

But then again, to have derived this problematic relationship of productionist metaphysics to the passion of sharing knowledge from the experience of one dilettante on the internet might be far less convincing than the rich idiom of philosophy. Nonetheless, I let it stand as an indication that these idioms—these researches— are not removed from one another, that the research of philosophy cannot proceed without the demands of sharing and communicating it, as difficult as that is, with absolute openness.

2.10 K. Geek programs law

***opensource.org and The Free Software Foundation Further Distinguished —
opensource.org attacks FSF — Richard Stallman Explained — FSF's veritable
Political Action contrasted with Stallman's Incessant Talk — FSF critiqued —
Distinction between Technical and Non-technical Considered as A Major
Problem --FSF attacked by opensource.org, Again — opensource.org is called
Disingenuous by the Author***

The difference between Sean's experience of the internet and the story of opensource.org is less a difference of philosophical import than simple the difference between experience and marketing. Sean's interest in the history of open source and free software wavers between memories of exclusion and a desire to apply some of these same principles of "giving back" to the structure of Amicas. Sean and Adrian have often considered the possibilities of openness— whether that be the openness of Java and its corporate transparency (even if it remains a proprietary specification) or the more radical openness of the Free Software Foundation. Opensource.org is involved in an attempted de-politicization of a model of software development that works only because it is based on the political and ethical sense, however inarticulate, that what keeps it going is openness and trust, not exclusion. In order to understand this relationship in more detail, it is necessary to understand what it means for source to be open, or for software to be free.

The discovery of “open source” and the self-creation of its tradition can be understood as a specific response to a very real set of concerns that have only recently become apparent, as a result of the commercialization and growth of the internet. Part of the motivation behind opensource.org is to make explicit that the basic standard technologies of the internet are in fact all developed according to the ‘open source’ way, and therefore to make it clear that there is a conflict between these ‘standards’ (and the process of setting them) and those of any given corporation that might also create similar technologies for networking and sharing information. There is actually only one corporation at issue here—Microsoft— even if it is always treated as representative of corporate behavior in general.⁷⁹ Opensource.org recognizes that there is in fact a significant threat that the internet itself will become the object of a corporate battle; that it will “balkanize”⁸⁰ as the basic technologies, tools and protocols are replaced by proprietary technologies.

However, opensource.org represents this conflict as a purely technical and economic one. They insist that what is truly great about ‘open source’ is that it is a better software development model. If ‘scale and convention’ has shown anything, it should be that standards are never just a techno-economic issue, but already a political one. Opensource.org represents the issue as a technical one because its members understand that the language of politics and rights is, for reasons that are much larger than the world of software development, incommensurable with the language of economic efficiency and technical superiority in the context of decision making. To oppose corporate ownership of software by asserting a political principle (as in the case of Richard Stallman’s political consistency) is to concede the economic and technical issue (insisting on politics does not allow you to say: “it works”). But the alternative they represent is to engage in all kinds of

⁷⁹ Though the possibility that Microsoft could become the literal owner of the internet is currently not outside the realm of possibility— and it was this revelation that the “Halloween Memos” contained. “Embrace, extend, extinguish” is the memorable tag from the Microsoft Halloween memos, that refers to the process by which the company can take an existing standard, add useful and useless features to it, and then make their version incompatible with the one it is derived from, hopefully bring all of the addicted users with them. In this, they are not alone, they simply have such a huge installed user base that it proves spectacularly effective when it works.

⁸⁰ A word popularized in this context by Mark Pesce, in an article that discusses “balkanization” by XML through the use of corporate, or more importantly for this metaphor, nationally or professionally specific tags.

bordering, excluding and defining— activities anathema to both the spirit of openness and to the actually existing openness of the IETF, or any of the software projects they claim to represent— in order to offer up “open source”, the entire set of programmers who contribute to free software and even openness itself, as a better model of economic efficiency and the best bet for technical superiority in a wholly corporate world into which they throw themselves with the giddy fanaticism of converts.

Nonetheless we have already seen that there are politics lurking in the rhetoric and the actions of opensource.org, leaving them looking like little more than a self-righteous version of Microsoft, a disingenuous coup in the name of an openness it does not possess. The “user” is constantly referenced as the beneficiary of this unpolitical revolution, but it is a particular and highly skilled user at issue, namely, the corporate user. Of course, this can always be sold as a kind of VooDoo Politics, what’s good for corporations is good for You, after all, Corporations are People Too. But the disingenuousness of this group is deeper than cynicism can reach, and more dangerous. As we will see thanks to the hyperbolic writings of Larry Lessig {Section L below}, this disingenuousness risks the very foundations of politics and of the very possibility of political participation, which has become the intersection of law— in its local, national, and international forms, especially the relationship between contract law and intellectual property law— and standards conceived of as implemented standards, standards that work, that is, the software and protocols that the internet consists of. At stake is the relationship between sharing knowledge, and reconceiving ownership as a contract relationship that sets the terms of this sharing.

2.10.1 “The Last True Hacker,” or the difference between political speech and political action

The recapitulation that this word signals, from the disintegration of nations to the integration of the internet, has

Richard Stallman, of course, is the hero of Free Software. His place in the pantheon secured,⁸¹ Stallman's politics remain the kind of outspoken consistency and contrariness that more typically populate Hollywood movies. Stallman is pure nerd. His apparent hagiographer, Steven Levy is less charitable: "[Stallman] recognized that his personality was unyielding to the give-and-take of common human interaction." But this betrays the story Levy himself tells of Stallman, in which the MIT AI lab functions as a kind of Eden, where people "sort of loved each other" but ended in the early eighties with a protracted and particularly "unyielding" battle between Richard Greenblatt and Symbolics Inc., over the commercialization of Greenblatt's LISP Machine. In this story, Stallman is wracked by hatred of Symbolics for its desiccation of AI lab personnel. Stallman, Rambo-like, engages a one-man vendetta against Symbolics, reverse engineering their code and creating functionally equivalent but structurally different code to give to Greenblatt's company. Whether this story of industrial espionage is true or not, it should be. At the end of Levy's book it is the Last Great Hack, admired because one man took on an army of programmers and won. At the origin of Stallman's Free Software Foundation, therefore, instead of the naive consistent purity of speech, there must instead be a political education—an experience— of the way the corporate world works, the way actually-existing capitalism humiliates give and take in favor of fair trading, because without going through the market and the legal system, Stallman's political stance would be exactly what it is often accused of: idealism.

Stallman is known principally for having begun many of the major components of what is now call Linux. The GNU operating systems includes, among other widely used tools, the emacs text editor, the GNU C compiler (gcc) and the GNU debugger (gdb). He is also recognized for having started the Free Software foundation and its wealth of resources for software developers. Almost all of the traits that opensource.org has identified with itself and the tradition of open source were present in Stallman's 1985

a particularly gruesome resonance, and it is a wonder that the word is used with such abandon.

⁸¹ Immortalized first in 1984 in Steven Levy's *Hackers* [Levy84], and then over and over again as Saint IGNUcius of the Church of Emacs, and then most spectacularly in a recent *Forbes* article that featured Linus Torvalds on the Front cover, and Long-haired round Stallman in the center of Storow Dr. holding a sign that reads "With Free Software, you have freedom." See *Forbes* August 10, 1998 [McHugh98].

FSF GNU Manifesto⁸². His political position on the ownership of software is unwavering, and strictly categorical. No one should own software, period. To this end he devised the GPL and the GNU Copyleft licenses, which are the basis for all of the existing ‘open source’ licenses. Emacs and its LISPing, fanatic devotees aside, it is Stallman’s licenses alone that should assure him continued presence in the open-ended story of openness— not so much for their specific content, or for what Stallman insists that they represent with respect to freedom, but what they are: a genuinely political act. The licenses that Stallman has applied to the GNU software, and from which all manner of other ‘open source’ licenses are derived, are the fulcrum of politics, law and the market— more than any political platform or manifesto, political action occurs there.

This is obscured, however, because Stallman (or Stallman as the Free Software Foundation— an issue of copyright and authorship— therefore hereafter FSF) is also the only conventionally politically vocal personality in this arena. His GNU Manifesto and the variety of short philosophical writings are often pictured as the centerpiece of the Free Software Foundation, earning Stallman a combination of adulation and dismissal. Judged by these writings, Stallman holds no more complicated a political position than “Information should be free.” Freedom and community are Stallman’s primitives, they mean, and he means them, in good, passionate classical-liberal form. Stallman himself constantly represents these political positions as his “values” (and in classic liberal form, they are just one set of values among others— ideas that should be allowed to circulate— and it is his hope that they will recruit others by virtue of their obviousness). In fact, all of this very honest political speech is divorced from the most important political action that the FSF has performed: the General Public License

However, the veritable political actions of the FSF concern the manipulation of legal and contract systems and the creation of new possibilities of ownership, and it is this which should rightly deserve the focus of all attention. However, the

⁸² All of Stallman and the FSF writings are available at www.fsf.org. They are referenced more exactly in the online text.

FSF also figures itself as a political philosophy, and it is here that the misfit between the efficacy of the political act and its impossible description becomes most apparent. A brief detour through the FSF's philosophical writings should clarify this.

Crises of terminology erode the forceful accretions of 'freedom' and 'community' and the FSF home page offers endless distinctions, between free and non-free software, and even "Some Confusing or Loaded Words and Phrases that are Worth Avoiding" as supplement to the origin of freedom.⁸³ At the apex of these distinctions is the attempt to distinguish between freedom and price. When people ponder free software they inevitably stumble on the eminently common sensical injunction "Think Free Speech, not Free Beer." Practically this has clear implications: it means that there is no taboo against selling free software (Indeed, Cygnus Solutions uses the clever catch-phrase "Making Free Software Affordable" to sell its software). Of course "selling software" is included under Words to Avoid, as are "for free," and "to give away software." However, the economic logic is crystal clear, even in the earliest manifesto, and depends on a distinction between goods and services, between physical things and non-physical things. Rather than depending on "protection" (another 'Word to Avoid') provided by copyright in order to ensure profitability on any given thing (physical or nonphysical), it puts the burden on the seller to provide a service associated with the software that people are willing to pay for (e.g. installation, support, customization, etc.).

"Free software" therefore makes a proposition which is extremely high risk in contemporary terms: "if you value what this software can do, then pay for it." There is no denying that this is an extreme position. Freedom in this context has one meaning, defined almost strictly by opposition to ownership. A thing/idea cannot be known and owned at the same time without precipitating a moral crisis. The very idea of "having an idea" is not possible unless that idea can be shared completely— without regulation by price

⁸³ The most obvious reference here for me is Derrida's *Limited Inc.* [Derrida88], with which a much more complete reading deserves to be written, especially since the basic operations of speech acts, copyright, the formation of corporate ownership, and the relationship of truth to politics is so elegantly and cleverly explored there.

or availability— with a “community.” Here, the community is the community of users (highly-skilled users of specific platforms, as we have seen with the creation of the “Open Source movement”). The FSF itself comes perilously close to losing control of this expansive notion of freedom. In an article called “Free Software and Free Manuals,” FSF criticizes O’Reilly Publishing for producing copyrighted manuals for Free Software (O’Reilly is the de facto standard for manuals for free software, and has recently taken center stage in the marketing of Open Source):

The criterion for a free manual is pretty much the same as for free software: it is a matter of giving all users certain freedoms. Redistribution (including commercial redistribution) must be permitted, so that the manual can accompany every copy of the program, on-line or on paper. Permission for modification is crucial too.

As a general rule, I don’t believe that it is essential for people to have permission to modify all sorts of articles and books. The issues for writings are not necessarily the same as those for software. For example, I don’t think you or I are obliged to give permission to modify articles like this one, which describe our actions and our views.

Several things should be noted here. First of course is that readers are users, and as with all of the issues concerning freedom in this realm, these users are highly skilled —highly literate, perhaps. The political force does not distinguish users and readers, all user-readers should all be equal, and all should have access. Ownership is tantamount to secrecy because users cannot change the documentation when they change the software. Freedom of speech outstrips integrity of speech here, and this is anathema to the notion of authorship and ownership— which will reappear as a particular problem of authenticity in Eric Raymond’s writings {q.v. below}. However, FSF hedges, some writings are not documentation, therefore some readers are not users, and their rights should be different, in order to protect the integrity of speech. “Articles like this one” are not so affected by the erosion of freedom because they merely “describe our actions and views.” The article is in fact marked “Copyright (C) 1997, The Free Software Foundation” with permission to distribute freely, provided the notice of copyright is included. This addendum closes the circle of supplements that shore up FSF’s logic:

While a blanket prohibition on modification is unacceptable, some kinds of limits on the method of modification pose no problem. For example, requirements to preserve the original author's copyright notice, the distribution terms, or the list of authors, are ok. It is also no problem to require modified versions to include notice that they were modified, even to have entire sections that may not be deleted or changed, *as long as these sections deal with non-technical topics*. (Some GNU manuals have them.) [My emphasis]

In the end, it is technology that decides. Only those things dealing with “non-technical” topics may be copyrighted. What does this mean? Are we to rely on common sense that one can easily distinguish between the technical and the non-technical. What system will allow us to distinguish, and will that system be free? Where does documentation become technical? Will it depend on it being ‘serious’ or can technical topics be clever, ironic, obscure, ambiguous, undecideable? When does software become technical. Given this criteria, it would not be difficult to assert that source code is only partially technical, since good code is usually filled with comment code that merely “describes the actions” of the code that is interpreted and compiled— that is, the machine-interpretable code. Yet no one who has written a program would ever admit that comment code is somehow inessential to a program— or worse, that it is “non-technical”—, it is only inessential to the machine. Yet if this is so, does that not make it non-technical? Who would decide? Hopefully not the machine. Besides, it is not machines that value freedom, not yet in any case. But I can hear a chorus of coders in my head asserting the obviousness of the distinction, and I can only agree that it is clear that the distinction is made in each particular case. Someone must decide, and inevitably someone does. This, the pragmatist in me promises, is what allows the tenuous existence of distinctions to begin with.

Ironically, this democratic-pragmatic status of the distinction is what most threatens FSF's notion of freedom— a kind of radical openness and infinite modifiability— by giving someone an arbitrary power to make the decision about what is technical and what is not. What is narrated as a kind of complete equality among users, a freedom that is without limit by the unjust and arbitrary actions of a corporation or government, is in fact threatened by just this injustice. If the protection of freedom depends on the distinction between the technical and the non-technical, then someone must make this

decision, and we are at degree zero of politics— the problem of the just decision, the just distribution, the fair division, equality guaranteed by a more fundamental inequality. A problem of rules as old as Aristotle’s *Nicomachean Ethics*.

FSF never reaches this point however, because the narration of freedom they propose does not match the action they undertake in the realm of copyright licensing. It does not fall short or over-shoot, it just does not fit. Because the political act involved in the GNU GPL is not a political decision in this philosophical sense, but rather the conversion of an existing American and international regime of property rights and contract law. It is the transformation of the system from within the system. The GNU GPL leverages a combination of copyright law and contract law to produce a version of freedom that guarantees itself not by reference to a regulative ideal, or by strict reference to the self-evidence of a constitutional right, but to an historically legitimate regime of law and governance— the American legal system (in particular copyright law and its constitutional foundations) and commercial contracting law (in particular, the Universal Commercial Code). The “copyleft”— so aptly named because it guarantees not the protection of property, but its opposite, the protection from becoming property— is an ingenious program— a technical program that operates the legal system like a giant computer. It is a legal maneuver that could only be made in this context.

Even though “protection” is a Word to Avoid by FSF’s criteria, it is perhaps the most essential ambiguous word in this proposition. Whereas intellectual property is conventionally ‘protected’ by the legal edifice of intellectual property law, the GNU GPL leverages the edifices of both copyright law and contract law to ensure⁸⁴ that the rights of this copyright are in fact extended to all subsequent users. In both cases, protection is provided by the legitimacy of the American legal system through recourse to the court

⁸⁴ Albeit in a weaker form, which will be the test of this system. But this will also be helped along by the debates that have currently been raging around Article 2B of the UCC which make specific and newly powerful provisions for contracts involving digital material.

system. Decisions all down the line.⁸⁵ This makes the common sensical “Think Free Speech not Free Beer” less common sense than propaganda, since it is precisely not self-evidence that is made to guarantee the right to information as the massive, complex power of the American juridical and court operating system. If it can be fairly said that the FSF’s truly political action consists in this programming of the legal system and not in the claims surrounding freedom as such, then it is all the more disheartening to return to the present disavowal by opensource.org of the FSF’s political platform— a disavowal hinging on words and not on licenses.

The fact of important words has not escaped the participants in opensource.org. The most intense focus of energy has been expended on creating an “Open Source Definition,” which will be used to “brand” software with the newly trademarked name “Open Source™.” Marketing takes over. To FSF, opensource.org offers only sour grapes. Particularly sour, as they take the form of a ruthlessly repeated disavowal:

We realized it was time to dump the confrontational attitude that has been associated with ‘free software’ in the past and sell the idea strictly on the same pragmatic, business-case grounds that motivated Netscape. We brainstormed about tactics and a new label. ‘Open source’, contributed by Chris Peterson, was the best thing we came up with.”

They expand this in an explanation of Open Source “for Hackers”

The case that needs to be made to most techies isn’t about the concept of open source, but the *name*. Why not call it, as we traditionally have, **free software**?

One direct reason is that the term “free software” is **horribly ambiguous** in ways that lead to conflict. You can read an extended discussion [link] of this problem.

But the real reason for the re-labeling is a **marketing** one. We’re trying to pitch our concept to the corporate world now. We have a **winning product**, but our positioning, in the past, has been *awful*. The term “free software” has a load of fatal baggage; to a businessperson, it’s too redolent of fanaticism and flakiness and strident anti-commercialism.

⁸⁵ The interaction with international law, including trade treaties and the enforcement of international contracts presumably complicates this further, it is still yet too soon to understand this.

Mainstream corporate CEOs and CTOs will never buy “free software”, manifestos and clenched fists and all. But if we take the very same tradition, the same people, and the **same free-software licenses** and change the label to “open source” - *that*, they’ll buy.

Some hackers find this hard to believe, but that’s because they’re techies who think in concrete, substantial terms and don’t understand how important image is when you’re selling something.

In marketing **appearance is reality**. The **appearance** that we’re willing to climb down off the barricades and work with the corporate world counts for as much as the **reality** of our behavior, our convictions, and our software. [emphasis *so* in original]

And again under the opensource FAQ:

How is ‘open source’ related to ‘free software’? Open Source is a marketing program for free software. It’s a pitch for ‘free software’ on solid pragmatic grounds rather than ideological tub-thumping. The winning substance has not changed, the losing attitude and symbolism have. See the discussion of marketing for hackers for more.

So that it is clear what kind of software we are talking about, we publish a definition and have made Open Source a ‘certification mark’ (a special form of trademark) to be applied only to software that meets that definition.

Are you guys opposed to intellectual property rights? The Open Source campaign does not have a position on whether ideas can be owned, whether patents are good or bad, or any of the related controversies. We think the economic self-interest arguments for Open Source are strong enough that nobody needs to go on any moral crusades about it. [emphasis in original]

The contradictory reactions to the term “free software” are less important here than the somewhat extreme rhetoric of denunciation: “ideological tub-thumping”, “losing attitude”, “A load of fatal baggage”, “fanaticism and flakiness and strident anti-commercialism” — terms more often reserved for bitter ad hominem attacks in political campaigns than for marketing differentiation. Imputations of anti-commercialism and the guarded references to communism don’t make the case for a simple change of terminology (if anything, they demand a more *extreme* reversal), but they do indicate a certain fanaticism of the convert. The conversion is particular to the ‘community’ of hackers that has, for at least twenty years, prided itself on its connections with academia, and the

moral high-ground occupied by the libertarian outlaw who is not beholden to corporate interests. This is also why Stallman's experience at the AI lab is an important figure in the story.

This conversion to the way of the market should not be surprising— save that it comes so late in the twentieth century— for this movement comes at the end of two decades of ceaseless promotion of the deregulating, free-marketeering, supply-side, trickle-down economic answer to the 'socialist' excesses of the New Deal administrative state, not to mention ten years of endless announcements of the end of communism, the triumph of democracy and the end of history. A quiet revolution of information technology apotheosized in an orgy of hard-nosed realism.

Opensource.org offers to dump attitude for realism, the eminently reasonable logic that insists that the content is what counts. On the one hand, this is true, since we have seen already just how FSF's actually political action is not in its supposedly clenched-fist soap-boxing, but in its licensing practices. On the other hand, opensource.org, in what appears to be an extremely cynical move, suggests that the corporations they hope to cooperate with cannot tell the difference between image and reality, and that by changing the political message to a supposedly more palatable one ("The appearance that we're willing to climb down off the barricades and work with the corporate world counts for as much as the reality of our behavior, our convictions, and our software"), the opensource.org revolution will begin, and the discussion of values can end.

FSF responded at length to this exclusion and repudiation of politics for 'cooperating with business'. Prefacing FSF's long rebuttal is a simple assertion: "The people who decide the meaning of "open source software" have accepted a license which is basically flawed: the Apple APSL ." By their own criteria, this is sufficient indictment, but FSF offers a more perspicacious indictment: "The main argument for the term "open source software" is that "free software" makes some people uneasy. That's true:

talking about freedom, about ethical issues, about responsibilities as well as convenience, is asking people to think about things they might rather ignore; this can trigger discomfort. It does not follow that society would be better off if we stop talking about these things.”

Somehow, this assertion is no longer self-evident, and this is also Larry Lessig’s concern {Section L Below}— that we are baffled and immobilized by the very idea of governance, unable to speak about justice. A frightening state of affairs for a polity committed to some notion of collective decision-making. But as we have seen in the case of the FSF’s GNU GPL, it is not collective decision-making that their actions promote, but a kind of programming of the legal and commercial system— which, like all writing, is a very un-collective undertaking.

Opensource.org on the other hand wishes to concede even this, because of an unreconstructed faith that “business” is the straightest path to success, by adopting an ideology of cooperation and a practice of commercialization. Even more important than this observation about the expulsion of politics, FSF notes that at the center of this name-change, the most crucial problem relates again to the manner in which protection is sought. FSF rightly notes that the Trademark that is appended to “Open Source” will hardly stop companies from abusing it. This much is clear with any trademark, where recourse is sought only through the judicial industry of threats, cease-and-desists, and court cases. It engages a different and much milder legal industry of protection than would a free software license. Trademark law is merely a way to program the English language, it is the province of marketing. Contract law programs much more: property relations. Trademark puts the burden on the owner of the trademark, contract coordinates.

Licensing is not forsaken by opensource.org, the GNU GPL stands as a model license. However, the vigilance surrounding “freedom” is relinquished in the name of overcoming tub-thumping, barricading ideology. The verification of licenses as ‘free-software’ licenses gives way to the ‘branding’ with open-source. In the former, the

arena of politics is a kind of competitive licensing practice (indeed, there are some licenses that outdo the GNU GPL by prohibiting commercial distribution, maintaining not just a hedge against becoming property but against the creation of any kind of value other than the use of the software), in the latter the arena is that of marketing and the media, and despite all cynicism to the contrary, image is unprogrammable.

This ersatz pragmatism has an honest basis: to create software that does not suck. And by all accounts the software that has been produced throughout the eighties and the nineties in this un-commercial manner has turned out to be vastly superior—by criteria that have since become very important (especially the internet related criteria such as stability, scalability, the capacity to handle vast numbers of transactions).

Eric Raymond is particularly proud of this aspect of the software and that is what he sells as open source: not politics, just good code. Recall that this is the de facto position of the IETF: “No kings, no priests, just rough consensus and running code”—but without the blanket disavowal of politics. As in the realm of law, which must at least maintain the fiction that legal decisions are above politics in order to operate, Raymond wants to take the best of FSF and opensource.org—the development model—and leverage it into making the world a better place through technology. Raymond is less libertarian than technocrat in the original American sense of that movement.⁸⁶ But this seemingly simple and honest motivation is impossible without a whole host of exclusions, presumably in the name of creating a positive image for the open source brand. These exclusions, coupled with the disingenuous unpolitical revolution of opensource.org are most clearly visible in Raymond’s writings.

⁸⁶ In the sense, perhaps, that the original Technocracy Inc. triumphed the possibility of reducing sociology to engineering, of insisting that all social problems had engineerable solutions. The difference rests in Raymond’s consistent simplification of libertarianism to mean ‘individual self-interest,’ pure and simple, as if all engineering solutions were solutions of self-organizing systems of programmable monads.

2.11 L. Lawyer worries nature

Law consulted on the Subject of Convention — Lawrence Lessig takes the Case — Lessig's work Critiqued — Some Ideology regarding Regulability Denounced — 'Nature' identified as Culprit — Nature Replaced with Code — Values are Sought, but Not Found — The First Person Plural becomes Very Annoying — Aporia of Value stumbled upon — Forgotten Role of Government Remembered — "We are the World" — Internet Values identified, Triumphed

Before we come to Eric Raymond and the outsourcing of opensource.org, suffer a digression through law. It seems appropriate, in thinking about the political nature of FSF's legal programming to ask the legal profession about the internet. "Cyberlaw" as an emerging branch of legal scholarship, still, unfortunately saddled with that metaphor of another space⁸⁷, is represented in fine form by one Lawrence Lessig of the 'Berkman Center for Internet and Society' at Harvard Law School, and provides one kind of peculiar answer. More than simply an answer, however, more than simply a reasoned assessment of issues surrounding FSF and opensource.org, Lessig has made a movement, replete with a mixture of rhetorical outrage and legal clairvoyance about the centrality of the internet to life in general. Lessig's movement is not a third wave or an economy of ideas or any version of a libertarian paradise. Lessig reserves only impatience for these.

What Lessig does consider, and what makes it crucial to the problematic of scale and convention, is the nature of software as regulation. Where I come from the left, following the rainbow from standard to software, Lessig come from the right, following law to regulation to software. Lessig's rightness is less conservative, however, than classically liberal, reaching backwards to J.S. Mill in order to straighten the swerve from liberalism to libertarianism and respond, full circle, to the incessant anti-governmentalism of

⁸⁷ Though if "cyberspace" resonated with a more precise etymological meaning, perhaps it would be more appropriate: not a space apart from 'reality,' but a space of control, in particular the space of control of the pilot (the cybernaut of cybernetics, and Weiner's original neological design), that is, the cockpit.

the present. This section introduces his various writings, adding law to the spectrum of conventions that started with standards.⁸⁸

Lessig's work begins with good analytic distinctions, "four sorts of constraints" that regulate (in "The Laws of Cyberspace") [Lessig98a]: Law, ex post, with the threat of punishment; 'social norms'— understandings, expectations, behaviors; 'markets,' which regulate by price, delimiting opportunity; and finally "there is the constraint of what some might call nature, but which I want to call 'architecture.' This is the constraint of the world as I find it, even if this world as I find it is a world that others have made." A fine set of distinctions to begin with.

These four kinds of regulation are all just as relevant "on the net" as off. All of Lessig's writings at some point unleash a vitriolic sortie against the techno-libertarian promise of absolute freedom in cyber-space. He is relentless in his attack, unforgiving in his mortification, humorless in his impatience— it is a clear, repetitive voice that has no patience for the 90's style Wired-inspired consensus that cyberspace cannot be governed. On the contrary, he insists, we are on the verge of regulating ourselves thoroughly, submitting ourselves to complete control, without so much as a word of discussion— without even recognizing it. To make this case, Lessig draws closed the analogy of architecture with nature—the given— by equating them with "code." "Code" is a code, however, and Lessig is perpetually skirting a more difficult philosophical problem whose password is not nature, but language. His shaky defining shifts from paper to paper, a hesitance of familiarity with either technology or philosophy, maybe both: "By code, I simply mean the software and hardware that constitutes cyberspace as it is— the set of protocols, the set of rules, implemented, or codified, in the software of cyberspace itself, that determine how people interact or exist, in this space" (4), and later: "The code or software or

⁸⁸ The writings referenced in this section are all available on Lessig's website. Most were written for conferences and presentations, and as is the nature with such texts, repetition and reconfiguration is the disorder of the day. I have tried to reference the arguments of each text separately, but in some cases, there is considerable overlap, and I default to a single reference. Lessig's work is also forthcoming as a book, referenced in many of the articles, called *Code and other Laws of Cyberspace*.

architecture or protocols of these spaces...” The ‘code’ is a force, the code is a sovereign, the code is law, the code is regulation.

Lessig’s imprecision is infectious. His first example—the availability of pornography to children— finds him reducing his careful distinctions among constraints all to the constraint of architecture, which in this case is nature confused with identity. That is to say: in real space children cannot buy porn because they are children— architecturally speaking— but in cyberspace, as the saying goes, no one knows you’re a dog, hence the constraint of architecture-nature-identity does not operate the same way.

The second example of how constraints regulates speaks from experience: he explains the difference between the University of Chicago and Harvard Law School’s philosophies of internet access (and perhaps the lawyer will see the profundity in this, if the average reader cannot). The University of Chicago allows direct anonymous access to the net, dynamically assigned IP addresses that allow law students and professors (or *anyone*, if Lessig is to be believed) with laptops to jack in *anywhere* on campus. At Harvard, however, Law students can connect to the internet only if assigned a recognizable IP address . If the intranet recognizes the number and the machine it is assigned to, you can connect to the internet. Others cannot. Two different architectures with two different philosophies behind the decision: access vs. control. “These architectures enable political values. They are in this sense political” (9). Regardless of this philosophical problem or definition, one point comes through: that the internet’s architecture is not inherently open, it is historically open, and it depends on a continuous vigilance to keep it open, a vigilance that is lost when pundits promise that cyberspace is unregulable. Indeed, “Laws of Cyberspace” finds Lessig in a state of high anxiety about this dangerous naïveté, frightened to the point of hyperbole that the our Constitution has been jettisoned in favor of some gross parody of Orwell:

But my view is absent in thinking about governments’ role in cyberspace. Indeed, my nation, for many years the symbol of freedom in world where such freedom was rare has

become a leader in pushing the architecture of the internet from an architecture of freedom to an architecture of control. From an architecture, that is, that embraced the traditions of freedom expressed in our constitutional past, to an architecture that is fundamentally anathema to those traditions. (10)

Pointed. Out of this failing, Lessig spins a fantasy of Stalinist control in which the US government, almost unwittingly comes to facilitate the low cost complete control by governments of people anywhere and everywhere. His analogies are passports, drivers licenses and state-issued certificates, which in “real space” are difficult and costly to control, but which in cyberspace become a nearly cost-less transaction of constant monitoring. “We must come to see how this code is an emerging sovereign— omnipresent, omnipotent, gentle, efficient, growing— and that we must develop against this sovereign the limits that we have developed against real space sovereigns.”(16)

“Laws of Cyberspace,” dated March 1998, has since been extended, and perhaps tempered as Lessig has added detail to this alarmism (as of this writing, Lessig’s various papers and revisions of papers all point to a forthcoming book, *Code and Other Laws of Cyberspace*, which I assume will consolidate the insights I have haphazardly poached here) In particular, Lessig’s paper “Jefferson’s Nature” [Lessig98c] extends his thoughts on nature via a familiar quotation from Jefferson about the possession of ideas, in which he conjoins appropriability and immateriality, and muses on the conundrum of how possessing ideas does not diminish them. This, Jefferson suggests, is the conspiracy of nature with thieves in the constitution of ideas. Lessig cues his continuing attack on the libertarian fantasy of an unregulable cyberspace:

My aim in this talk is to challenge this thought [that Cyberspace is ‘naturally’ unregulable]. It is to challenge this view about nature and cyberspace, as well as challenge this view about nature in real space. My aim, you might say, is nature talk all around. Not so much because I’m against nature; but because I’m against the security this talk about nature gives us. Nature, in my view, is just the way things are when its too hard to imagine how they might be different. But these natures— these natures about cyberspace and about the nature of inventions and property are natures that we can easily imagine being different. (3)

A dangerous argument perhaps, especially in an era when the ‘nature’ daily renewed for us by biologists commands a peculiar attention over and against the ‘nature’ Lessig identifies, which common sense is more accustomed to calling ‘culture.’ But, again, hyperbole, like sarcasm is sometimes the most direct access route to entrenched ideology, and so the ‘nature’ of cyberspace is de-sedimented and we are reminded anew that it is an architecture—a given that is changeable, even if such change is difficult—that constitutes the borders, shape, and ‘nature’ of this space. If Lessig’s client is law, it is philosophy who is made to wait on the bench outside, since this is but a familiar argument about the nature of nature, in which property and quality relate things to each other based on their identity and difference. The relation between the given and the appropriable, the appropriation and disappropriation of properties, and the conditions of possibility of ‘giving’ in general and without reserve, without reference to some regulative appropriability guaranteed by nature, in a tautological relation to the given—all of this and the politics of enclosure, enforcement and violence that follow are the province of a philosophical questioning for which common sense, the legal establishment, and most of all the corporate media have no patience.⁸⁹

But perhaps philosophy’s case—a personal injury case—can wait, since it is Law’s case—a constitutional emergency—that is most urgent. Lessig is less interested in truth than in the dangerous failings of reason and history that he sees unfolding around him. He returns to the constitution: the protection accorded ideas by the U.S. constitution—“to promote the Progress of Science and the Useful Arts”—was to be limited in time, and the protection only a stimulus. However, our current congress, according to Lessig, has forgotten this,⁹⁰ blinded by the speed and scale of the internet and its near

⁸⁹This list, a familiar one, perhaps includes at least: Hobbes *Leviathan*, Locke’s *Two Essays on Government*, Hume’s *Moral, Political and Literary Essays*, Kant’s *Critique of Judgment* and *Critique of Practical Reason*, Hegel’s *Philosophy of Right*, J.S. Mill’s *On liberty*, Jefferson’s writings, *The Federalist Papers*, Marx’s *Critique of Hegel’s Philosophy of Right*, Mauss’ *The Gift*, Heidegger’s writing on giving and on technology, Derrida’s works on giving and on the proper.

⁹⁰ Having just passed the Sonny Bono Copyright extension case, which extended copyright to 95 years plus the life of the author. The Case *Eldred v. Reno*, has subsequently become Lessig’s test case for his own version of

literalization of Jefferson's 'idea' as something that spreads like fire, never diminishing in the infinite extensibility of space. Lessig queries:

Why the danger: But we should pause a moment to ask just why there is a danger to copyright in cyberspace. What about its nature makes this danger so great? Why is it that copyrighted material can be copied without limit; why is it that it can be distributed to millions of machines in a couple days. What makes it such that the nature there is the world Jefferson spoke of but more? (5)

Lessig responds:

It takes just a moment to understand what laws of nature make this so. It takes just a reflection to understand why things are as they are. We can give this nature a name a name that will identify just why the space is as it is. The name is code. (5)

Now this will not be the first time nature has been named code, even that nature distinguished above as the enuciatory property of the biologist, where regardless of its naturalness, nature is repeatedly referenced as a code, indeed, *the code*, not one among others. However, Lessig is against nature here, or rather against the naturalness of code. In his hyperbole, in his passionate attack on common sense, code is what 'we' write. Code is positive law. Code is conventional, in the sense of an agreement achieved through coordination of some kind, not natural, not even mimetic of Nature. Code is the architecture of 'cyberspace'. The lack of specificity works in his favor here, because it allows him to avoid getting trapped in the intricacies of standard, nonstandard, and proprietary code, along with the vagaries and tragedies of interoperability that we have seen glimpses of above in the examples of Amicas and Partners Telemedicine. Instead, Lessig is freed to insist on the relation that architecture of the net have to our values.

"We" are in control of code. Throughout Lessig's entire corpus, "we" are the invisible, unarticulated, chimerical agents of this 'nature'. Who are we, though? Who is this 'we'? Or more importantly— since who? always implies an exclusion, and "we" want to include everyone— *where* are we? This is precisely the problem of

'open source'— 'open law,' and has opened the legal arguments and briefs being brought in the case on the

locating ‘us’ ‘in’ space, or ‘in’ cyberspace. Where are we when we write code? In congress? In a voting booth? In front of a computer, getting code to ‘work’? Is code in our heads, in our computers, on the network, in a constitution, and if “we” are responsible for it, how do ‘I’ answer ‘with’ someone else, thus becoming a ‘we’ again? Is the ‘we’ whole and stable, or is it dynamic, if dynamic, how is stability achieved? Before we stray too far down the tantalizing path of philosophical questioning, however, we should let Lessig lead us to it less prosaically and more urgently.

From the sections (Sections E-H) on the structure of standardization on the internet above, it should be clear how decisions as to the architecture of the net were made up until very recently (see section E above). When commerce jacked in to the web, this architecture met its test. Over the last five years, the technologies that have been designed to take advantage of the basic internet services, and more importantly, the nascent and much less fundamental protocols that make up the world wide web, have been stretched, added to, reconfigured, abused, and replaced with abandon. The relatively closed world of open values that the internet had itself embraced and extended from its narratives and myths of science and scientific method burst open to the commercial and political versions of closure and pluralisms of value— and it brought us to the brink of this particular technological horizon of market economy and democracy. All along the internet has had structure, it was never radically open (and even Lessig wavers on this, occasionally engaging a rhetoric of loss of freedom, occasionally an argument for the design of freedom), and could be configured to assault or guarantee any number of values ‘we’ hold. This is what Lessig insists on against all futurological declarations to the contrary.

The Word is commerce. As the world goes by believing the anonymity of this space is somehow inherent, business is working furiously to lay onto the architecture of cyberspace technologies that would facilitate identity, and therefore technologies that would facilitate control. Technologies that would facilitate the ability to know who someone is, where someone comes from. The ability to automatically know this; and the capability, then, to make decisions about access and liability based on this information.(8)

Here, for the first time, we catch a glimpse of who it is that will be controlling us. Stalinist fantasies of passports and identification cards turn out to be Lessig's rhetorical sleight of hand, his own weakness to a common sense cold-war polarization of value. No, it is business— good 'ol communism-defeating American capitalist business— that is identified with this problem. If the IETF was formerly in charge of making the decisions, of creating the architecture, of being the *de facto* governors “rulers with humility”(10), slowly commerce emerges as the new creator:

But these governors [the IETF] are slowly being replaced. Or not so much replaced, as displaced. Displaced by code-writers of a different sort— code writers who answer to suits, to commerce, to the business they work within, not code writers who answer to the elegance of an argument. Now in their place — in the place of governors of the sort of IETF — in their place has emerged an idea, not much of an idea, more a grunt than an idea, but an idea nonetheless. It says this: “The single unifying force is that we don't want the government running things.” (10-11)

In this and several other papers, Lessig repeatedly quotes this last, arresting sentence. By 1998 the 20 year-old fashion for deregulation and privatization rarely expresses itself with such singular boldness, and Lessig finds in it a crisis expressed everyday in America: that we have lost an understanding of the role of government. The sentiment of anti-governmentalism is implicitly attributed to the corporate interests that are here identified as the *de facto* legislators of our cyber-natures. Complexity lurks, however, and the example that stories this crisis concerns how a single lawyer representing diverse interests came to be the sole person responsible for writing the draft of ICANN (the Internet Corporation for Assigned Names and Numbers); the same lawyer, it turns out, responsible for the quotation above (the story is narrated in the paper called “Governance” [Lessig98b]). The lawyer is not a corporation, nor, according to Lessig's story, does he represent any one in particular. For Lessig it is no less a story of the failure of process, a story of how the government conceded control over the registration and management of domain names— even a story of how the consensus on anti-governmentalism is so positively overwhelming that even the government is falling over itself to concede the right to govern. Lessig rages

rightly at this absurdity, this obviously mad disavowal of governance, even if his implicit targets are corporate rather than individual, and in his backyard, so to speak. His rage is acceptable, even if misdirected, but what makes this strange rage so puzzling is ‘us’:

We have lost this idea, we inheritors of the 21st century. We have lost the ideal that there is a role for government here. We— especially we who spend too much of our life using electrons to interact; we— especially we, who still stand amazed at the potential of this wired world; we— especially we, who cant remember a time when there wasn’t an underbelly to every story about a hero. We— children of David Lynch, who cant help but believe that, just underneath the surface of the sensible, there is a decay that cant be avoided. We listen to the promises of our governors no differently than Soviet citizens listened to the promises of their governors. We, like Soviet citizens, have heard it before. “Hope” is not a place; “Hope” was a television commercial. (12)

‘We’ are so alarmingly self-evident here that one might accuse Lessig of thinking that America is the world, or worse, that America owns the world, that it is, after all, “our world.” This wouldn’t be so far from the mark, as will become evident, but for now, it is important to recognize the uncertainty that Lessig identifies in ‘us’:

But the first point to see is that it is we who chose the values; it is we who should decide what this space will be. It is we who should decide this, and yet this is just what we are unable to do. Unable, because we think incapable; incapable because collective choice is something in which we no longer believe. (9)

We value. There is hardly any space between the words, and even together they can barely bear the weight they’re made to. Values are our nature, they are the only thing we have that can influence or control this law we make— this code. For Lessig, values— especially U.S. Constitutional values— are the only thing we have (and we do ‘have’ them in this formulation, they are proper to ‘us’, and for now it is less important who ‘we’ are and more important to recognize that the nature of ‘we’-ness is that it possesses its ‘own’ values— this is easily confused with the possessions of values by individuals, which is normally distinguished by the word ‘interests’) which can influence standards, norms, regulations, laws and cultures, in short, for Lessig, code. But what is the source of

these values? Where do they come from? Values issue from governance. They issue from that which brings ‘us’ together and by which ‘we’ regulate ourselves. Values are the regulating-regulated. Lessig has accidentally stumbled on precisely that aporetic foundation of law that Jacques Derrida so elaborately unwinds in his article “Force of Law: The Mystical Foundation of Authority” [Derrida92]: that the only basis of right is its assertion, that there is in fact no guarantee, no nature, no culture, only *code*. This aporia, far from being the sole province of French philosophers, is precisely what Lessig identifies here:

We are at a time when the most important judgments about how this new world will be made are being made. And yet, we are strangely disabled — immobilized by ourselves — from making choices about that new world. Laws are being written in the code that that space will be, yet we have no idea how we might participate in the writing of those laws, and little desire to do so. (12)

But Lessig does not stop with aporia. That would be very unlawfulerly. Rather he offers two reasons for this immobilization. The first is that the protection of idealized values— such as liberty— is confused with the absense of government. For this he blames lawyers— calls them unlawfulerly, not possessing what is proper to lawyers— and his reference is Mill, whose method “should be our own”(12) when we try to discern the status of our ideal and real values. But the second is more significant: the skepticism “we” hold towards governments. Lessig’s honesty about this admits of no solutions, he “shares this skepticism,”(14) (with who!?) but only wants to know this disavowal’s source:

I don’t believe that our skepticism about governance is a point about principle. We are not, most of us, really Libertarians. We may be anti-government, but for the most part we do believe that there are collective values that ought to regulate private action. Our problem is that we don’t know by whom, or how. We are weary with governments. We are profoundly skeptical about the product of democratic processes. We believe, whether rightly or not, that democratic processes have been captured by special interests more concerned with individual rather than collective value. While we believe that there is a role for collective judgments, we are repulsed by the idea of placing the design of something as important as the Internet into the hands of governments.

Again, “we” are the foundation of value. This 1st person plurality that offers self-evidence in the place of any identification of actual values. But the internet is drowning in collective forms of all kinds from corporation to ‘community’. As an example, Lessig offers ICANN again, pointing out that the charter for the corporation refers to it as “a non-profit corporation devoted to the collective interest,” and insists that the only thing that differentiates this body from government is the requirement of elections. His indictment intends to include everyone (but who? Americans? Citizens? stateless refugees?) in this failure:

This is extremely odd behavior for democrats. That the idea that a governmental body, whether American or international, should set this governing policy was not even considered is a profoundly interesting fact about us. It says something about us — about where we have come in this experiment with Democracy. We have lost faith in the idea that the product of representative government might be something more than mere interest.(15)

If we hate government, we hate it not because the idea of collective values is anathema; if we hate Government, we hate it because we have grown tired of the corruption of our government. We have grown weary of its betrayal, of its games, of the interests that control it. We have grown weary, but we must find a way to get over it. (15)

For we stand on the edge of an era when fundamental choices about what life in cyberspace, and therefore, life in real space, will be like. These choices will be made; there is no nature here to discover. And when these choices are made, they will be made either with the values that we hold sacred influencing the choices that are made, or they will be made ignoring these values. There are values that we have in this space — values of free speech, or privacy, values of due process, or equality, values that define who we are, and which should lead us to ask — if there is not government to insist upon them, then who? (16)

This story of anti-governmentalism and of the lawyerly— and fundamentally unconstitutional— way that the ICANN was arrived at is an allegory for this aporia of collective judgement. If the source of ‘our values’ is governance and the one thing ‘we’ are devoted to bypassing is government, then we find ourselves at the foundationless foundation of all regulation— of the fact that value must issue from somewhere, even if the origins of that value were arrived at by means strictly and precisely anathema to those values. This is not a new insight. What is new concerns the scale of the internet. The internet’s location has given ‘us’. The internet— this new space— this public sphere that is outside of any nation, but ‘in’ all of them, that is outside of any corporation, factory, university,

institution, home, but ‘in’ all of them, means that value is in crisis, precisely because value is always and only “our” value— it cannot exist without being shared— and ‘we’ are no longer the same ‘we’, no longer is the we that decides first spatio-temporally together, it is an asynchronously transnational we.

This recognition of the regulated/regulating aporia of value (symbolized in money— that mystifying source of value— which presents the related problem of the fact that money has become pure information, yet still represents a value that has no fundamental ground except inasmuch as it is shared) and its transformation by the internet should be enough for one paper, but Lessig — ever the practical, lawyerly and logical leader— takes one step further. Presenting the story of Daniel Webster’s 1851 speech: “Mr. President, I wish to speak today, not as a Massachusetts man, nor as a Northern man, but as an American...” Lessig claims that it is situated at the origin point of national American identity and represents the birth of collective action at a national and corporate level. “We” sit at the business end of this allegory, with our skepticism of collective action and naive anti-governmentalism:

We stand today just a few years before where Webster stood in 1851. We stand just on this side of being able to say, “I speak as a citizen of the world,” without the ordinary person thinking “What a nut.” We stand just on the cusp of an existence where ordinary citizens come to know how the world regulates them. Where ordinary citizens begin to feel the effects of the regulations of other governments, as the citizens in Massachusetts came to feel the effects of slavery, and the citizens in Virginia came to feel the effects of a drive for freedom. As we, citizens of the United States, spend more of our time, and spend more of our money, in this space that’s not really part of any particular jurisdiction, but subject to the regulations of all jurisdictions— as we spend more time there, we will increasingly come to ask questions about our status there. We will increasingly feel the entitlement that Webster felt, as an American, to speak about life in another part of America. But for us, it will be the entitlement to speak about life in another part of the world. (17)

I want to give Lessig the benefit of my doubt here, appoint him the ambassador of the moral equivalent of imperialism. Because I think he is right, that the internet, and in particular its ability to scale itself to the size of a world that used to represent

totality— in a single click— is in fact bringing about a crisis, not of national governance, but of international governance. But instead I can only let this final assertion waver uncertainly between self-evidence and outrageousness. The latter since this specific allegory of Webster and the Civil War recapitulates the trauma of American Slavery on a world-wide scale, without the specificity of either an exceptional American institution or an unsupportable international division of labor. The former because even without the code of the internet, even without the wires and satellites and glass, there has been no shortage of American entitlement to speak about—and for— life in just about every other part of the world. We value.

Perhaps we shouldn't take Lessig as seriously as he takes himself, even if we can agree that the rhetoric of anti-governmentalism and the techno-libertarian nonsense about frontiers is rank. This is all the more curious and compelling, since along with myself and the rest of the world, Lessig discovered “open source” and began writing about it in late 1998, and has since turned it into a kind of revolutionary movement, regardless of its libertarian ethics or its disingenuousness about the political issues surrounding property, their guarantee by governments and their relationship to international corporate capitalism.

So even if we dare scoff at this pre-millenarian promise of world-government, “the code is law” appears to have found its manifesto, its commune, and in Richard Stallman, its idol.

2.11.1 Epiphany and Manifesto

“Open Code and Open Societies,” dated May 11, 1999 [Lessig99b] contains Lessig's epiphany. As usual, the familiar allegory of scientific method opens the piece. But in this case openness recurses through Fermat's last theorem, Andrew Wiles attempted solution of it and its internet distribution, correction and subsequent

solution. This version at least has the savor of example, rather than the stench of cliché that inflates every other parable of the freeing of software. A prosaic story for a prosaic revelation. Lessig recounts his months-long attempt to convince people that “the code is law” (“I’ve been selling this line for what seems to be a very long time— months, which in internet time is a generation”(6)), about his insistence that we must reference our values in the code, especially those values “we” value most: the U.S. Constitution. But then, a revelation:

And recently [Joe Reagle] said this to me: You lecture about the values implicit in our constitutional tradition; you argue we should carry these to cyberspace; what about the values implicit in the Internet’s tradition; what about the values that are implicit in how it is governed. Why shouldn’t we identify those, and carry those to real space?

And I realized he was right. Ever the imperialist, ever the lawyer, I had proceeded on the assumption that real space would have something to teach cyber. But why not the other way round. Why wouldn’t the governance of the net have something to teach real space?

What follows is the story of Linux, GNU, the scientific method, and the basic protocols of the internet— that is, though Lessig never makes this connection, the story of open standards and their creation, and in particular the method of standardizing that made the IETF so different from ISO and the ITU, or from Microsoft, or from a government-controlled project. Lessig recognizes that the origins of the internet are academic and government funding (though ARPA, as usual, is conveniently shrouded in the mists of Cold War history), because he is retelling our now familiar story of the ‘open source’ community, and how this community is the internet as we know it. Hook, line and sinker.

Epiphany concluded, Lessig in turn reveals (“I don’t really care for what techno-geeks say. I want to look at what they do. What are the values implicit in what they do. Revealed-values, like revealed-preferences”(12)) the values of the internet culture— its tradition of governance.

The first of these is what Lessig calls “open forking”, which sounds like stupidity. That is, it sounds much like the Stupid Network and the promise of keeping complexity on the ends, keeping the core simple and preserving neutrality about how it is used (recall that this depends on treating pornography and medical data identically, a conclusion that conflicts with Lessig’s earlier assertions that pornography could be regulated with certificates, which may be true, but still depends on appointing someone to decide what is porn— or what is medical data— and what isn’t). According to Lessig, Good Code is modular, permits revision and substitution without redesign of the entire code base. The crucial lesson: no single person decides, evolution favors the suitably adapted. This is like markets and democracy, says Lessig.

The second he calls “universal standing,” which is not about equality, but rather about inequality. Everyone is equally unequal. Actually, Lessig doesn’t explain this, but the point he wants to make is that the only code that is accepted— and we could see this coming from a mile away— is code that “works.” “No kings, no priests, just rough consensus and running code.” This is like markets and democracy, says Lessig.

Sadly, these are diluted revelations, and not so much observed as generalized from example or anecdote. Lessig’s goal is not ethnographic description, but lawyerly conclusions that conveniently schematize into a mantra that would align the market, democracy and open source according to two overriding principles: that (market/democracy/internet) be allowed to evolve however ‘we’ choose (that pesky plural again), and that (market/democracy/internet) be open to anyone without restriction(17). To the extent that these are ‘values’ they are agreeable values of openness, but it is not the value that is of interest here, but its agreeability. Just how people agree on any given value, or any self-evident one for that matter, is the locus of mystery, and the reason why it is not openness per se that distinguishes the internet, but the openness of its standards, and how openness serves to legitimize them as such.

Despite my critique, I would not deny that Lessig has identified one point about open source that is important to reiterate. It is most clearly stated in a paper called “The Limits in Open Code” [Lessig99c]:

To many in the open code movement, this whole argument about the values in open source software might seem quite odd. To them, the real issue with open source software is its power. Its real virtue is its amazing efficiency— its robustness and reliability. And no doubt, if these are its virtues, they are valuable indeed. But my point is not to question any claim about efficiency. My point is simply that there are other issues at stake as well.

However efficient open code may be, arguments about open source must also consider the questions that these values raise. For in my view, it makes as much sense to promote open source on efficiency grounds alone as it does to promote democracy on grounds of economic wealth alone. It may well be that democracies are more wealthy than other forms of government, just as it may well be that open source software is more robust than others. But it is a thin conception of value that would see wealth or efficiency as the only, or most important, value at stake.

And it is with this staking that we return to opensource.org, Eric Raymond and questions concerning the source of value.

2.12 M. Anthropologist seeks navel

Eric Raymond, Libertarian Anthropologist, assessed — Stallman Attacked, Yet Again — Raymond’s Writings Critiqued — Crucial Insights about Property and Legitimacy gleaned — The Gift Appears, and is Shaken — Reputation Identified as the Source of Value

Eric S. Raymond is an Internet developer and writer living in Malvern, PA.

Eric S. Raymond is a wandering anthropologist and troublemaking philosopher who happened to be in the right place at the right time, and has been wondering whether he should regret it ever since.

Eric S. Raymond is an observer-participant anthropologist in the Internet hacker culture. His research has helped explain the decentralized open-source model of software development that has proven so effective in the evolution of the Internet. His own software projects include one of the Internet’s most widely-used email transport programs. Mr. Raymond is also a

science fiction fan, a musician, and a martial artist with a Black Belt in Tae Kwon Do. His home page is at <URL:<http://www.tuxedo.org/~esr>> .

An April 1998 interview with Eric Raymond in *salonmagazine.com* is teased with the tag: “Let my Software Go.” Though Raymond is quick to disavow spokespersonship for “the movement” or as Raymond puts it, “my culture and my people,” there is no denying that the game plays with liberation rules. And though Raymond’s meanly artful self-presentation fools few close to him (supporting or detracting), it has worked magic on the press. As the unofficial official spokesman for the un-political revolution in software development that now goes by the name ‘Open Source’, Raymond mixes claims on authenticity with affected hard-nosed business realism with pseudo-academic software economics and ‘hacker’ anthropology. Raymond is an aggressive nerd. An auto-didact with attitude and a libertarian with a gun, or more. Raymond is, as far as perceptions go, no one’s hero, but everyone’s leader. He is the perfect symbol for what Jessica Litman suggests we call “the age of disingenuousness” [Litman98]. All of Raymond’s talk about ‘my people’ about ‘community’ about being ‘in the right place at the right time,’ about ‘hacker culture’ says one thing while clearly attempting to accomplish another. Recognition manufactures authenticity, and authenticity attracts the media.

Recognition has come slowly to Raymond, but certainly not accidentally. Modesty (false and true), candor, frankness, self-interest, and especially, reputation, are central problems of value for Raymond’s description of hackers, as we shall see in his various writings. In the early 1990’s, Raymond published the “New Hacker’s Dictionary,” which updated, incorporated and publicized the once collective (if not quite anonymous) effort called the “Jargon File.” The publication of this book affected his status both on and off line, and must have given him a deep sense of how reputation can be converted into value and vice versa. In 1997, Raymond posted an article called “The Cathedral and The Bazaar” which has quickly become one of the most widely read documents dealing with the “open source development model” (the version change history

very prominently displays the change from ‘free software to open source’ on February 8th, 1998). This is the article that developers at Netscape read and handed to Jim Barksdale that prompted Netscape to release the code for Communicator (renaming it Mozilla). From there it has come to be referenced almost as much as the ‘open source revolution’ itself.

Raymond then wrote the fascinating “Homesteading the Noosphere,” which is a self-described ethnographic study of the “gift culture” of hackerdom. Here, Raymond tries his hand at formalizing many of the peculiar aspects of hackerdom that he has observed. Despite his denials of leadership or spokespersonship, he shows great alacrity in narrating the history of hackerdom towards the founding of opensource.org.

As we have already seen, the creation of opensource.org as the end point of internet hacker culture has depended to a large extent on the exclusion of Stallman and the Free Software Foundation— repeatedly silenced via a peculiar combination of adulation and ridicule. From the same Salon article: “I love Richard dearly, and we’ve been friends since the ‘70s and he’s done valuable service to our community, but in the battle we are fighting now, ideology is just a handicap. We need to be making arguments based on economics and development processes and expected return. We do not need to behave like Communards pumping our fists on the barricades. This is a losing strategy.”⁹¹ The denunciation of FSF is only the obverse of an argument about economics. Raymond has convinced himself and others that ‘open source’ software development is an organic, evolutionary effect of a particular kind of ‘culture’. Stakes are high for Raymond, who sees the necessity of declaring the economic legitimacy of this phenomenon as essential to its continued success. Throughout his articles, his notions of culture, evolution and economics are atavistic, confused and opportunistically pieced together to match the much more believable observations and experiences. This mismatch of experience and justification

⁹¹ The substitution of Communard for communist betrays a peculiar difference. Raymond seems to be careful not to call Stallman a Communist, even though the guarded references seem to point relentlessly towards this figure. Calling Stallman a Communard might simply be an attempt to register Stallman’s intransigence, but on what? Stallman is the very model of the opposite of intransigence. Perhaps there is a hidden story here. It certainly doesn’t signal an anti-revolutionary sense, since opensource.org is liberal with its promises to reform everything, change all the rules, and show the world the way.

suggests again a disingenuousness— a disingenuousness that masks an honest desire to join in the largest creation of wealth in history. A conversion to a market-based corporate ideal of value that hides its political responsibility behind an equation of open source with (a particular myth of) science and the scientific method.

It is his honesty, and not the failure of Raymond's analysis that I want to focus on. Raymond's efforts, carried out in journalistic form, parallel the economic and technological dilemmas of Amicas and the legal ones of Lessig: they are honest efforts to identify the source and nature of value in a changed world in order to identify a way in which to participate in it. The desire to participate is most important. No one here [Amicas, Lessig, Raymond, Stallman] sees a vocation in science as asceticism, nor even a protestant ethic that sees work as asceticism. The desire to participate is the desire to improve self, nation, and society— even in some cases to realize, or actualize one of these three. This desire is nowhere explicit, but everywhere tangible. Since no one understands all the details of the changes that the internet implies (and everything leading up to it, making it possible). Since no one seems to know just how to affect them in specific political contexts, or since no one (in the case of Amicas), understands how the changes in healthcare infrastructure relate to the changes in internet technology— then the only thing left to do is *to do*.

Raymond's doing consists first in open sourcing, and second in the making up that goes with this making real.⁹² It is in these writings that Raymond forces an understanding of the origin of value in software development. I exploit him here both as informant and as opponent, since there is much to learn from but much more to disagree with.

⁹² 'Making up' and 'making real' are terms from Elaine Scarry's *The Body in Pain*, a phenomenological investigation of the relationship between work, perception and technology, See [Scarry86].

The primary goal of “The Cathedral and the Bazaar” [Raymond97] was to announce the success of Linux as a model of software development and to enumerate, Fred Brooks style,⁹³ a technique for reproducing it. If any confusions circulate consistently through this and the following paper, they concern reputation, motivation, property and value— subjects that easily confuse. The metaphors of cathedral and bazaar, like all of Raymond’s figures, are haphazardly chosen, and indiscriminately applied. One should not make too much of them, or risk mistaking the substance of the argument. ‘Cathedral’ is the perjorative used to refer to hierarchical top-down management of large-scale software projects.⁹⁴ ‘Bazaar,’ though analogy would not oppose it to the Cathedral, is the opposite, a pseudo-hierarchical, unplanned, ‘evolutionary’ model. These architectural figures degenerate, because they are chosen to represent proprietary corporate software (read, sometimes, Microsoft) as religious ideologues, and the ‘open source’ as the promising new economic model of a truly free free market. Bazaars do not represent Islam, even secular Turkey, except via unreconstructed orientalism that associates the simplest of images with the word. But Raymond’s style is not really the interesting issue.

Raymond stresses one particular aspect of the difference, which he labels “Linus’ Law”:

Here, I think, is the core difference underlying the cathedral-builder and bazaar styles. In the cathedral-builder view of programming, bugs and development problems are tricky, insidious, deep phenomena. It takes months of scrutiny by a dedicated few to develop confidence that you’ve wrinkled them all out. Thus the long release intervals, and the inevitable disappointment when long-awaited releases are not perfect. In the bazaar view, on the other hand, you assume that bugs are generally shallow phenomena — or, at least, that they turn shallow pretty quick when exposed to a thousand eager co-developers pounding on every single new release. Accordingly you release often in order to get more

⁹³ Fred Brooks holds the clever-title monopoly for essays on software engineering. *The Mythical Man-Month* [Brooks95] is his collection of diagnoses and recommendations born of another powerful authenticity: project manager (repeatedly aka “Father of”) for the IBM/360 and the OS/360. Famed essays both for their eloquence and their perspicacity, they produce object-lessons out of titles like “The mythical man-month,” “The Tar Pit,” “Ten Pounds in a Five Pound Sack,” “Hatching a catastrophe,” and the now famous incitement “No Silver Bullet” in which monstrous problems of productivity are predicted to outlive any proposed magic technology. Brooks is the acknowledged master of models for software development, oft consulted for lessons on organizing programmers and conceiving systems.

⁹⁴ Ibid. Perhaps borrowed from Brooks, who uses the metaphor to greater effect in discussing differences within cathedrals, showing architectural remnants of “conceptual disunity”, in “Aristocracy, Democracy and System Design.” [Brooks95].

corrections, and as a beneficial side effect you have less to lose if an occasional botch gets out the door.

This law is the selling point for opensource.org. Whereas FSF would sell freedom if they could, opensource.org sells a better mousetrap, or perhaps ‘bug-trap’ is the better metaphor. Some have objected (including Tim O’Reilly) that this shouldn’t be the primary selling point, but rather the quality of the software itself. However quality, in Raymond’s account, only emerges when a programmer “scratches a personal itch.” By building the first or second version of a program to solve a specific need, there is then an implementation that can be bootstrapped into a powerful application. This, as Raymond recognizes, is especially true for small tools and pieces of infrastructural support that require little user input. Indeed, most of the internet is built on these kinds of technologies. But the question of the necessity and role of the “architect” remains for larger projects.

In “The Cathedral and the Bazaar’, Raymond relies on Brooks and Gerald Weinberg⁹⁵ as experts on the nature of programming and software architecture. Brooks is partially dismissed, less because his lessons are twenty years old than because the force of experience with which Brooks formed his arguments conflicts with that which formed Raymond’s arguments. Weinberg offers a compatible story, in the form of “egoless programming” (though Raymond objects to the term): “Weinberg observed that in shops where developers are not territorial about their code, and encourage other people to look for bugs and potential improvements in it, improvement happens dramatically faster than elsewhere.” The source of value in Raymond’s open source world is not source code per se, nor is it labor invested in company time or self-improvement, but has something mysterious to do with the nature of collaboration and reputation. Raymond struggles:

The “utility function” Linux hackers are maximizing is not classically economic, but is the intangible of their own ego satisfaction and reputation among other hackers. (One may call their motivation “altruistic”, but this ignores the fact that altruism is itself a form

⁹⁵ Gerald Weinberg’s *Psychology of Programming* is another standard work in the field of software engineering, a sort of late behaviorist industrial psychology applied to the problem of getting inherently solitary programmers to work in groups. It demands a reading, but elsewhere. [Weinberg71]

of ego satisfaction for the altruist). Voluntary cultures that work this way are not actually uncommon.

Constipated insight, when simplified economics and psychology are incompletely digested to argue for the creation of value in a form not recognizable by either. Raymond suggests that this value will continue to be created outside of any corporate “cathedral” by “the effective construction of voluntary communities of interest.” The cynic scoffs, but the fact of this movement and its support, and the popularity of this article attest the opposite. Even if the precise understanding of either the mechanism or the stakes of opensource.org, or its attempted exclusion of FSF on the grounds of rational, unpolitical, economic reasoning is incomplete, the fact of its existence is announced here.

More than that, Raymond’s struggle to understand the nature of these “customs” and the source of value lead him write a second article, under anthropology’s mantle, called “Homesteading the Noosphere” [Raymond98]. Property customs, reputation seeking and ‘gift cultures’ are the most interesting foci of this article, especially since they should be generalizable questions concerning the nature of value and property in the internet economy, and conceivably useful explanations for understanding Amicas, for example. However, Raymond’s theorizing is typical of the hacker autodidact whose references more often serve to justify than to explain. In particular, a certain imaginary scientific, philosophical and historical consensus makes repeated appearances, as supplement to an argument based less on thought than on the attempt to justify the authenticity of opensource.org and the hacker community. Property is a central concern, of course, and as opensource.org depends on differentiating itself from those communistic anti-property FSF folks, Raymond identifies hacker property customs with the “theory of common law land tenure” which “like hacker customs, evolved organically in a context where central authority was weak or nonexistent.” The role of this justification is less important than the fact that Raymond identifies an “implicit theory of ownership” in a community that prides itself on not owning software.

The “owner” in this setting, according to Raymond, is the person with the “right to re-distribute modified versions.” This custom conflicts with the reality of the free-software licenses that have been developed which legally guarantee anyone the right to re-distribute modified versions. Hence, certain learned customs are observed: forking of projects is avoided and discouraged, distributing changes with the cooperation of others is discouraged, and removing a name from the list of contributors is taboo. The free software license, if invoked would invalidate any of these customs, and so they continue only by virtue of an informal network of customs that somehow propagate reliably enough to prevent an evolutionary process from becoming a war of all against all. Because this conflicts with a certain economic consensus on the utility maximizing behavior of individuals (above), the only rational explanation is to rely on something called variously ‘reputation’, ‘status’, or ‘ego-satisfaction’ (but subsequently distinguished with vigor and flame from ‘fame’).

In order to save the properly functioning free market in labor and goods from experiencing such irrational behavior, Raymond divides the world into “command hierarchy”, “exchange economy”, and “gift culture.” Raymond, of course is not the first nor last social scientist to view the world in such a way, but note particularly the asymmetry of the terms. Only exchange constitutes an economy, while gift-giving remains culture, and command (shall we continue to read “communism” here, a word Raymond can barely even say?) is denied either culture or economy, left only with hierarchy, left to signify the very essence of injustice presumably. Reputation, status, ego-satisfaction are irrational behaviors maximizing no utility, not because they can’t be converted into real capital (they can, and Raymond is intimately familiar with this process, in the form of consulting, speaking tours, book writing, etc.), but because the hacker culture is a culture of abundance— just like the Northwest Coast Kwakiutl, insists Raymond the Anthropologist. Abundance begets super-economic games of reputation and status and therefore, a ‘culture’, specifically, a gift culture.

Raymond's territorialism produces bizarre effects, not the least of which is that in order to identify what kind of property exactly is being homesteaded according to the "common law theory of land tenure," Raymond dubs the "space of all possible thoughts" the noosphere.⁹⁶ Whatever Raymond imagines the noosphere might be, or wherever it is,⁹⁷ because it must be somewhere, it means that two people can't be in the same place without violating some law of Raymond's own private physics. Ownership therefore conflicts with the "cultural" practice of reputation seeking and status-making that is somehow (thankfully, Raymond does not speculate) perpetuated through the giving of gifts (i.e. the expenditure of surplus, especially in the form of time and computing power) on the internet. We are back to a problematic of knowing and owning, of having an idea, sharing an idea and owning an idea.

Raymond's poaching of the concept of gift-culture from anthropology is so riddled with theoretical and actual difficulties as to be nearly useless in this context. However, rather than nit-pick the conceptual inadequacy of Raymond's gift vis-à-vis the rich tradition of writing issuing from anthropology and sociology, I would pose Sean Doyle as an empirical counterpoint to both, as a real-life engagement with the practice of giving. Sean's sense that he wants to "give something back" because he has gotten so much from the internet {q.v. above} strikes me as an experience that does not deserve the criticism that Raymond's article does. But why? Perhaps it is because Sean's gift is to teach, not to outdo. There is in any theory of the gift (at least those that are not romantic or naive), a fundamentally violent and agonistic relationship. Sahlins identifies this in a comparison of Hobbes and Mauss.⁹⁸ The agonism may be that of the game, or it may be that of war, but in both cases, there is a sense of indivisible individuals (c.f. department of redundancy department) strategizing according to some set of rules. It is precisely the

⁹⁶ Which he subsequently calls "an obscure term of art in philosophy derived from the Greek 'nous' [sic] meaning 'mind', 'spirit', 'breath'." Teilhard de Chardin is not referenced as the originator of the term, and I admit it is hard to know what he might think of this use of it.

⁹⁷ Raymond distinguishes it from the "the totality of virtual locations in electronic media that is sometimes (to the disgust of most hackers) called 'cyberspace'. Property there is regulated by completely different rules that are closer to those of the material substratum — essentially, he who owns the media and machines on which a part of 'cyberspace' is hosted owns that piece of cyberspace as a result." [Raymond98]

⁹⁸ . Marshall Sahlins, "Spirit of the gift" in *Stone Age Economics* [Sahlins72]

existence of these rules that is difficult to understand, the process of achieving even the most basic agreement on a single rule precipitates an aporia of origin and end. What then does it mean to teach? To share the passion of discovering how to do something, how to think about something, or simply communicating something? In Mauss, the gift is riddled with obligation, question and answer create responsibility: one must give, one must receive, and one must reciprocate. Charity, then, under this structural tyranny is strictly violent, it denies one the responsibility for oneself, the possibility of answering, even if that answer would ruin the respondent. What then is an obligation without this force? Or more precisely, is it strictly possible to expect nothing in return? In many versions (Godbout, e.g.)⁹⁹ this is the experience of freedom, the freely given gift. However, no one ever occupies this position of spontaneously giving, one is always, in Sean's words "giving back." The given, even the given of language, is always already given, expectation is impossible without memory.¹⁰⁰

Of course, Raymond's point is simpler. Gift culture is a manner of formalizing the reputation game. The founding of opensource.org, the branding of free software and the leveraging of a system of ownership of names is a manner of turning the reputation game into a part of the market economy of the internet. Brands represent services, brands are values— and even though this was already apparent in the case of commodity culture, even though¹⁰¹ there is a familiar tendency to think about an economy of signs, as well as an economy of goods, this notion of "branding" represents a departure by turning the brand into a service into a source of value: there are no goods, there are only relationships, and these relationships are guaranteed only by the existence of reputation. And if you can name reputation (brand) you are halfway to measuring it and standardizing it so that it can be risked on an open market. Contracts and licenses are the means to secure this relationship, and decisions made with respect to the standardization of certain important technologies will constitute constitution. This is a question of property, one that will only be partially answered by reference to the legal regime of rights and the edifice of legitimacy

⁹⁹ Jacques Godbout, *The World of the Gift*. [Godbout99]

¹⁰⁰ cf. Derrida on the gift. [Derrida92]

¹⁰¹ On this subject, see Fritz Haug's Critique of Commodity Aesthetics [Haug86], and Scott Lash and John Urry's Economies of Signs and Space [Lash94].

described with respect to healthcare and the history of the administrative state in the sections to follow.

2.13 N. Open end (a ligature)

A Second Connecting Interlude flexes — Ellen Ullman cynicises — Some Arguments Recapitulated — the Reader is warned of the Author's Attitudes — Amicas Reintroduced — Value and Amicas form a Question Mark — Culture avoided In Favor of Story

The global network is only the newest form of revolution, I think. Maybe it's only revolution we're addicted to. Maybe the form never matters— socialism, rock and roll, drugs, market capitalism, electronic commerce— who cares, as long as it's the edgy thing that's happening in one's own time. Maybe every generation produces a certain number of people who want change— change in its most drastic form. And socialism, with its quaint decades of guerilla war, its old-fashioned virtues of steadfastness, its generation-long construction of a "new man"— is all to hopelessly pokey for us now. Everything goes faster these days. Electronic product cycles are six months long; commerce thinks in quarters. Is patience still a virtue? Why wait? Why not make ten million in five years at a software company, then create your own personal private world on a hill atop Seattle? Then everything you want, the entire world, will be just a click away.

And maybe, when I think of it, it's not such a great distance from communist cadre to software engineer. I may have joined the party to further social justice, but a deeper attraction could have been to a process, a system, a program. I'm inclined to think I always believed in the machine. For what was Marx's "dialectic" of history in all its inevitability but a mechanism surely rolling towards the future? What were his "stages" of capitalism but the algorithm of a program that no one could ever quite get to run?

— from Ellen Ullman, *Close to the Machine*, p. 29.