend to neology" hardly seems particularly noteworthy—who, after all, is an *enemy* of new words? It looks like another of Jefferson's quaint intellectual quirks, one of the weird windmills against which he spent so much of his time tilting.

But this was serious business. How was language to be regulated, and by whom? These were, at the time, new questions, because if you believed in the historical accuracy of the Biblical story of the Tower of Babel—as many people

---

> {adelphidoys} ["nephew"], {adelphikos} ["brotherly,"adj.], {adelphizo} ["to adopt as a brother"], {adelphikos} ["brotherly," adv.]. *And this should be the law of every language.* Thus, having adopted the adjective *fraternal*, it is a root which should legitimate *fraternity, fraternation, fraternisation, fraternism,* to *fraternate, fraternise, fraternally.* And give the word *neologism* to our language, as a root, and it should give us its fellow substantives, *neology, neologist, neologisation*; its adjectives, *neologous, neological, neologistical*; its verb, *neologise*; and adverb, *neologically.*

Id. at 272-73 (emphasis in original). Languages appear to share this positive feedback growth characteristic with an astounding number of other growth processes—trees, for example, and sandpiles, and cities, and organic molecules. But more on that at another time.

47. Letter from Thomas Jefferson to Joseph Milligan (Apr. 6, 1816), *reprinted in* THE LIFE AND SELECTED WRITINGS OF THOMAS JEFFERSON 662 (Adrienne Koch & William Peden eds., 1944) (outlining Jefferson's thoughts on neologism).

48. *Authors in the OED: Jefferson* <http://etext.virginia.edu/jefferson/oed/> (accessed Mar. 25, 2001). The complete list of Jeffersonian neologisms—as recorded by the OED—is as follows:

amovability	bountied	enregistry	public relations
Angloman	bread-stuff	indecipherable	retard
Anglomania	catenary	inheritability	reticulate
Anglophobia	circumambulator	intercolonnation	sanction
Authentication	countervailing	non-intercourse	snowberry
Belittle	discountable	palinodial	tolerablish
Bibliography	doll-baby	plexi-chronometer	unconciliatory
Bonapartism	drayage	post-note	vomit grass

See id.

Interestingly, Jefferson is—according to the OED—the first *and last* user of four of the words on the above list—Angloman, enregistry, intercolonnation, and plexi-chronometer. *Id.* He would have been particularly disappointed, one suspects, that "Angloman" didn't catch on—he used it—incessantly—to describe those like the Arch-Fiend, Alexander Hamilton in the iron grip of English customs and English ways of thinking. AUTOBIOGRAPHY OF THOMAS JEFFERSON, *in* THE LIFE AND SELECTED WRITINGS OF THOMAS JEFFERSON 76 (Adrienne Koch & William Peden eds., 1944) (discussing Jefferson's thoughts on the misleading of the patriots by "Anglomaniacs.").

did, of course—the question of how to regulate human language never arises. If the single human language—the Ur-language—was, in a single cataclysmic moment, split apart into hundreds of different and mutually incomprehensible tongues and fixed forever, there is nothing *to* regulate. But, by the Eighteenth century many people were beginning to understand and appreciate that languages *change continuously over time.*[49] Looking backwards, languages had a *past*. The Anglo-Saxon of William the Conqueror, and the English of Chaucer, and the English of Shakespeare, and the English of Edmund Burke were all connected by an unbroken chain of intermediates. The same was true of Dutch, German, Norwegian, and the languages of the Native American tribes.[50]

And if languages have a past, then, looking forward, they have a *future*, they will not, tomorrow, be what they are today. Who controls that change? How can we be sure that change would be in the right direction? How will people continue to talk to one another if languages are continuously splitting apart? With too many neologists neologistically neologizing, how will we continue to understand one another? Who is in charge of all this?

How new words and new usages become introduced and incorporated into the language "without the authority of any dictionary" was a matter of some contention in the intellectual life of the time.[51] Neology actually *had* its enemies—eminent ones at that:

> I have been not a little disappointed, and made suspicious of my own judgment, on seeing the Edinburgh Reviews, the ablest critics of the age, set their faces against the introduction of new words into the English language;

---

49. *See generally* R.C. ALSTON, A BIBLIOGRAPHY OF THE ENGLISH LANGUAGE FROM THE INVENTION OF PRINTING TO THE YEAR 1800 (1966) (compiling a record of writings that traces the progress of the English language through the Eighteenth century); *see also* JEFFERSON, *supra* note 39, at 161-65 (discussing how languages are changed by evolution and circumstance).

50. Languages, in other words, *evolve*. Jefferson realized that one could determine by a comparison of their vocabularies: "[h]ow many ages have elapsed since the English, the Dutch, the Germans, the Swiss, the Norwegians, Danes and Swedes have separated from their common stock." It is a strikingly modern conception—the idea that languages *could be* unraveled in this way, that from a study of *existing* human languages we could construct what we would now call a "phylogenetic tree" showing the actual historical divergence of one language, and one people, from another. It is difficult, from our exalted post-Darwinian Twenty-first century perch, to appreciate just how radical this idea was at the time. That languages do not merely evolve but they evolve *systematically*—that the differences between two languages could serve as an accurate guide to the amount of time that had elapsed since they shared a common origin—was an idea that only a crazy or a lunatic could hold. And yet, of course, it was, as we know now—largely—correct. The effort to uncover the 'proto-language'—and indeed to debate whether such a thing ever existed—goes on with, if anything, more vigor than ever. *See generally* STEPHEN PINKER, THE LANGUAGE INSTINCT 332-69 (1994) (discussing the systematic evolution of language).

51. Letter, Jefferson to Waldo (Aug. 16, 1813), *supra* note 44, at 1295.

> they are particularly apprehensive that the writers of the United States will adulterate it.[52]

There was a view—and it was a serious view, held by serious and reasonable people—that languages are too important, too indispensable as vehicles for commerce and of learning, to leave control of their development to the uncoordinated chaos of the mob.[53] Development of that most characteristic Eighteenth century work—the dictionary[54]—was impelled precisely by a desire to "fix" a language in its then-current form, constraining its development within prescribed and more orderly bounds. Samuel Johnson himself admitted that he had begun his magisterial *Dictionary of the English Language* with "the prospect of fixing our language" in full view, and he even "flattered himself for a while," that he would succeed in that effort—though he later came to the realization that this was an "expectation which neither reason nor experience could justify;"[55] language being "the work of man, a being from whom permanence and stability cannot be derived," the *Dictionary* could, at most, only "curb the lust for innovation."[56]

And of course, there was the Académie Française, an institution Jefferson knew intimately from his years in France and the most obvious manifestation of this point of view. The Académie's goal, as Jefferson himself put it, was to "arrest the progress of [the French] language by fixing it to a Dictionary, outside of which no word was ever to be sought, used, or tolerated."[57] The Académie Française began life as an informal literary circle, meeting in Paris in the early 1630s to discuss rhetoric and criticism.[58] But, first, the Church—in the form of

---

52. *Id.*

53. *See id.* (discussing the Edinburgh Review's opposition to new words in the English language).

54. The Académie Française first published the dictionary of the French language in 1694. ROBERT L. COLLISON, DICTIONARIES OF FOREIGN LANGUAGES 2 (1955) (noting that Cesar-Pierre Richelet was the first to compile a French dictionary shortly before the Académie Française). John Kersey's A *New English Dictionary*—the first compilation of the meaning of English words put together by a professional lexicographer—appeared in 1702. THE DICTIONARY FROM 1604 TO 1828 (Britannica CD-Rom Edition, 1999-2000). Nathan Bailey's spectacularly successful *Universal Etymological English Dictionary* appeared in 1721, followed by the first edition of Samuel Johnson's magisterial *Dictionary of the English Language*, in 1755. *See generally id.*

55. Encyclopedia Britannica, *English Language, Historical Background, Age of Johnson* <http://www.britannica.com/eb/article?eu=118116&hook=603947#603947.hook> (accessed Apr. 5, 2001).

56. Encyclopedia Britannica, *Dictionary, Historical Background, From 1604 to 1828* <http://www.britannica.com/eb/article?eu=108521&tocid=31960#31960.toc> (accessed Apr. 5, 2001).

57. Letter, Jefferson to Waldo (Aug. 16, 1813), *supra* note 44, at 1298.

58. *See L'histoire* <http://www.academie-francaise.fr/histoire/index.html> (accessed Mar. 25, 2001).

Cardinal Richelieu's formal recognition of the Académie in 1632—and then the State—in the form of the grant of a royal patent to the Académie in 1635—gave it formal blessing, and in 1672 the State took it over completely: henceforth King Louis XIV and his successors would serve as the 'protecteur' of the Académie—and therefore of the French language itself—and the Académie's decrees on usage and grammar and rhetoric would be backed by the force of law.[59]

The notion that you could, or should, control the growth of human language in this way seems a bit ridiculous—to us, now, in retrospect. Nobody seriously argues anymore that the Académie Française has the authority, or should be given the power, to fix the French language and to enforce *by law* its dictates on French speakers—do they? But looking *forward*, in the eyes of the participants themselves, it was not ridiculous at all. It seems so, now, because a *different* view—one more consonant with Jefferson's—has triumphed, and has become, over time, a kind of self-evident truth. In a Jeffersonian world, curb the "lust for innovation" in language and you destroy its beauty and its utility. The *absence* of centralized State control will best ensure the beauty, and the power, of English. When a reviewer had commented upon the "location" of certain subjects—military and naval architecture—within the curriculum for "Pure Mathematics" in Jefferson's plans for the University of Virginia,[60] Jefferson wrote to John Adams:

> For this word *Location*, see [the Dictionaries of] Bailey, Johnson, Sheridan, Walker, etc. But if dictionaries are to be the arbiters of language, in which of them shall we find *neologism*? No matter. It is a good word, well sounding, obvious, and expresses an idea which would otherwise require circumlocution. The Reviewer was justifiable (*sic*), therefore, in using it; although he noted . . . as 'unauthoritative' [the words] *centrality*, *grade*, *sparse*; all which have been long used in common speech and writing.

---

59. *See id.* <http://www.academie-francaise.fr/histoire/index.html> (accessed Mar. 25, 2001); *see also Dictionnaire de l'Académie Française*: Base Enchantillon Analytique <http://www.chass.utoronto.ca/~wulfric/academie/dafeng.html> (accessed Mar. 25, 2001). The French, Jefferson happily noted, had seen the error of their ways, doing away with the Académie's royal charter and removing it from State control in 1793. *See L'histoire* <http://www.academie-francaise.fr/histoire/index.html> (accessed Mar. 25, 2001). Jefferson later remarked:

> What a language has the French become since the date of their revolution, by the free introduction of new words! The most copious and eloquent in the living world . . . at this time it is the language in which every shade of idea, distinctly perceived by the mind, may be more exactly expressed, than in any language at this day spoken by man.

Letter from Thomas Jefferson to John Adams (Aug. 15, 1820), *reprinted in* THOMAS JEFFERSON, WRITINGS 1440, 1442 (Merrill D. Peterson ed., 1984).

60. Letter from Thomas Jefferson to John Adams (Aug. 15, 1820), *reprinted in* THOMAS JEFFERSON, WRITINGS 1440, 1442 (Merrill D. Peterson ed., 1984).

> Dictionaries are but the depositories of words already legitimated by usage. Society is the workshop in which new ones are elaborated. When an individual uses a new word, if ill formed, it is rejected in society; if well formed, adopted, and after due time, laid up in the depository of dictionaries.[61]

Society, not government—and, for Jefferson, there was no more important distinction than the one between society and government[62]—is the better workshop for the development of new words.

This debate had practical implications; new and unanticipated circumstances, new knowledge, and new forms of social organization *require* new words, new dialects, and new languages,[63] and nowhere would we more need a "ductile and copious" language than in the new world:

> Necessity obliges *us* to neologize. . . . The new circumstances under which we are placed, call for new words, new phrases, and for the transfer of old words to new objects. . . . So great growing a population [as ours], spread over such an extent of country, with such a variety of climates, of productions, of arts, must enlarge their language, to make it answer its purpose of expressing all ideas, the new as well as the old.[64]

The "improvement of English by the free use of its faculties" he called it.[65]

> An American dialect will therefore be formed. . . . [They] will not adulterate or disfigure the English language. . . . [The] *variety of dialects will constitute the riches of our language.* The greater the degree[of enlargement] the more precious will it become as the organ of the

---

61. *Id.*

62. *See generally* Gordon S. Wood, *Thomas Jefferson, Equality, and the Creation of a Civil Society*, 64 FORDHAM L. REV. 2133, 2142-46 (1996) (discussing Jefferson's belief that a civil society could create a natural ordering of itself).

63. A wonderful example of new circumstances requiring new language impressed itself on Jefferson's mind during his visit to revolutionary France in the early 1790s. Letter, Jefferson to Waldo (Aug. 16, 1813), *supra* note 44, at 1294. Just as the English had created "legal French" during the thirteenth through sixteenth centuries, the French had needed, and had created, a kind of "Parliamentary English" ("anglais parliamentaire"):

> The institution of parliamentary assemblies in [France in] 1789, for which their language had no apposite terms or phrases (as having never before needed them) first obliged them to adopt the Parliamentary vocabulary of England. . . . [O]ther new circumstances called for corresponding new words; until by the number of these adopted, and by the analogies for adoption which they have legitimated, I think we may say with truth that a Dictionaire Neologique of these would be half as large as the dictionary of the academy. . . .

Id. at 1298-99 (order of quotation altered by author).

64. *Id.* at 1295-96, 1300 (emphasis added) (order of quotation altered by author).

65. *Id.*

> development of the human mind. . . . *Not by holding fast to Johnson's Dictionary; not by raising a hue and cry against every word he has not licensed; but by encouraging and welcoming new compositions of its elements* . . . .[66]

IV. LOOKING FORWARD

So what does all this tell me? About cyberspace?

It tells me that the debate about the control of the development of language has a long and distinguished pedigree—useful to know, as we seem to be embroiled in it once again. The battle over open source software is a battle about who controls the languages of cyberspace. The battle over Napster's liability is a battle about who controls the languages of cyberspace. The battles over mandated geographical filtering, and encryption policy, and the contents of the domain name system's root server, all are battles about who controls the languages of cyberspace. We, too, will need new dialects for new circumstances. Who will decide whether, and how, we will bring them into being?

It tells me to watch out for arguments that languages are too important, too indispensable as vehicles for commerce and of learning to leave their growth and future development entirely to the uncoordinated chaos of the mob. It tells me that sometimes the answer to the question "who is in charge?" can best be answered "nobody" or, "everybody." It tells me that the notion that we need centralized control over the growth of language is likely to be as self-evidently wrong in prospect as it is in retrospect. It tells me that open source software might actually be better software—more "ductile and copious"—than software produced within a system relying on proprietary control, more ductile and copious.[67]

---

66. *Id.* at 1295-96, 1299 (order of quotation altered by author). Some forty years later, Walt Whitman thought the effort to create a new language for new circumstances had been a successful one:

> The English language befriends the grand American expression . . . it is brawny enough and limber and full enough. On the tough stock of a race who through all change of circumstance was never without the idea of political liberty, which is the animus of all liberty, it has attracted the terms of daintier and gayer and subtler and more elegant tongues. It is the powerful language of resistance . . . it is the dialect of common sense. It is the speech of the proud and melancholy races and of all who aspire. It is the chosen tongue to express growth faith self-esteem freedom justice equality friendliness amplitude prudence decision and courage. It is the medium that shall well nigh express the inexpressible.

WALT WHITMAN, WALT WHITMAN'S LEAVES OF GRASS, THE FIRST (1855) EDITION 22-23 (Malcolm Cowley ed., 1960).

67. *See* Eben Moglen, *Anarchism Triumphant: Free Software and the Death of Copyright* <http://emoglen.law.columbia.edu/publications/anarchism.html> (accessed Mar. 25, 2001).

And it tells me that we may, perhaps, need ICANN (the Internet Corporation for Assigned Names and Numbers) to manage the Internet's Domain Name System (DNS) about as much as we needed the Académie Française.

A few words of background about ICANN.[68] The DNS consists of a series of databases and a consensus. The machines whose job it is to move messages around—the Internet routers—require that every message have an IP number attached to it, so that the routers can move it along to its intended destination. That is just the rule of the language the routers speak: If a message doesn't have an IP number attached to it, it will be discarded. The databases link names–Temple.edu, microsoft.com, whitehouse.gov, aclu.org, lcfc.co.uk–with numbers, the unique IP addresses assigned to each machine, so that a request for www.temple.edu or a messsge to janedoe@microsoft.com can be passed along the network to the right place.

The consensus is a consensus among Internet service providers that particular machines hold the "authoritative" databases linking names with numbers. As long as all ISPs look to the same databases to resolve names into numbers, a message to www.temple.edu will reach the same machine no matter from where on the network, or through which ISP, it originates.

Who controls these databases? What holds the consensus about the authoritative databases together? In the early days of the Internet, no one outside the small cadre of engineers that was putting the system together cared very much about the answers to these questions. The United States government had long operated the root server—a holdover from the days that the Internet was a Defense Department project—and had worked with something known as the Internet Assigned Numbering Authority (IANA), a loosely-structured voluntary organization led by the late Jon Postel, to organize the necessary data and to see to it that the hierarchy of machines and databases in this system were being properly managed.

As long as it all seemed to be working smoothly enough, who cared what was going on behind the Wizard's curtain? Who noticed when, in 1992, as the extraordinary growth of the Internet began to outstrip the management capacity of this largely volunteer operation, the United States government engaged the private firm Network Solutions, Inc. (NSI) to manage and maintain both the root

---

68. The ICANN story has been told in detail elsewhere. *See, e.g.*, A. Michael Froomkin, *Wrong Turn in Cyberspace: Using ICANN to Route Around the ACPA and the Constitution*, 50 DUKE L.J. 17 (2000) (available at <http://personal.law.miami.edu/~froomkin/articles/icann-main.pdf>); Milton Mueller, *ICANN and Internet Governance: Sorting Through the Debris of 'Self-Regulation,'* 1 INFO. 497 (1999) (available at <http://www.icannwatch.org/archive/mueller_icann_and_internet_governance.pdf>). Interested readers are invited to visit *ICANNWatch* for continuing discussion and debate about the ICANN situation. *ICANNWatch* <http://www.icannwatch.org> (accessed Mar. 25, 2001).

server—the database at the top of the interlocking hierarchy of databases comprising the DNS—and the databases for the COM, ORG, and NET domains?

But, slowly, as more and more people began to realize that the Internet was a really big deal and that these funny "domain name" things might actually be of real value, more and more people started to pay attention to all of this, and this arrangement began to come under increasing fire from many quarters. The government and NSI found themselves increasingly under attack, from within and without the Net community, by those challenging NSI's apparent monopoly control over these increasingly valuable top-level domains, by trademark owners concerned about domain names that appeared to infringe upon their valuable trademark rights, and others.

In 1996, as the expiration date of the government's contract with NSI approached, the Commerce Department announced that the government wanted to get out of the DNS management business entirely. The government proposed transferring responsibility for management and operation of the DNS, including management of the root server, to a private non-profit corporation controlled by Internet stakeholders themselves.[69] ICANN, a California non-profit corporation, was formed in 1998 in response to this privatization proposal and, by contract with the Department of Commerce executed in September of that year, took over responsibility for operation of the DNS and retains it today.

During this period, nobody, as far as I could tell, took seriously the idea that the Commerce Department might do what it ordinarily does when a contract expires: break out the champagne, shake hands, and walk away. Too much was at stake, we were told; the Internet was too big, too important, too valuable, too mission-critical, to permit it to descend into the chaos that would somehow inevitably follow the government's withdrawal from the DNS scene. According to the Commerce Department's Statement of Policy:

> *Management of number addresses is best done on a coordinated basis.* . . . As technology evolves, changes may be needed in the number allocation system. These changes should also be coordinated. Similarly, coordination of the root server network is necessary if the whole system is to work smoothly. While day-to-day operational tasks, such as the actual operation and maintenance of the Internet root servers, can be dispersed, *overall policy guidance and control of the TLDs and the Internet root server system should be vested in a single organization* that is representative of Internet users around the globe.

---

69. Management of Internet Names and Addresses, 63 Fed. Reg. 31741 (Dep't Commerce June 10, 1998) (available at <http://www.ntia.doc.gov/ntiahome/domainname/6_5_98dns.htm>).

> The U.S. Government should end its role in the Internet number and name address system *in a manner that ensures the stability of the Internet.* The introduction of a new management system *should not disrupt current operations or create competing root systems.* During the transition and thereafter, *the stability of the Internet should be the first priority of any DNS management system.*[70]

I suppose the ICANN experiment has been a success. The Internet, as far as I can tell, has continued to be stable. But stability in some things—in language things—comes at a price, and if it is our *highest* priority, the price will be a correspondingly high one. Though I am rarely accused of downplaying the significance of the Internet, it is not bigger, or more important, or more valuable, or more mission-critical, than the languages we speak. This bit of code/architecture—the language of the DNS—can lose its copiousness and euphony if we are not careful.

Or, rather, if we are *too careful*. Lon Fuller spoke of the law

> act[ing] as a gardener who prunes an imperfectly growing tree in order to help the tree realize its own capacity for perfection. This can occur only when all concerned genuinely want the tree to grow and to grow properly. Our task is to make them want this.[71]

If we want the DNS tree to "realize its own capacity for perfection," we may need to think more about, and appreciate more, why it grows at all, and how it grows, and how it might grow most luxuriantly.

---

70. *Id.* at 31749 (emphasis added).

71. Lon L. Fuller, *Adjudication and the Rule of Law*, 54 PROC. OF THE AM. SOC'Y OF INT'L L. 1, 8 (1960).