

Response to Lawrence Lessig's "Code v2.0", Part #2 (ch 6-8)  
John Randall N13725890 – Submitted to Dr. Kathleen Hulley, 2007.12  
Critical Thinking – Y20.6401.06 Fall 2007

Reading Code 2.0 by Lawrence Lessig is an exhilarating, enlightening, and insanely frustrating experience. In part 2 of the book, Lessig continues to point out just how interconnected laws, social norms, and the nature of reality are. As the nature of reality changes because of technological developments, Lessig urges that we develop an understanding of these relationships to more effectively write the code of law and the code of technology, online and off, in our best interests.

In part 2, Lessig focuses more specifically on examples of "regulation by code", and it would be difficult to put into words how insightful he is. He makes so many well supported arguments, overturning with the stroke of a pen so many micro and macro paradigms of technology, law, and Internet theory, that I suspect most readers will be instant converts and supporters of his ideas.

Along the way though, Lessig makes a few additional blunders of technical oversimplification. Lessig obviously has an up-do-date understanding of Internet technology developments and vocabulary, but, from the nature of his blunders, I speculate that much of his experience is theoretical rather than practical. Since Code 2.0 was derived in part from leaving his original work Code on a public Wiki for five years, I am particularly surprised that these glitches in his explanations remain.

For example, Lessig explains that the limitation on the number of simultaneous user people allowed in AOL chatrooms dictate that there is not "public space" within the cyber-space of AOL for large-scale meetings of "AOL citizens". As an important aside, Lessig explains that, while AOL users are free to take their business to competing ISP, they will find similar restrictions there. He is incorrect and is confusing with apples of yesterday with the oranges of today. Traditionally, AOL has been a cyber-space of its own, completely separate from "the Internet", and similar to the bygone cyber-spaces of Prodigy and CompuServe in that

regard. The popularity of these contained spaces pre-dates the popularity of the Internet. (What remains of the user base of these services utilizes these services primarily as gateways to the Internet, as ISPs– and any private services are merely value added extras.)

While AOL customers certainly can switch to other ISPs, whether or not they find chatrooms there with out 24 users per chatroom limits is irrelevant. Most forums and chatrooms exist as Internet destinations, and the ISP used to access them is irrelevant. Content provided by ISPs themselves is largely considered to be a joke throughout Internet culture.<sup>1</sup> ISPs are now considered to be utility companies. Customers don't want to listen to music, read books, or consume any media for that matter, published by the same companies who's primary experience and focus is on providing gas or electricity connections. They feel the same way about the companies who provide their Internet connections.

Furthermore, AOL users *have* in fact found large forums for public discourse, as has just about every community, out on the Internet, just outside of AOL's reach. There are the countless "AOL user" forums on the Internet, and conversations found there range from delight about AOLs "value added" content to organizing efforts fostering class-action lawsuits over the difficulty users find in canceling their AOL accounts.

These facts actually support Lessig's larger arguments about the changing nature of the Internet, and how important the values programmed into "code" are. It is a shame that he sometimes actually complicates his messages in an effort to

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<sup>1</sup> In general, big business either doesn't get the joke, or has no sense of humor. A lack of understanding of this culture can explain the demise of AOL, the failure of the AOL/TimeWarner merger, and the general failure of Telcom and ISP companies to create successful business models out of content creation and distribution services, all of which has been widely predicted by those who are active participants in "Internet culture."

simplify technical realities.

The most offensive of these blunders starts on page 111, where Lessig briefly explains the end-to-end (e2e) principle and the values that the e2e principal have embedded into the Internet through the TCP/IP. He speaks about how the "code" of the Internet stops ISPs from discriminating against or between content on their network. He is plainly wrong on this matter. Although utilization of the e2e principle in TCP/IP certainly did embed a certain set of values into the code, ISPs have long been able to discriminate between types of network traffic using many technologies, from simple port blocking to complex "deep packet" inspection.

While the FCC makes some very strong suggestions to US network providers, there are no regulations protecting the democratic values of non-discrimination on the Internet, and there are no technical realities that enforce non-discrimination in any strict sense. Currently, in the US, it is only respect for the technical efficiency of e2e principle and the fear of public backlash that preserves the neutrality of the Internet.<sup>2</sup>

Unbelievably, throughout Lessig's (oversimplified and partially untrue) explanation of the technical realities and values derived from the e2e principle, he never once uses the term that has become central to debates about these matters, "network neutrality". How Lessig can even get away with partaking in this conversion while avoiding the term "network neutrality" is beyond me.

This is only one of the many cases in which Lessig bobs and weaves, struggling to illuminate his visionary ideas and the debates derived from them while but awkwardly squirming to not comment clearly on where he stands in these debates. Lessig often states things like "I have ideas of my own on this matter, but, regardless of my ideas we all need to consider...." or "While the

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<sup>2</sup> Some other contries have directly regulated on neutrality issues.

EFF's view may not be universal, there is a fairly universal surprise at....". While these disclaimers can sometimes be refreshing, and can disarm the reader into deeper understanding of his concepts without political difference getting the way, generally, his failure to share comment on a personal, or even discuss the merits of, specific ideology is *infuriating*.

On the whole— Lessig message consistently feels incomplete. Code 2.0 reads as 85% of a complex argument. He shares his amazing vision, and articulately explains many layers logic, but then provides no path forward. He leaves the reader emotionally charged and anticipating a call to action that never arrives. Lessig occasionally acknowledges this tendency of his in asides, and remarks that his training is as a lawyer (not a legislator), and that his tendency is to comment on existing law rather than to propose new. However, this explanation is too simple and superficial, as Lessig's thinking obviously encompasses the roles of the lawyers, the legislative, judiciary, executive, and citizens, along with the different actions and standards of states, republics, and other sovereigns.

It is very difficult for me to forgive Lessig's lack of leadership, especially when he simultaneously, implores the reader on page 93 to "think a bit about the power I am describing – and again, I am not complaining or criticizing or questioning this power, only describing it", but then quotes Jennifer Mnookin on page 102 as saying "politics [is] implemented through technology".

Furthermore, there are many places throughout part 2 of Code 2.0 where Lessig fails to explore the implications of the situations he describes. On page 113, while Lessig describes different types of cyberspaces and different types of ISP connections, he mentions in an offhand matter "AOL has regulatory tools that others... do not. Its power is, of course, checked by the market."<sup>3</sup> While it is true

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<sup>3</sup> Lessig seems to have great faith in markets, and these types of asides are sprinkled throughout the book.

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that there is a market full of choices of dialup providers that provide Internet connectivity at dialup speeds, Lessig fails to note that there are relatively few choices for customers seeking Internet access at broadband speeds. (Such customers comprise is over 85% of the home ISP market in the US.) For a customer at any given location, there usually exists only a choice between one cable provider (usually regulated at the local level), one DSL provider (the local telcom provider) and a very small handful of satellite providers (who are regulated by FCC spectrum allocation, and offer upstream speeds that are barely faster than dialup). This is hardly what most people think of when they use the word "market", and the choices of customers are, in reality, incredibly limited. By this point in the book, Lessig has already taken great care to describe the complex situation of the "code writers" of these commercial interests (including how they tend to reflect government interests) find themselves in, and how complex market conditions dictate that they do not necessarily serve the public good or their customers interests. Because Lessig doesn't explain the details of his personal political paradigm, the audience can only take these asides at face value; on face value, many of these asides seem to contradict Lessig's messages.

Lessig's most disturbing omissions come from his many mentions of the Digital Millennium Communications Act (DMCA). On page 117 he uses the DMCA to illustrate a more general point about the unintended consequences of regulation. In doing so, he mentions the imprisonment of Dmitry Sklyarov that resulted from his companies development of DVD decryption software that allowed circumvention of DVD copy protection software. However, he fails to mention the parallel situation of Norweigan programmer Jon Lech Johansen. Johansen developed technology that circumvented DVD copy protection for the purposes of playback on Linux machines. Since Linux is an "open source" operating system, licensing and incorporating the privately owned, closed source

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decryption systems needed for DVD playback is problematic for many reasons, so Johansen reverse engineered the technology instead. By this point in the book, Lessig has already highlighted the importance of open source systems. It is obviously that something as quintessential as DVD playback must be provided for in an operating system for that operating system to maintain popularity. Why he fails to tie these arguments together into a more general argument against the proliferation of DRM is puzzling.

His omissions continue on page 118, where he mentions the "Broadcast flag" mandated for US television transmissions as an example of how the government can accomplish its aims, sidestepping constitutional limits, by regulating, through legislation, the design of code, rather than regulating behavior through legislation. While his legal points are valid and important, his failure to mention how copy limitations imposed by broadcast flags fail to protect fair use, and again, fails to make more meta-arguments.

When Lessig finally mentions the dynamic of popular resistance on page 188, I was excited. I presumed, just for a moment, that the call to action I had been anticipating was about to arrive. However, Lessig glances over various resistance movements, and states merely that "circumvention technologies are code", and that "they weaken rules reinforcing control." He fails to mention that the DMCA makes it illegal to create or use circumvention technologies, and therefore makes use of media that would clearly be considered "fair use" illegal and punishable because the act of jumping through the technical hoops needed to access the media to accomplish that fair use violate the DMCA.

These are just a few example is just one of his many failures to tie his arguments together into more meta-arguments against the proliferation of DRM, the perpetuation of closed systems favored by corporate interests and governments– or even a more general statement about the psychopathic nature

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of corporate entities. What were Lessig's motivations for writing this book? I don't know... but he certainly has laid the groundwork for others, and has provided much of the insight need to fully understand these situations.

I find solace in the fact that even though the last 15% of Lessig'ss messages is painfully missing, much of that last 15% seems self evident, and many others have continued the conversation without missing a beat. Still, Lessig has the respect and the audience to be a driving force in these debates, and I am disappointed that he seems to prefer to be one of the most cited sources in these conversations instead of partaking in them directly.