V viewpoints

Chris Marsden

Law and Technology
How Law and Computer Science Can Work Together to Improve the Information Society

Seeking to remedy bad legislation with good science.

IN THIS COLUMN, I explore the various means by which lawyers can be helped by computer scientists to stop the (inevitable) collateral damage to innovation when the unstoppable force of legislation hits the irresistible innovation of the Internet.[1] I will explore some current controversies (fake news, Net neutrality, platform regulation) from an international perspective. The conclusion is familiar: lawyers and computer scientists need each other to prevent a disastrous retrenchment toward splintered national-regional intranets. To avoid that, we need to be intellectually pragmatic in pursuing what may be a mutually disagreeable aim: minimal legislative reform to achieve co-regulation using the most independent expert advice. The alternatives are to allow libertarian advocates to so enrage politicians that severe over-regulation results.

Regulation should first do no harm. That is easy to state, difficult to achieve, when legislation is the clumsiest version of the engineering principle of the 'Birmingham Screwdriver': to a legislator, every problem looks like a new bill will solve it, and worse, to an international lawyer every problem looks like a new Convention or Treaty is needed. Yet in reality, all that law can achieve is to enforce against a few bad actors to prevent the

most egregious overreaching by companies and users. More negatively, the worst law can do is overlegislate in the interests of monopolies old and new to prevent technological progress (one example: a man carrying a red flag in front of the first motor vehicles, which protected stagecoaches and railways from innovative competition).[2,a]

---

a United Kingdom: Locomotives Act 1865 s.3 (An Act for farther regulating the use of Locomotives on Turnpike and other roads for Agricultural and other purposes: 28 & 29 Vic. Chapter lxxxiii).

Heroic policy interventions by government often fail, especially when aimed at industry self-regulation. Governments for the last 20 years have spent a great deal of time realizing how little governments can do effectively in steering toward better self-regulation by the industry, as well as the unintended consequences of badly constructed legal mechanisms. Experts have to continually advise in favor of independent scientific evidence gathering and against corporate and public safety advocates' claims that the sky is falling. The

time-limited and dynamic 'truth' (or at least second-best solution) has always lain in the expert opinion that was not clamoring for attention, but reaching those experts requires patience and focus on the part of often distracted policymakers. Twenty years ago, it was pornography/Napster copytheft; now it is more likely 'fake news'/'Net neutrality'/'platform regulation'. I will briefly sketch those three current controversies, as these case studies help us see what goes wrong in law enforcement and how to (partially) remedy that bad lawmaking with good science.

Fake News

'Fake news' is the heartfelt cry of politicians who feel wronged by the online media. Ad blocking and filter bubbles have made consumers and voters harder to reach. Industrial scale behavioral profiling and viral marketing via Twitter bots are a new method to so do. The expansion of social networking and smartphones means that new methods of communication are necessary, and consumers-voters are filtering out content they do not like.

That is not new—it applied to the tabloid newspapers methods of 'yellow' journalism, radio news and telegraph-supplied newswires 100 years ago. Unfortunately, the failure to adopt a universal independent public service model then meant the public was inflamed by irresponsible media into a series of wars for the first time made global by the same communications means (telegraphs, railways, radio, long-distance reliable air and maritime transport) that enabled the mass media. Today, the calls for fake news regulation pay no regard to both historians of technology and legal historians who can advise on public service media. Twitter and Facebook offer parallels to Hearst newspapers and radio broadcasts.

It is high time for an interdisciplinary project exploring how to avoid the same disastrous outcomes. Computer technology is a tool for the powerful; that insight is not new but politicians are ignoring the previous generations of transformative technology and our attempts to marshal them. More obviously, politicians are not fully using the tools of behavioral insight to explore how to regulate fake news and social networking: evolutionary economics and behavioral neuroscience tells us how we become addicted to social media, yet legislators are only beginning to consult the experts to explore how social networking affects our behavior in fundamental ways.[6] Social and economic sciences, as well as computer scientists, and neuroscientist, can help lawyers convince legislators not to be silly.

Net Neutrality

Net neutrality is a simple term that describes the complicated reality of highly complex engineering task: how to permit sufficient permission-free innovation in the network. The overpoliticized doomsayers on both sides fail to mention what is becoming abundantly clear: policy can only partially steer traffic management practices. Net neutrality can do no more than prevent large telecoms companies continuing blocking Skype and WhatsApp or throttling back video traffic their subscribers want to see.

Net neutrality cannot stop innovation by telecoms companies (whose own corporate histories show a somewhat checkered relationship with Internet protocol network deployment). Regulators are simply not that competent, even if they had the resources and will to carry out laws to the letter, which they do not. More scientific exploration of the limited effects of Net neutrality policies would be rather useful. An example of regulators trying to do this in a non-confrontational manner is the extensive work produced by the Body of European Regulators of Electronic Communications.

How can legislators discuss complex laws when they do not know the difference between an Internet access provider (IAP) and an Internet service provider (ISP)? In European law, an access provider (telco) is an 'Electronic Communications Service Provider' (ECSP), distinct from an Information Society Service Provider (ISSP). 'Information Society' was Europe's rhetorical counterpoint to Al Gore's 'Information Superhighway.' Lawyers often fail to master these terms.

Minimal rules made sensibly by technically proficient people are achieving quietly what millions of email messages to regulators and legislators cannot: conduct rules to stop telecoms companies blocking legitimate content while giving them the latitude to experiment where not harmful to the public Internet. Note that common carriage was a rather successful way of delivering public (alongside private and business) communications services in previous technologies.

Platform Regulation

Politicians ask: What is the difference between platforms and networks? Journalists confuse their readers by referring to all those companies as ISPs—even though access networks perform fundamental and entirely different functions than social networks or search engines. This is the canard thrown into the Net neutrality debate by those telcos. If we are regulated, they argue, the same should also apply to the giant monopolies of Google, Apple, Facebook, and Amazon (known collectively as 'GAFA'). The very high public profiles of Twitter and Snap cause issues, as they are by no means monopolies.

Google was fined €2.4billion by the European Commission in June 2017 for antitrust violations because of the links between its search engine and shopping platform. Google avoided an adverse outcome for eight years, a delay even longer than Microsoft under European investigation (a complaint in 1998 resulted in enforcement from 2004: Case T-201/04).

E-commerce dominated by the GAFA platforms is becoming a major

> **Heroic policy interventions by government often fail, especially when aimed at industry self-regulation.**

political issue especially in Europe, where mass youth unemployment and a rapidly ageing workforce means IT skills are in short supply, especially in Parliaments. Google- or Uber-sponsored promises of untold riches from autonomous vehicles fall on politicians' deaf ears: robots do not vote. This is a red flag to those advising governments as well as those legislating.[2]

If platform regulation signals a desire to slow down the pace of innovation by government, what rational answer can be sold to government? The first essential is to prevent platforms becoming liable as publishers, by whatever legitimate means necessary. That may mean fines for failure to take down fake content or revenge porn. It may mean a user ombudsman as suggested in new proposed English legislation. Recruiting more internal content checkers at Facebook and Google to remove content may be overdue. Global platforms need to conform to European rules on hate speech (for instance Nazi content), a legal battle lost by Yahoo! in the French *Tribunal de Grand Instance* 17 years ago.[b]

Co-Regulation as a Hybrid Solution

What more can be done? Europe sets the global standards for regulation of content, notably in data protection and hate speech. The decisive power relationship in European law has swung to Germany and France. Regulation will increase, and Anglo-American companies increasingly recognize that and are embracing a French term: co-regulation. What that means is diluting government control of the Internet by ensuring a compromise based on industry self-regulation, but with oversight by users and by government regulators.[3] Examples include global Top Level domain name oversight. Governments have sponsored industry standards not only in Europe but globally via hosting and supporting the World Wide Web Consortium with industry.

Co-regulation is the compromise computer scientists must live with. Totalitarian regimes want to use the

---

Co-regulation is the compromise computer scientists must live with.

---

threat of terrorism and cyber-crime to replace self-regulation with direct and often draconian control. Co-regulation is the best alternative.

Areas for cooperation between law and computer science can flourish in co-regulatory institutions, because the best of them engineer a deliberative evidence-driven expert-friendly process.[5] It can curb the worst excesses of both corporate and government control.

If lawyers and computer scientists cooperate to make these social regulation processes work, it is the best chance to prevent a much worse system of direct government control emerging. C

References

1. Brown, I. and Marsden, C. *Regulating Code: Good Governance and Better Regulation in the Information Age.* MIT Press, Cambridge, MA, 2013.
2. Guadamuz A. and Marsden, C. Blockchains not Bitcoin: Distributed Ledger Technology. *Computers and Law 2,* 2016; http://www.scl.org/site.aspx?i=ed46568
3. Marsden, C. *Internet Co-regulation: European Law, Regulatory Governance and Legitimacy in Cyberspace.* Cambridge University Press, Cambridge, U.K., 2011.
4. Marsden, C. Technology and the law. *International Encyclopedia of Digital Communication & Society* Wiley-Blackwell, 2015; DOI: 10.1002/9781118767771.wbiedcs138
5. Marsden, C. et al. Deliverable 4.3: Final Report on Regulation, Governance, and Standard, 2015. European Internet Science Consortium; http://www.internet-science.eu/groups/governance-regulation-and-standards
6. Pollett, T.V., Roberts, S., and Dunbar, R.I.M. Use of social network sites and instant messaging does not lead to increased offline social network size, or to emotionally closer relationships with offline network members *Cyberpsychology, Behavior and Social Networking 14* (2011), 253–258.

Chris Marsden (c.marsden@sussex.ac.uk) is Professor of Law at the University of Sussex, Brighton, U.K.

The argument in this column is further explored in the final chapters of author's recent book *Network Neutrality: From Policy to Law to Regulation.* Manchester University Press, 2017.

---

b Confirmed in *Yahoo! Inc. v. La Ligue Contre Le Racisme et L'antisemitisme.* L'Union Des Etudiants Juifs De France, 433 F.3d 1199 (9th Cir. 2006); http://bit.ly/2f8Oi59

Calendar of Events