CHAPTER 12

A CRITICAL EMBRACING OF THE DIGITAL LAWYER

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Synopsis

§ 12.01 Introduction
§ 12.02 Critical Hurdles
§ 12.03 Curricular Interventions

[1] Introduction
[2] The Digital Divide(s)
[3] Complexity
[4] Service Biases
[7] Captology
[8] Science Fiction and its criticism

§ 12.04 Becoming Experimental

§ 12.01 Introduction

We will go out on a proverbial limb and predict the widespread adoption of digital lawyering by the legal profession and large swaths of its increasingly fastidious client base. The cost savings of a brick-and-mortar-less practice alone practically assure its embrace.1 Because of our role as legal educators, we believe we inherit a set of societal and professional obligations to render this embrace less impulsive, less reckless, less

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§ 12.01

romantic. And fortunately, that role grants us a strategically well-placed position from which to intervene pedagogically in just those ways. Bringing critical legal gazes to bear on this latest salvo of technological temptation will require extraordinary efforts, however. Digital lawyering, like most other forms of technologically enabled, -underwritten and -underwriting activities, carries such a culturally coherent valence that even benign criticism has to anticipate suspicion and scrutiny.

§ 12.02 Critical Hurdles

The American lawyer inclined to criticize technology in any substantive sense is confronted with a dynamic, difficultly-traversed space of obstacles. To begin with, her society’s culture is profoundly technophilic. Whether railways, radio, nuclear energy or nanotechnology, new technical powers are almost always heralded as a—and here we follow David Bowie’s terminology—Saviour Machine.¹ Such extreme technological enthusiasm is a perennial strain of American culture. A mix of technological determinism, utopianism and prophecy, it has tended to depict powerful technical innovations as inevitable, even when those innovations are nascent or inchoate.

Since technology criticism is quickly conflated with full-bore anti-technology sentiments, it tends to trigger a repulsive reaction as it brings to mind the widespread suffering that would surely follow any immediate relinquishment of technology in the modern world. The critic therefore finds herself on the wrong end of an imaginary morality debate. Technology enthusiasts have even argued that technological innovation must be supported because of its importance to the project of self-realization of individuals who will be born in the future.

She is also likely to encounter commonsensical rebukes based in the contradictory yet widely held beliefs that technological artifacts, devices, and systems are merely tools (we choose to use them or not; we pick them up, use them, and then put them down again), and that technological development or change is inexorable—something between a cosmological force and species imperative in terms of its amenability to being bucked.

Perhaps out of an arguably appropriate taste for efficiency, instead of describing the technology critic as an anti-American, immoral blockhead, the social forces toting the banner of technophilia resort to labeling our

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technology critic with a connotatively rich yet concise term: Luddite.

If we’re correct, however, much rides on the success of her navigation.

Technologies are not neutral artifacts. They change our world. They change our ability to act in that world. They change our perceptions of it and ourselves. Our technologies are effectively material constitutions. In a world increasingly shot through with artifice, dependent on complex techno-social configurations, awash in arcane scientific knowledges—in a technoscientific civilization, we might simply say—legal analysis and scrutiny, broadly construed, are indispensable. To be sure, so are the contributions of other actors—social movements, civil society organizations, artists, business enterprises and users/consumers of technological innovation, a list of them might commence—but the legal profession will need to contribute singularly. No other social force is tasked with guarding, cultivating, and refining so many of society’s most deeply held and codified values. And the singularity of this duty takes on an even greater importance when, as in the case of digital lawyering, the technological developments are to be introduced into the heart of legal practice.

In acknowledging this obstacle space and the necessity of its successful traversal, the educators of digital lawyers will need to become cultural heretics; tempering technophilia amounts to nothing less. And, at a minimum, such heretical work seems to call for a curriculum that aims to turn down the high wattage romanticism of technoenthusiasm, and for the development of methods for monitoring the effects of the embrace of digital lawyering by the profession, its collective client base, the legal academy and the public at large.

§ 12.03 Curricular Interventions

[1] Introduction

Alongside the traditional fare of coursework, the digital-lawyer-in-the-making will likely study subjects not currently taught in more than a small fraction of law schools. Document automation and document modeling; HyperText Markup Language, Extensible Markup Language and Resource Description Framework query languages; “artificial intelligence” and expert systems: all of these forms of coding and exploiting code will arguably become areas of sufficient concern to win them prominent places in concentration clusters. As critical as these and other areas of technical skill

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will be to matriculating the digital lawyer effectively, we believe that alone
they cover only the thinnest prerequisites to this new form of practice, and
that in isolation they will fail to thoroughly consider the ethical, profes-
sional, and societal implications of their use.

[2] The Digital Divide(s)

Some ethical issues may be more or less easily introduced into the new
curriculum due to their resonance with technology assessment literatures
already familiar to the legal community. Take, for example, the digital
divide.

Initially coined to describe disparities in information technology access on
the bases of race and ethnicity, age, gender, education, and socioeconomic
position, the digital divide may be presently more usefully understood as a
concept describing different types and regularity of use.\(^1\) Certainly, there is
strong evidence that formerly large gaps (say between black male and white
male users) have shrunk considerably.\(^2\) The less well-educated, the poor, the
rural dwellers and the elderly, though, continue to access the internet and
information technologies at rates considerably lower than those with
advanced degrees, urban or suburban household with incomes above
$50,000, and those under the age of 50. Accordingly, to the extent that the
digital lawyer communicates with her clients using the Internet, contrary to
the assumptions of some of her advocates, lack of access to justice may not
be so much alleviated as shifted from certain slices of society to others.

[3] Complexity

Since incorporation of digital lawyering into traditional firms will
necessarily involve the modification of services offered (if only in the form
of their delivery), increases in complexity of legal practice will likely
become an issue of study. The managers of firms understand the direct
correlation between increased rates of indigenous innovation and profit
margin-reducing complexity.\(^1\) Beyond a certain threshold, the adoption of
new technologies intended to increase profits or render day-to-day activities

\(^1\) Linda A. Jackson et al., Race, Gender, and Information Technology Use: The New
Digital Divide (City: Publisher, 2008).

\(^2\) Aaron Smith, “Technology Trends Among People of Color,” Pew Research Center’s
Internet & American Life Project, (2010).

\(^1\) See Mark Gottfredson and Keith Aspinall, “Innovation Versus Complexity—What is
more efficient may even lead to complexity-induced organizational collapse.²

But complexity will also pose possible ethical issues.

Will the digital lawyers’ systems generate legal products or modes of client interaction that will be overly complex? Presently, lawyers seem to use the term “artificial intelligence,” or “A.I.,” mainly to denote expert systems based on decision tree algorithms, as opposed to neural networks or other computational models and forms of machine learning theoretically capable of performing analogical reasoning.³ But even simpler types of learning machines or code used to service clients of the digital lawyer could increase complexity in troubling fashions.

For example, in either the legal product or its conveyance, digitalization could force practitioners to consider whether what they provide their clients and how they provide it constitute barriers that do not presently exist in conventional attorney-client exchanges. The American Bar Association’s Model Rules of Professional Conduct presently contemplate situations in which a client becomes impaired, and stipulates a lawyer’s duty.⁴ But what duties will be owed if a client does not experience diminished capacity, but rather finds their cognitive capacity overly taxed by the legal product provided them?

[4] Service Biases

Another possible ethical issue will be the skewing of digital lawyering towards relatively more crunchable problems and legal issues. Certain areas of legal practice (say, patent drafting and prosecution) will certainly be more amenable to virtual interaction between practitioner and client than others (consider mediation or advisement-based service, given the incentive to unbundle legal services that digitalization is likely to provide).¹ To a

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§ 12.03

significant degree, the digital lawyer may become machinic: he may experience a kind of gravitational tug towards types of practice and specialties that is a function of the technologies he uses rather than his own choices or the needs of his community.

[5] **Technological Legislation**

Digital divides and increased complexity of attorney-client interactions represent problems amenable to at least partial solution without any necessary recourse to any genuine critique of underlying technology: if the poor, elderly rural-dweller lacks adequate access, then we supply need to extend the network to them and reduce the use costs; if legal products are likely to become increasingly complex as digitalization takes hold, then we can modify our professional codes accordingly or dis-incentivize the unbundling of services provided by virtual lawyers. Machinic counseling, however, suggests a different order of problem. The code that enables the virtual lawyer to service clients at a remove, also effectively biases that service to a particular set of legal problems and concerns. Traditionally lawyers have exercised their own agency to determine what type of law they would practice, and what type of legal issues that practice would focus on, and equipped themselves accordingly—with relevant study, licensing, staff and so forth.

The possibility of machinic counsel, however, reverses this arrangement, for now the virtual lawyer’s equipment (and particularly, his enabling code) at least partially determines what work he can take on: the means of his work, in this hypothetical situation, would seek to dictate his work’s ends. In our opinion, this type of technological legislation should constitute the gravitational center of any critical approach to the education of the digital lawyer.¹

Respecting the time and disciplinary constraints of law professors and their students, in the remainder of this section, we will briefly discuss three different possible supplements to the likely virtual lawyer curriculum mentioned above: the New Chicago School style of jurisprudence, the study of persuasive computing known as captology, and science fiction coupled with its best criticism. Ideally, each of them would be incorporated into curriculum. Time, student tolerances, and pedagogic goals, of course, will in

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many cases lead professors to selectively sample them.


In a 1998 article, Professor Lessig proposed a then new approach to studying and effecting regulation, dubbing it “The New Chicago School.”1 Somewhat mischievously, his program was cast in contrast to what he called the “Old Chicago School,” a precedential program that took the realization that law alone does not regulate as the basis for arguments against law participating in regulation at all. The New School acknowledged other regulatory forces also, but instead recognized them “as additional tools for a more effective activism,”2 a more powerful form of regulation.

The New Chicago School can be understood essentially as vectorial governance. Four different types of constraints on behavior—Lessig refers to them as modalities of regulation—3 are brought to bear on a target of regulation, summing up to a net force in a fashion analogous to that of vector summing as taught in a physical science textbook, or observed on a billiards table.

A regulator can turn to law, which the program encourages us to understand in a classical Austinian sense (a sovereign’s order coupled with the promise of punishment if a subject refuses or fails to obey): “Laws tell me not to buy drugs, not to sell unlicensed cigarettes, and not to trade across international borders without first filing a customs form—all this with the threat that if these orders are not obeyed, I will be punished.”4

The New Chicago School approach also tells us that markets have regulatory power. Through dynamic pricing systems, market forces partially control what subjects can and cannot do, by determining what they can and cannot afford.

Likewise, norms represent an effective form of regulation. A subject community poopoos, ignores, and valorizes different types of behavior. Distinct from legal and market forces, constraining norms function through community enforcement; they say “[you] can buy a newspaper, but cannot

§ 12.03
2 Id. at 661.
3 Id. at 663.
4 Id. at 662.
buy a ‘friend’."

For our purposes, it is the fourth form of regulatory power—Lessig refers to it as “architecture”—that is most important for digital lawyer education. Aspects of the material world, in its given or “natural” state, and in its artificial aspects, also govern. “That [we] cannot see through walls is a constraint on [our] ability to snoop. That [we] cannot read your mind is a constraint on [our] ability to know whether you are telling [us] the truth. That [we] cannot lift large objects is a constraint on [our] ability to steal.”

Much of the now classic cyberlaw literature will be useful to thinking through and ultimately contouring our curriculum, but Lessig’s early works are of signal value for their thorough consideration of technological legislation. In them the built world is conceptualized as a collection of constraints, as a congress of demi-legislative artifacts that can be more efficacious than law in certain circumstances. “Code”—the chips, the fibers, the terminals, the hard drives, the servers, the routers, and certainly the software—enables our networked world at the same time that, in its design, it regulates that networked world, and so will also regulate digital lawyers.

Lessig’s is arguably the clearest, most provocative and fruitful contemporary analysis of technological legislation to originate in the legal academy. We do take issue with the absence of any sustained consideration of the imaginary effects conceptualizing governance in so mechanical, so Newtonian, a fashion. For while Lessig laments the possibility his theory of regulation opens up for increased regulatory power without political accountability, and the further possibility that the New Chicago School is a “totalizing” project in the Habermasian sense, potentially able to exercise control ubiquitously, his project only hints at the Heideggerian enframing that haunts it; it is too easy to imagine his rather mechanical regulator as being no better situated than the “pathetic dot[s]” who are her regulatory targets.

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5 Id. at 662.
6 Id. at 663.
7 Id. at 663.
Captology

In the process of completing his dissertation thesis, entitled “Charismatic Computers,” B. J. Fogg created the term “captology,” an acronym for computers as persuasive technologies. Subsequently he expanded the term into a sub-field of study and practice that is, at base, a mix of suasion and computer science; think of it as a form of rhetoric practiced by and/or through digital artifacts. Precisely where the New Chicago School goes dark on the implications of using code-as-law for a regulator, captology begins: it stresses the importance of attending to the ways that interacting with computer systems can lead to behavior changes purposefully sought by the designer(s) of those systems.

Captology suggests two specific types of technological legislation-related problems that digital lawyers need to be aware of. First, the digital lawyer’s professional autonomy can possibly be retarded by the designer(s) of the computer systems the lawyer uses; and, second, clients’ behavior, perhaps even behavior that has nothing to do with any legal matter for which they seek service, can be modified through the design of the systems clients use to interact with their lawyers.

Although Fogg’s work covers ground conceptually similar to that of the New Chicago School when it is concerned with code, the former’s style of presentation (in many ways it is a less-demanding read than Lessig’s work and may fit better into curricula already overflowing with material) and its disciplinary situation in computer science may make it more suitable than New Chicago School readings in certain circumstances. Our only significant caveat is the limitation Fogg places on captology with respect to intention: behavior changes induced without the designer’s intention—either randomly, or by the efforts of individuals who are not designers of the computer system—are simply not considered by captology. In addition to agreeing in principle with one captology critique that argues that the field must take some degree of responsibility for unintended outcomes, we believe adopting

§ 12.03


2 The question of whether computers actually exercise autonomous agency remains open in captology studies.

3 The two combined suggest the potential for violations of Model Rule 2.1 in that a lawyer is required to provide “independent professional advice.” See Model Code of Prof’l Conduct R. 2.1 (1983).

4 B. J. Fogg (2003),17.

\section*{Science Fiction and its criticism}

Science fiction can also be a useful device for furthering the critical embrace of digital lawyering. If the reader agrees with our basic assertion that the American legal academy, like the broader American culture in which it is situated, is profoundly technophilic, then science fiction might seem an unusual suggestion. After all, the genre is obsessed with technology and science to the point that at least one technology critic has described it as a “technopornographic literature.”\footnote{Langdon Winner, “Technologies as Forms of Life,” in \textit{The Whale and The Reactor—A Search for Limits in an Age of High Technology}. (Chicago: University of Chicago Press, 1986).} At best the genre holds a \textit{schizoid} valuational charge, at once wildly valorized in popular culture, as well as, increasingly, in the academy, and reviled as a nearly worthless, artless form in certain circles of literary criticism.\footnote{See Istvan Csicsery-Ronay, Jr., “The SF of Theory: Baudrillard and Haraway,” \textit{Science Fiction Studies}, 18.3, (1991), 389; see also Dave Itzkoff, “It’s All Geek to Me,” \textit{New York Times}, March 5, 2006. (Available at http://www.nytimes.com/2006/03/05/books/review/05itzkoff.html)}

The best science fiction criticism acknowledges these complexly negative critiques of the genre, incorporates them into its interpretations and encourages us to do the same. Samuel R. Delany and Darko Suvin are two such lions of science fiction criticism, and their works can offer substantial inoculation against vulgar technophilia.

We believe that at least three aspects of science fiction criticism should be stressed before and during generic readings in the legal academy:

1. Rather than conveyors of extreme technophilia, science fiction works should be interpreted as techno-centric, or as Delany has argued, concerned with an object-critique:

\begin{quote}
Despite the many meaningful differences in the ways of reading that constitute the specifically literary modes, they are all characterized—now, today—by a priority of the subject, i.e., of the self, of human consciousness. \[ . \]
\end{quote}

Answering its own expectations as a paraliterary mode, science fiction is far more concerned with the organization (and reorganization) of the
object, i.e., the world, or the institutions through which we perceive it. It is concerned with the subject, certainly, but concerned with those aspects of it that are closer to the object: How is the subject excited, impinged on, contoured and constituted by the object?

Suvin’s consistent emphasis on the centrality and “narrative dominance” of what he terms a “novum” (often some new science, technology or techno-social arrangements) in science fictional works amounts to a similar point: the foregrounding of artificial things distinguishes science fiction from other fictional genres.

2. That science fiction is not prophecy is also an important critical stipulation to bear in mind, particularly in the legal academy where the genre has been instrumentalized as a quasi-futurological tool. Both Suvin (“Laying no claim to prophecies except for its statistically [to-be-expected] share, SF should not be treated as a prophet: neither enthroned when apparently successful, nor beheaded when apparently unsuccessful.”) and Delany (“... science fiction is not about the future. It uses the future as a convention to present a significant distortion of the present.”) see the regular deployment of futurity as a figural means of generating effects, or potential effects, unique to the genre.

3. Subversiveness, or potential subversiveness, is chief among those effects. Although our critics diverge on whether science fiction is essentially subversive or if this effect is produced by particular readings, we think this non-trivial difference offers room for thought and debate among professors and students considering digital lawyering. The greater value of the critical assertion of subversiveness rests largely on the idea that, in presenting human-technology interactions differing significantly from our own, science
fictional texts dramatize the related idea that our own techno-social arrangements could have been different, and that they can be different.\textsuperscript{10}

Thus critically armed, the choice of which science fiction text to introduce into the curriculum will be largely a matter of professorial taste. For instructors less familiar with the genre and, therefore, interested in recommendations, we suggest Delany’s novella, \textit{We, In Some Strange Power’s Employ, Move on a Rigorous Line}, a cyber-punk precursor whose drama turns largely on the distribution of a internet-like power and communication system, and the effects of its distribution on what Lessig might call technologically legislated “ways of life.”\textsuperscript{11}

\section*{§ 12.04 Becoming Experimental}

We can understand our own approach to critically embracing digital lawyering and arguably, any critical approach to doing so, as an exercise in technology assessment. By anticipating the consequences of societal incorporation of new and newly deployed technologies, the legal academy can arrive at a non-technophilically driven digital lawyering program.\textsuperscript{1} And, because of the vital role of lawyers and lawyering\textsuperscript{2} in this age of high technology, we consider it imperative that the legal academy recognize the intrinsically \textit{experimental} quality of the emergence of digital lawyering. A reasonable course for assessing the impacts of digital lawyering would


\textsuperscript{11} See Samuel R. Delany, “We, In Some Strange Power’s Employ, Move on a Rigorous Line,” in \textit{Aye, and Gomorrah, and other stories}. (New York: Vintage Books, 2003); and Lessig (1999), 66. Curricula that are less concerned with space and time, or simply more ambitious, might include Charles Stross’ \textit{Accelerando}.

\section*{§ 12.04 EDUCATING THE DIGITAL LAWYER}


profitably include the proposal of research projects to the National Science Foundation, under its Law and Social Sciences Program, or its Science, Technology and Society Program. Any such proposals would explore the hypothetical problems discussed in our essay, as well as any others that emerge as the digital lawyering phenomenon evolves over time. We should seek to explore and understand as comprehensively as possible how (if at all) interactions between lawyers and clients change as practice goes virtual, how the administration of, and access to, justice are modified, how the legal profession is reconfigured and constrained by the enabling systems we incorporate, and even how public perceptions of the American Lawyer change in the process. In other words, our profession’s technological modification should be examined in a scientific manner, for in fashioning the digital lawyer, as in so many other technoscientifically-related activities occurring presently, we are becoming our own experiments.