

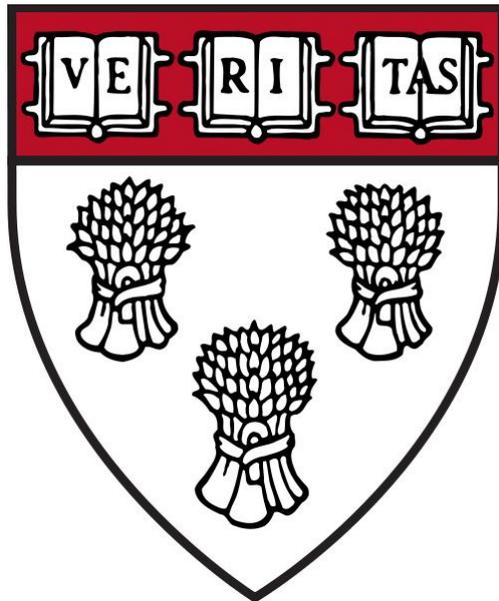
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PARADOXES OF DIGITAL ANTITRUST:

Why the FTC Failed to Explain Its Inaction on Search Bias

By Frank Pasquale



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I. INTRODUCTION

Google is no stranger to antitrust law. Scott Cleland has estimated that the company “officially violated antitrust laws in 10 different ways over 5 years.”¹ Commentators routinely critique its practices as anti-competitive.² It is under investigation in 9 countries, the EU, and some states in the US.³ But in early January

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1. See Scott Cleland, *Google’s Global Antitrust Rap Sheet* (Jan. 2012), <http://googleopoly.net/wp-content/uploads/2012/07/Googles-Global-Antitrust-Rap-Sheet1.pdf>; see also *Antitrust Regulators Raid Google’s Offices in South Korea*, BBC (Sep. 7, 2011), <http://www.bbc.co.uk/news/business-14816295>.

2. Joshua Hazan, *Stop Being Evil: A Proposal for Unbiased Google Search*, 111 MICH. L. REV. 789, (2013) (arguing that “Google’s conduct does in fact violate § 2 of the Sherman Act and § 5 of the FTC Act”); Nathan Newman, *The Cost of Lost Privacy: Search, Antitrust, and the Economics of Control of User Data* 1 (on file with authors) (“what is largely missed in analyses defending Google from antitrust action is how that ever expanding control of user personal data and its critical value to online advertisers creates an insurmountable barrier to entry for new competition”); Benjamin Edelman, *Bias in Search Results?: Diagnosis and Response*, 7 INDIAN J.L. & TECH. 16, 30 (2011) (India).

3. See Cleland, *supra* note 1; see also *Antitrust Commission Probes Allegations of Antitrust Violations by Google* EUROPEAN COMM’N (Nov. 30 2012), http://europa.eu/rapid/press-release_IP-10-1624_en.htm; *Google Faces Texas AG Inquiry*,

2013, Google scored a major victory, as the FTC agreed to drop nearly all of the most publicized part of its case against the company: allegations of biased and anticompetitive behavior in search results. Commissioner J. Thomas Rosch worried that Google may have been “telling ‘half-truths’ — for example, that its gathering of information about the characteristics of a consumer is done solely for the consumer’s benefit, instead of also to maintain a monopoly or near-monopoly position.”⁴ But the majority of the Commission decided unequivocally to end the investigation. They publicly justified the decision with little more than a page of assurances that FTC interviews and economic analyses had found little to no problematic behavior.⁵

Antitrust complaints against Google crescendoed just as the company’s market capitalization surpassed that of Microsoft, another web giant. In the late 1990s, competition authorities in the US and EU intervened to prevent Microsoft from using its power over operating systems to funnel PC buyers into the company’s Internet Explorer web browser, Media Player for music, and Office for productivity software. The EU, for example, forced a “browser ballot” onto personal computers using Microsoft’s operating system.⁶ Restrictions on Microsoft’s ability to tie browsers, media players, and other software to its dominant operating system allowed companies like Google to survive and thrive on the Internet.

Settles Privacy Suit, REUTERS (Sept. 3, 2010), <http://www.reuters.com/article/2010/09/03/us-google-settlement-idUSN0312083220100903>; *Italy Launches Antitrust Probe Of Google News*, LAW 360 (Aug. 27, 2009) <http://www.law360.com/corporate/articles/118735/italy-launches-antitrust-probe-of-google-news>.

4. Concurring and Dissenting Statement of Commissioner J. Thomas Rosch Regarding Google’s Search Practices, In the Matter of Google Inc., FTC File No. 111-0163, note 1 (Jan. 3, 2013), <http://www.ftc.gov/os/2013/01/130103googlesearchroschstmt.pdf>.

5. FTC Closing Letter, STATEMENT OF THE FED. TRADE COMM’N REGARDING GOOGLE’S SEARCH PRACTICES IN THE MATTER OF GOOGLE INC., FTC File Number 111-0163 (Jan. 3, 2013), <http://ftc.gov/os/2013/01/130103googlesearchstmtofcomm.pdf>. The Commission’s statement says, “The totality of the evidence indicates that, in the main, Google adopted [changes] improve the quality of its search results, and that any negative impact on actual or potential competitors was incidental to that purpose.” But the Commission has not released details about the nature of that evidence, the types of tests it used, or the standards employed in them.

6. See generally Andrew Chin, *Scholarship: Antitrust Principles in Information Technology*, available at <http://www.unclaw.com/chin/scholarship/index.htm#antitrustinit>. When Microsoft failed to add the browser ballot screen to all versions of windows, the EU fined it €561 million for noncompliance. Jon Brodtkin, *EU Fines Microsoft €561 million for not giving users a browser choice*, ARS TECHNICA, Mar. 6, 2013, at <http://arstechnica.com/tech-policy/2013/03/eu-fines-microsoft-e561-million-for-not-giving-users-a-browser-choice/>.

Now competition authorities beyond the FTC are considering whether Google itself is a monopolizer, cutting off upstart, specialized search engines in order to expand its own internet empire. Their decisions will shape the future of the digital marketplace. Without strong action, centrifugal tendencies will increasingly dominate the internet, as innovation will centralize in the few mega-firms capable of promoting new services on an ever-less-level playing field. If antitrust law continues to decline in power and scope, we should expect a digital replay of the domination of monopolistic trusts in the late 19th century. As central to our era's economy as railroads were to that time's economy, these mega-firms are likely to exploit their infrastructural status for as long as they can convince regulators and politicians that their market domination is the natural price of innovation. Thus other competition authorities need to avoid the FTC's quiescence. This essay explains (a) what the search bias case was about, (b) why competition is not "one click away," (c) why the FTC's explanation of its inaction was unsatisfactory, and (d) how competition agencies will need to treat search bias claims going forward to avoid the embarrassing denouement of the FTC's investigation.

II. A BRIEF GUIDE TO SEARCH BIAS CONCERNS

Imagine that you own Company A, and your main competitor is the persistent (but demonstrably worse) Company B. In searches for the products you sell, you reliably end up in the top five results in the studies you've commissioned; your competitors at Company B are on the fifth or sixth pages. What happens if Google purchases Company B, and immediately after the purchase, Company B appears to dominate the first page of results, and your company has been relegated to later pages? You might start by appealing to Google employees who run webmaster forums there, but that (and other mechanisms of corporate due process) are quite likely to fail. Should there be some type of remedy at law?

As Google acquires more companies, this type of dispute is becoming increasingly likely. Agencies and courts around the world have already heard many complaints about anticompetitive practices at Google. But there are many economists and lawyers who would dismiss such complaints as parochial disputes, whines from also-rans unaccustomed to the harsh new realities of online competition. The etiolated state of American antitrust law makes that position popular among US elites.

Despite growing concern about online intermediaries' power, legal authorities have done little to regulate these intermediaries over the past decade. If a search engine is abusing its position, market-oriented scholars say, economic forces will usually solve the problem.⁷ Can't find something on Google? Hop over to the Bing search engine. Don't like the new version of iTunes? Buy a subscription to a music service.

However well it worked in prior decades, this sanguine attitude runs into several problems in the digital age.⁸ How are users to even know if something is being hidden from them if they are coming to a firm like Apple or Google to find what they need? As antitrust authorities investigated it in 2012, Google's spokespersons never tired of repeating that "competition is just a click away;" users had only to type in "Bing" to find another search engine. The mantra was disingenuous, since it was the entities that were trying to be found, and not consumers acting as "finders," who had initiated the complaints against Google. Small, web-based companies had to go where the users were—and in general purpose search, that was largely Google (just as Twitter dominates microblogging, Facebook general social networking, and Apple a leading entertainment and app ecosystem).

Nevertheless, scholars have tended to assume that the more innovation happens on the Internet, the more choices users will have and the more efficient the market will become. Yet these scholars have not paid enough attention to the *kind* of innovation that is best for society, and whether the uncoordinated preferences of millions of web users for low-cost convenience are likely to address the many concerns raised by dominant intermediaries.⁹

7. See, e.g., Geoffrey Manne & Joshua Wright, *Google and the Limits Of Antitrust: The Case Against the Case Against Google*, 34 HARV. J.L. & PUB. POL'Y 171, 181 (Winter, 2011) (arguing that these investigations are not based on good antitrust policy). For a parallel argument in the communications field, see Douglas A. Hass, *The Never-Was-Neutral Net and Why Informed End Users Can End the Network Neutrality Debates*, 22 BERKELEY TECH. L.J. 1565, 1569, 1620–28 (2007) (Describing "the inherent enforcement difficulties in preemptive or ex post neutrality regulation," and doubting the utility of antitrust law). I have tried to demonstrate that both the communications and search industries need such rules, given their pivotal role in the economy. Frank Pasquale, *Internet Nondiscrimination Principles: Commercial Ethics for Carriers and Search Engines*, 2008 U. CHI. LEG. F. 263, 265 (2008).

8. See BARRY LYNN, CORNERED: THE NEW MONOPOLY CAPITALISM AND THE ECONOMICS OF DESTRUCTION (2010).

9. A notable exception is Maurice Stucke, *Better Competition Advocacy*, 82 ST. JOHN'S L. REV. 951 (2008) (Noting that "[p]revailing competition advocacy glosses over four fundamental questions: First, what is competition? Second, what are the goals of a competition policy? Third, how does one achieve, if one can, the objectives of such desired competition? Fourth, how does one know if the economy is progressing toward these goals?").

This has left policymakers adrift, and quick to resort to canned stories about competition and consumer welfare that miss the stakes of a case like Google's.

III. REASONS TO DOUBT THAT "COMPETITION IS ONLY A CLICK AWAY"

Despite persistent controversies surrounding Google, and its longstanding dominance in the search industry, leading policymakers have tended to assume that competition will eventually assuage most critics' concerns. If consumers wanted a more open search engine, so the story goes, they would demand it. When I testified before a Congressional committee in 2008 about Google's market power, virtually every representative who questioned me assumed that a clique of twentysomethings working in a garage could develop an alternative. The representatives didn't know much about the Internet, but the press had taught them about Larry Page and Sergey Brin's rise from grad students to billionaires, building a corporate behemoth out of old servers and ingenuity. In the popular imagination, the Silicon Valley giants' own rags-to-riches story forever foreshadows their own eventual displacement by another upstart.¹⁰

Is competition actually likely? In his book *Planet Google*, Randall Stross suggested that the company was using up to a million computers to index and map the web.¹¹ If he's even within an order of magnitude of the real number (a strictly protected trade secret), that ought to give pause to anyone who thinks an alternative can be cooked up in a garage. Indeed, a cursory review of the growing literature on the power usage of Google belies the "garage innovator" fantasy: its data centers use the equivalent of Salt Lake City's voltage.¹² (If your garage can hold about 190,000 people, maybe you can swing that; if it holds 2 cars, you might need a few more outlets). Companies may be able to lease computing space at Amazon or other suppliers, but it's almost

10. See, e.g., John Naughton, *Why the Facebook and Apple Empires are Bound to Fail*, THE GUARDIAN (Jan. 27, 2013), http://www.guardian.co.uk/technology/2013/jan/27/facebook-apple-only-way-is-down?CMP=tw_t_gu. Similar arguments have been made about Google for years. Such authors rarely if ever acknowledge how long dominance would need to last for them to consider it to be a problem, and the answer is likely the same as Jack Valenti's view of the optimal copyright term: forever minus one day.

11. RANDALL STROSS, *PLANET GOOGLE: ONE COMPANY'S AUDACIOUS PLAN TO ORGANIZE EVERYTHING WE KNOW* (2007).

12. See James Glanz, *Google Details, and Defends, Its Use of Electricity*, N.Y. TIMES (Sept. 8, 2011), <http://www.nytimes.com/2011/09/09/technology/google-details-and-defends-its-use-of-electricity.html>.

impossible to imagine a ragtag crew of grad students, even with a few million or tens of millions of dollars in venture capital funding, taking on a large firm like Google. Google is far, far more likely to purchase a start-up with valuable search technology (something it tends to do twice a month) than it is to be displaced by one.¹³

True, a few other giants might take Google on. Microsoft has poured money into Bing, but has so far lost billions of dollars—an unsustainable investment. Governments tried to create an alternative for a while, but the European Quero project sputtered out. Perhaps the engineers involved concluded that the \$450 million or so allocated to it could not support a viable rival to a company with \$100 billion in annual revenue. Finally, even if fellow Goliaths like Facebook, Apple, and Twitter manage to squeeze Google out of the burgeoning worlds of social media, mobile computing, and microblogging, they will raise the same concerns to the extent their domination in those areas matches Google’s in general purpose search.

Beyond the infrastructural challenge, many other factors make it extremely difficult for competitors to emerge in the general-purpose search space. Google’s secrecy is not only designed to keep spammers from manipulating its results; it can also prevent rival companies from copying its methods or building upon them. Unlike patents, which the patent holder must disclose and which eventually expire, it is possible for trade secrets to never be revealed, let alone enter the public domain.¹⁴

Innovation in search is heavily dependent on a base of users that “train” algorithms to be more responsive.¹⁵ The more search queries a search engine gets, the better able it is to sharpen and perfect its results.¹⁶ For example, if a search engine finds that everyone in a given area clicks on the third result instead of the

13. See Frank Pasquale, *Internet Nondiscrimination Principles: Commercial Ethics for Carriers and Search Engines*, University of Chicago Legal Forum, 2008 (Describing Google’s acquisition strategy).

14. Sequential innovation in the private sector relies on later “improvers” being able to stand on the shoulders of earlier innovators. Trade secrecy threatens to nip that process in the bud, siloing innovation in search into the firm that came to dominance first.

15. See James Pitkow et. al., *Personalized Search*, 45 COMMS. ACM, Vol. 45:9 (Sept. 2002) at 51 (discussing methods of personalizing search systems); Elinor Mills, *Google Automates Personalized Search*, CNET NEWS, June 28, 2005, http://www.news.com/Google-automates-personalized-search/2100-1032_3-5766899.html (reporting that Google launched a new version of its personalized search that monitors previous searches to refine future results).

16. For example, if 100 people search for “alternatives to Microsoft Word software” on a search engine on a given day and all pick the third-ranked result, the search algorithm may adjust itself and put the third-ranked result as the first result the next day. The most-used search engine will have more data to tweak its algorithms than its less-used rivals.

first result in a given day, the search engine can tailor results for that area to elevate what was once merely the third result. If other firms were able to observe this process, they might be able to develop rival, and better, computational strategies. Instead, the data is kept secret.¹⁷ The self-reinforcing “Matthew Effect” described by Robert Merton takes hold: to those who already have much, more is given.¹⁸ Incumbents with large numbers of users enjoy substantial advantages over entrants.

Competition may not lead to less secretive search engines unless the important search engine—Google—becomes more open about its own data and algorithms. It is impossible to find better interpretations and applications of data without access to it. As long as Google's search data is secret, no would-be rival will have access to this critical “raw material” for search innovation. Google's Chief Scientist Peter Norvig has made this very point. “We don't have better algorithms than everyone else,” he has stated; “we just have more data.”¹⁹ Thus Google itself controls the chief input into better search services: the data that engineers need in order to better personalize results.²⁰

Restrictive terms of service also deter competitors who aspire to reverse engineer and develop better versions of such services.²¹

17. Rival teams might try to run billions of Google searches themselves to reverse engineer the algorithms, but that would violate the terms of service and would be easily detected and deterred.

18. Robert K. Merton, *The Matthew Effect in Science: The Reward and Communication Systems of Science are Considered*, Science (1968), available at <http://www.garfield.library.upenn.edu/merton/matthew1.pdf> (inspired by Matthew 25:29: “For unto every one that hath shall be given” more).

19. Matt Asay, Tim O'Reilly: ‘Whole Web’ is the OS of the Future, CNET.COM (Mar. 18, 2010), http://news.cnet.com/8301-13505_3-10469399-16.html; see also *How Google Plans to Stay Ahead in Search*, BLOOMBERG BUSINESSWEEK (Oct. 2, 2009), <http://buswk.co/1arA6c> (noting Google's Eric Schmidt's statement that “Scale is the key. We just have so much scale in terms of the data we can bring to bear.”).

20. Similar issues were raised by the Google/ITA deal. Randy Stutz, *An Examination of the Antitrust Issues Posed by Google's Acquisition of ITA*, American Antitrust Institute White Paper, at <http://www.antitrustinstitute.org/sites/default/files/Google-ITA%20AAI%20White%20Paper2.18.11.pdf> (“acquiring ITA would put Google in the business of supplying a technology input that powers downstream products in a vertical online search market. That is, Google would own what many consider to be the premier technology that online travel agents, travel meta-search websites, and airline websites license from ITA to afford Internet users the ability to search real-time pricing and seat availability data in the course of shopping for airline tickets online”). That is one reason why the DOJ required Google to “license ITA's software, to continue to upgrade it and to establish firewalls to hide ITA clients' proprietary information from Google” for five years. John Simpson and Carmen Balber, *DOJ's Strict Conditions on Google/ITA Deal Will Open Internet Giant To Unprecedented Scrutiny*, CONSUMER WATCHDOG, at <http://www.consumerwatchdog.org/newsrelease/doj%E2%80%99s-strict-conditions-googleita-deal-will-open-internet-giant-unprecedented-scrutiny>.

21. See Google Inc., Terms of Service at § 5.4 (Same policy on Apr. 16, 2007, and July 25, 2011), <http://www.google.com/accounts/TOS>. Google's terms of service prohibit any

Every time a user types in a search query, he is treated by Google as having agreed to Google's "Terms of Service."²² That contract forbids users to reproduce, copy, or resell any Google service for any reason, even if the behavior is manual and nondisruptive.²³ Another section proscribes "creat[ing] a derivative work of . . . the Software."²⁴ Advertisers have faced other restrictions imposed by Google's AdWords Terms & Conditions.²⁵ All of these factors militate against robust competition.

Quantum leaps in technology capable of overcoming these brute disadvantages are unlikely. Search is as much about personalized service as it is about technical principles of information organization and retrieval.²⁶ Current advantage in search is likely to be self-reinforcing, especially given that so many more people are using the services now than when Google overtook other search engines in the early 2000s.²⁷

There are isolated consumer boycotts of Google, but a company so dominant can do without the business of, say, hardcore Rick Santorum supporters. Most of the problems described above would not even be noticed by ordinary web searchers, let alone provoke a protest. Why would the average user compare dozens of search results to assess and re-assess rival companies? Consumers lack both the incentive and the ability to detect manipulation as long as they are getting "good enough"

action that "interferes with or disrupts" Google's services, networks, or computers. Repeated queries to the service necessary to gather data on its operations may well violate these terms.

22. *Id.*

23. *Id.* at § 5.5.

24. *Id.* at § 10.2. Together, these sections of the TOS explicitly forbid much of the data harvesting that might be necessary for rival firms to incrementally innovate beyond the current capacities of Google's services. Commercial scraping of data, such as the use of software to automatically gather data from the Google service by a competitor to establish a rival search engine, is prohibited by multiple sections. Section 5.3 would proscribe both the automatic data collection and the use of an unapproved "interface" for accessing Google's database, regardless of the exact means.

25. See Ben Edelman, *Google-Yahoo Ad Deal is Bad for Online Advertising*, HARVARD BUS. S. WORKING KNOWLEDGE (Aug. 12, 2008), <http://hbswk.hbs.edu/cgi-bin/print/5995.html> (arguing that "Google's restrictions on export and copying of advertisers' campaigns . . . hinder competition in Internet advertising"). Though the hearing at which Professor Edelman was to testify was cancelled, he has documented these problems in some detail at his website, www.benedelman.org.

26. JOHN BATTELLE, *THE SEARCH: HOW GOOGLE AND ITS RIVALS REWROTE THE RULES OF BUSINESS AND TRANSFORMED OUR CULTURE* 8 (2006) (describing how personalized search enhances the value of search engines to both users and advertisers). Due to trade secrecy, it is impossible for policymakers to discover how much of an intermediary's success is due to its employees' inventive genius, and how much is due to the collective contributions of millions of users to the training of the intermediary's computers.

27. See RANDALL STROSS, *PLANET GOOGLE: ONE COMPANY'S AUDACIOUS PLAN TO ORGANIZE EVERYTHING WE KNOW* (2007) (describing the success of YouTube, a subsidiary of Google).

results. Given the opacity of search algorithms, neither users nor trusted proxies can reverse engineer the hundreds of factors that go into a ranking.²⁸

Rather than “Competition is one click away” (the mantra of Google’s antitrust lawyers), a more honest shibboleth would be “worse alternatives are one click away” (the view expressed privately to the investors who have driven up Google’s stock price over the years). Google use is more like co-investment than a one-off purchase. The more you use it, the more it can tailor its offerings to you. As Marcelo Thompson observes, “it is clear that a situation of lock-in has arisen in relation to Google’s dominant position in the information environment.”²⁹ And just as individuals “teach” the artificially intelligent algorithms what each of them wants, Google’s access to the aggregate data on search behavior helps fill in gaps where past surveillance of individuals provides no guides.

IV. THE ANTITRUST TRAP

In the U.S., mere possession of dominant market share—or even a monopoly—is not enough to lead to antitrust liability. Complainants must show evidence of genuine restraint of trade, a set of practices rendered more difficult to prove over the decades by courts increasingly influenced by the Chicago School of economics. Though American antitrust laws (including the Sherman, Clayton, and FTC Acts) were rooted in a political vision of fragmenting business power to avoid corporate capture of the legislative process, courts gradually tired of trying to bring order to precedents based on highly contextualized assessments of corporate conduct.³⁰ They chose, instead, to gradually adopt a highly technical set of definitions of anti-competitive conduct.

28. See Niva Elkin-Koren, *Let the Crawlers Crawl: On Virtual Gatekeepers and the Right to Exclude Indexing*, 26 U. DAYTON L. REV. 179, 185 (2001) (discussing the difficulty of replicating a search engine’s work).

29. Marcelo Thompson, *In Search of Alterity: On Google, Neutrality, and Otherness*, 14 TULANE J. TECH. & INT. PROP. 137, 165 (2011) (describing the “click away delusion”).

30. See Maurice Stucke, *Better Competition Advocacy*, 82 ST. JOHN’S L. REV. 951 (2008) Noting that:

[a]lthough neoclassical economic theory may be indifferent to [many] distributional effects, one concern underlying the Sherman Act’s passage in 1890 was the growing disparity in wealth Senator Sherman identified this inequality of condition, of wealth, and opportunity as the greatest threat to disturbing social order: This inequality has grown within a single generation out of the concentration of capital into vast combinations to control production and trade and to break down competition.

Behind the technique, though, lay a seminal work by Robert Bork, *The Antitrust Paradox*.³¹

Bork's thesis was relatively simple. Antitrust lawyers tended to defend their interventions in markets by saying that monopolies (and large firms exercising market power) were inefficient. Only competition would lead firms to innovate, reduce prices and improve quality. But for Bork, this forward-looking explanation for progressive antitrust policy missed the backward-looking evidence of exceptional innovation—that is, market dominance. We should expect the truly exceptional firm to attract a mass of consumers. Market dominance could just as easily be evidence of a firm's productivity as its power. Thus Bork called antitrust law a “policy at war with itself:” in the name of promoting competition, the law could take off the table the greatest reward for competing well—market dominance.

As Bork's (and the Chicago School's) ideas took hold, U.S. antitrust law became encrusted with an apparatus methods designed to spot those instances when a firm has won its dominant position in a market by clearly illegitimate means. Monopolies are fine, so long as they are not the result (or cause) of “monopolization.” An ever-narrowing set of actions and effects, not a firm's dominant status, are the key triggers for monitoring and potential penalties.

A *post hoc*, episodic antitrust enforcement model could work in a relatively simple business world, where written business records could be subject to definitive econometric analyses. But what happens in digital businesses driven by complex algorithms, where intent and effect can be hidden in millions of lines of computer code subject to multiple interpretations and almost entirely hidden from view. Even in environments conducive to investigation, one person's anti-competitive conduct can often be

31. See ROBERT BORK, *THE ANTITRUST PARADOX* (1978). Bork argued antitrust law should narrowly focus on “consumer welfare,” price-fixing, and little else. Bork's book has been cited in over 150 antitrust cases. Bork's followers largely ignore the ways powerful firms can leverage long-term dominance by using profits gained from one monopoly to undercut competitors in adjacent fields. They have steadily undermined a more expansive vision of how antitrust can benefit society by ensuring competition and enabling small, emerging companies to thrive, compete, and innovate. If a business practice appears to help individual consumers, however trivially, there's little concern about its long term effects; see also Robert H. Bork & J. Gregory Sidak, *What Does The Chicago School Teach About Internet Search And The Antitrust Treatment Of Google?*, AMERICAN ENTERPRISE INSTITUTE, http://aei.org/files/2012/10/05/-what-does-the-chicago-school-teach-about-internet-search-and-the-antitrust-treatment-of-google_132249480630.pdf (blessing Google's near-monopoly over search advertising as “pro-competitive” in one of Bork's last writings, an October 2012 white paper commissioned by Google). But see Scott Cleland, *Bork-Sidak's Fatally Flawed Google Antitrust Defense*, THE PRECURSOR BLOG (Oct. 9, 2012), <http://www.precursorblog.com/node/1737>.

characterized as another's effective business strategy—thus the enormous time and expense devoted to many modern antitrust suits. Antitrust cases tend to consume a great deal of resources, in part because economic conduct is subject to many different interpretations.³² When “new economy” firms enter the mix, regulators are liable to throw up their hands in frustration, unwilling to even try to give a reliable, public estimate of the harms and benefits arising out of any particular transaction or practice.

V. KICKING THE TIRES IS NOT LOOKING UNDER THE HOOD

This appears to have happened during the FTC's investigation into anti-competitive search bias at Google. Despite having an over 100-page memo prepared by staff describing the bases of a case against Google in 2012, the Commission stalled action repeatedly and barely stirred itself to hire the requisite technical experts to understand the bases of complaints against the company that year.³³ It finally closed the investigation, in a document that spent barely 2 pages discussing search bias allegations.³⁴

The FTC did “not find Google's business practices with respect to the claimed search bias to be, on balance, demonstrably anti-competitive.” But the decision was almost immediately second guessed, because the agency failed to articulate exactly why it believed search bias would be illegal under current antitrust law, how one would test for it, and whether those who believed they were affected by it would be able to challenge the agency's

32. See Jonathan Zittrain, *The Un-Microsoft Un-Remedy: Law Can Prevent the Problem that It Can't Patch Later*, 31 CONN. L. REV. 1361, 1361–62 (1999).

The main concern in finding a remedy for [‘bad monopolist behaviors’] may be time: The technology environment moves at a lightning pace, and by the time a federal case has been made out of a problem, the problem is proven, a remedy fashioned, and appeals exhausted, the damage may already be irreversible.

33. See Steve Lohr, *Drafting Antitrust Case, F.T.C. Raises Pressure on Google*, N.Y. TIMES (Oct. 12, 2012), <http://www.nytimes.com/2012/10/13/technology/ftc-staff-prepares-antitrust-case-against-google-over-search.html> (reporting that the FTC staff had prepared a secret 100-page memo advocating legal action against Google). The sudden reversal in January, 2013, raised many questions. Did the staff change its mind completely in less than 90 days? Were they being overruled by political appointees? See Peter Maass, *Your FTC Privacy Watchdogs: Low-Tech, Defensive, Toothless*, WIRED (June 28 2012), <http://www.wired.com/threatlevel/2012/06/ftc-fail/all/> (noting, in the privacy context, that “[t]he agency can take companies to court, but its overworked lawyers don't really have the time to go the distance against the bottomless legal staffs in Silicon Valley.” Is the same now true for competition law as well?

34. Statement of the Federal Trade Commission Regarding Google's Search Practices, In the Matter of Google Inc., FTC File Number 111-0163, January 3, 2013, <http://ftc.gov/os/2013/01/130103googlesearchstmtftcomm.pdf>.

interpretations of its analyses of data provided by Google.³⁵ In response to allegations of search bias, Google's public assurances have amounted to little more than a message of, "Trust us." And at the end of its investigation into the potential bias, the FTC essentially said "We do."³⁶

Journalists and watchdog groups were disappointed in the conclusion of the FTC's investigation as well.. As a New York Times reporter put it, "the FTC did not detail how it defined harm or what quantitative measures it had used to determine that Google users were better off."³⁷ Nor did the agency appear to consider whether small consumer gains now from, say, an ultra-clean interface of purely Google-owned or -affiliated results might later disserve consumers who want more diverse offerings. In response to this opacity, one public interest group has already put in a FOIA request for communications between Google and the FTC. Consumer Watchdog has requested public disclosure of a staff report that was reported to have recommended more robust action.³⁸

The Director of the Bureau of Economics at the FTC responded to these concerns, assuring the New York Times that, "We kick the tires hard on all of the data we receive." But the 4 page findings of the Commission don't even give us a sense of the hypotheses the FTC tested, or even the full legal theory of the case. If one of my students came to me at the end of a seminar with a four page report elaborating on the idea that "there really wasn't much of a problem" in the area he had investigated, he would get a failing grade. Certainly a federal agency with staff, concluding a 20-month investigation, can do better than this.

The Director's comment is unintentionally revealing, however. In my past work on consumer protection and competition regulation, I have insisted that agencies be able to "look under the hood" of highly advanced technologies like the algorithms at the heart of the Google search engine.³⁹ This might involve hiring

35. Statement of the Federal Trade Commission Regarding Google's Search Practices, In the Matter of Google Inc., FTC File Number 111-0163 (Jan. 3, 2013), <http://ftc.gov/os/2013/01/130103googlesearchstmtofcomm.pdf>

36. Frank Pasquale, *Google Antitrust: The FTC Folds*, MADISONIAN (Jan. 3, 2013), <http://madisonian.net/2013/01/03/google-antitrust-the-ftc-folds/>

37. See Edward Wyatt, *Critics of Google Antitrust Ruling Fault the Focus*, N.Y. TIMES (Jan. 6, 2013), <http://www.nytimes.com/2013/01/07/technology/googles-rivals-say-ftc-antitrust-ruling-missed-the-point.html>

38. See Stephen Shankland, *Watchdog Seeks FTC Staff Opinion on Google Antitrust Case*, CNET.COM (Jan. 8, 2013), http://news.cnet.com/8301-1023_3-57562841-93/watchdog-seeks-ftc-staff-opinion-on-google-antitrust-case/

39. See Frank Pasquale, *Beyond Innovation and Competition: The Need for Qualified Transparency in Internet Intermediaries*, 104 NW. U. L. REV. 105.

computer scientists, programmers, and other experts capable of understanding exactly how algorithms changed over time, and how directives from top management might influence what is always portrayed as a scientific, technical, and neutral process.⁴⁰ “Kicking the tires” is not a metaphor suggestive of expert analysis. Rather, it suggests a skeptical consumer trying, as best he can, to use whatever signals are available to a layman to make an assessment ultimately beyond his competence. Until the FTC releases more information on how it assesses accusations like search bias, we may need to consider its investigative capacity little better than that of the consumers it ostensibly protects.

Fortunately, there are some signs of hope at the agency, at least among privacy regulators. Realizing how quickly the world of online data collection is moving, the FTC has taken important steps to monitor evolving business practices. The agency appointed “Chief Technologists” and has also employed highly regarded privacy experts with expertise in computer science. Each has done a great deal to help the agency apply expertise to current problems in privacy. Moreover, the agency’s report, *Protecting Consumer Privacy in an Era of Rapid Change: Recommendations For Businesses and Policymakers*, was a model of sensitive appreciation of stakeholder concerns, leading to guidance on some best practices for digital companies.

This perceptive, well-written report grappled with fundamental issues in the law of fair data practices and consumer protection. Where the law was plainly inadequate, the report said so. For example, it supported “legislation that would provide consumers with access to information held by data brokers,” an increasingly important priority in a pervasively scored society.⁴¹ The FTC’s December 2012 subpoena of leading data brokers indicates an interest in illuminating some of the darker corners of data collection, analysis, sharing, and use. The FTC’s commitment to technical personnel and cutting edge reports is something of a model for other agencies tasked with protecting privacy in an era of rapid change. We can hope that the Bureau of Competition will learn from the example of its colleagues in privacy regulation.

40. Elizabeth Van Couvering, *Is Relevance Relevant? Market, Science, and War: Discourses of Search Engine Quality*, JCMC, Vol. 12, No. 3 (2007) at 866–87.

41. Applying the Fair Credit Reporting Act, the FTC itself required firms that “score” the health status of individuals based on their pharmacy records to disclose these records to scored individuals.

VI. THE HOPE AT THE BOTTOM OF PANDORA'S BOX

To be sure, Google hired some of the best minds in the legal profession (and academy) to promote its position.⁴² That kind of advocacy often gets results. But until we have a better sense of the answers to the questions above, the bottom line is that a black box investigation exonerated a black box search engine—cold comfort for those who might worry about the power exercised by Google online.

Fortunately, in the terms of Google's own "commitment letter" to the FTC, Google states that it won't demote sites in general purpose search results (on Google.com) if the sites opt out of having their content scraped onto Google Shopping, G+ Local, Flights, Hotels, and Advisor pages. As the FTC Chairman put it, "Going forward, Google will allow websites the ability to opt out of appearing in its vertical properties like Google Local or Product Shopping, without being penalized or demoted in its general search results on Google.com."⁴³ But what happens if a site produces evidence that it has been demoted after opt-out (during the 5-year period this commitment letter is good for)? Is there any FTC process that will be faster, more accurate, or more streamlined than, say, a good old-fashioned adjudication?

If the FTC's Google search bias investigation is not to have been a total waste, we will need to see positive answers to these questions. To assure a better competitive landscape online, promote privacy, and get a handle on the quasi-governmental role of large internet companies, we need a much better sense of how these companies are actually conducting their business and using data.

To conclusively adjudicate cases like these, a panel advising the FTC would need extensive access to the relevant Google search algorithms to assess the company's treatment of

42. See Eric Goldman, *The FTC Smartly Ends Its Imprudent Google Search Antitrust Investigation*, FORBES (Jan. 3, 2013), <http://www.forbes.com/sites/ericgoldman/2013/01/03/the-ftc-smartly-ends-its-imprudent-google-search-antitrust-investigation/>.

Google spent millions of dollars trying to sway the FTC. Google's economic stimulus package included a dozen DC lobbying firms . . . big brand-name paid influencers such as Robert Bork (recently deceased), Eugene Volokh, Marvin Ammori and many others, and multiple conferences designed to educate DC insiders. Not directly tied to this investigation, Google also has invested substantially in its policy and advocacy work in other ways, as we discovered in *Oracle v. Google* and we've seen from its work in Germany.

43. Google Press Conference, Opening Remarks of Federal Trade Commission Chairman Jon Leibowitz As Prepared for Delivery (Jan. 3, 2013), <http://www.ftc.gov/speeches/leibowitz/130103googleleibowitzremarks.pdf>.

upstart vertical search services.⁴⁴ Google keeps close tabs on its users' every click; surely it is not too much to ask the company itself to document all the changes to its algorithms (and especially manual interventions by human beings) so that someone—such as a regulatory agency, a nonprofit organization, a judge, or a standard-setting body—can look under the hood and understand what is going on. After the Microsoft antitrust case, the parties to the litigation agreed to appoint a Technical Committee to be empowered to understand how decisions at that critical computing company originated and how they were implemented. A similar body should be appointed for Google, and quite possibly for Facebook, Apple, Amazon, and Twitter as well.

Reporting to a Technical Committee may seem like a major burden for a technology company.⁴⁵ However, changes in ranking methodology at such firms are rigorously tested and documented.⁴⁶ When a website suddenly tumbles dozens of places in search results, and has a plausible story about being targeted as a potential rival of an established Google interest or in a space the company is planning to invest in, is it too much to ask for some third party to review the particular factors that led to the demotion? Given how quickly a sudden drop usually occurs, we are not discussing an infinite variety of changes to be reviewed. Nor would such review require the disclosure of the entire algorithm to a third-party auditor, or even the revelation of the relevant changes in the algorithm to the party involved, much less the general public.⁴⁷ In my early work on this topic, my coauthor and I even

44. The question is whether the change was driven entirely by its purported account of a multistep, user-test-driven process of assessing the quality of search results, or whether motives of self-preservation and competition strangulation informed the ostensibly neutral ranking algorithms.

45. Managers of the Ammori Group, a law firm and Internet-law consulting practice whose client include Google, have made this argument. Marvin Ammori and Luke Pelican, *Competitors' Proposed Remedies for Search Bias*, 15(11) J. INTERNET L. 1, 16, 26 (2012) ("Microsoft's top lawyer for antitrust issues noted that the technical committee's staff ballooned from three people to 40 and that the majority of Microsoft's compliance efforts required laborious and time-consuming back-and-forth with that committee."); Erick Schonfeld, "Google and Monopoly Theater," *TechCrunch*, Sept. 25, 2011 ("Senator Al Franken suggested the possibility of a voluntary technical committee to provide oversight, to which Google's outside lawyer Susan Creighton responded (quite correctly): 'Google already changes its algorithm 500 times a year. I think a technical committee would be too slow to keep up with changes in the market.'").

46. See e.g., *Search Quality Highlights: 52 Changes for April*, INSIDE SEARCH: THE OFFICIAL GOOGLE SEARCH BLOG (May 4, 2012, 1:44 PM), <http://insidesearch.blogspot.com/2012/05/search-quality-highlights-53-changes.html> (last updated May 6, 2012).

47. Frank Pasquale, *Rankings, Reductionism, and Responsibility*, 54 Clev. St. L. Rev. 115, 125 (2006) (discussing the need to balance the trade secrecy interests of search engines against regulators' prerogatives to understand the basis of some ranking decisions).

pointed to the precedent of the secretive Foreign Intelligence Surveillance Act (FISA) court as a model, to underscore how much we respected the intellectual property rights of the company whose actions are being reviewed (and particularly the value of trade secrecy).⁴⁸

As antitrust expert Mark Patterson has shown, the Dodd-Frank Act already requires far more disclosure from rating agencies than was previously required.⁴⁹ Patterson believes that such legislation is a model for intervention here, because “Google has been alleged to have manipulated its search results (or ratings) in much the same way that the rating agencies have been alleged to have manipulated credit ratings.”⁵⁰ In the Dodd-Frank Act, Patterson documents, “Congress directed the SEC to prescribe rules that, when credit-rating agencies make ‘material changes’ to ‘rating procedures and methodologies,’ ensure that: ‘the changes are applied consistently to all credit ratings to which the changed procedures and methodologies apply . . . and [the CRA] publicly discloses the reason for the change.’”⁵¹ Such requirements do not impinge on

48. See Oren Bracha & Frank Pasquale, *Federal Search Commission? Access, Fairness, and Accountability in the Law of Search*, 93 CORNELL L. REV. 1149 (2008).

49. Mark Patterson, *Manipulation of Product Ratings: Credit-Rating Agencies, Google, and Antitrust*, COMPETITION POL’Y INT’L, Apr. 17, 2012, <https://www.competitionpolicyinternational.com/manipulation-of-product-ratings-credit-rating-agencies-google-and-antitrust/>, noting that:

Although Google is alleged to have manipulated the ratings of competitors (e.g., potentially competing “vertical” search engines) and credit rating agencies are alleged to have manipulated the ratings of customers (issuers of financial products), the basic phenomenon is the same . . . lack of transparency in quality can give an information provider market power, as does an absence of price transparency.

50. *Id.* Evgeny Morozov and Julie Cohen have also advocated for more independent review of tech companies’ algorithms. MOROZOV, TO SAVE EVERYTHING, CLICK HERE: THE FOLLY OF TECHNOLOGICAL SOLUTIONISM (2013) (finding international examples to buttress Patterson’s and Carroll’s comparison between financial and tech regulation, based on Hong Kong’s regulation of algorithmic trading); COHEN, CONFIGURING THE NETWORKED SELF 8 (2011) (“The lives of situated subjects are increasingly shaped by decisions made and implemented using networked information technologies. Those decisions present some possibilities and foreclose others. Most people have very little understanding of the ways that such decisions are made or of the options that are not presented. In many cases, this facial inaccessibility is reinforced by regimes of secrecy that limit even technically trained outsiders to “black box” testing. We would not tolerate comparable restrictions on access to the basic laws of physics, chemistry, or biology, which govern the operation of the physical environment. The algorithms and protocols that sort and categorize situated subjects, shape information flows, and authorize or deny access to network resources are the basic operational laws of the emerging networked information society; to exercise meaningful control over their surroundings, people need access to a baseline level of information about what those algorithms and protocols do.”).

51. *Id.*

the information providers' judgments; they simply require that some information about it be given.⁵²

In contexts ranging from privacy rights to false advertising, authorities in the US and Europe have recognized the need for fast, flexible “quick looks” at suspect business practices.⁵³ In the case of FTC investigations into false advertising, 95% of problematic situations are quickly resolved in a self-regulatory fashion, by nongovernmental entities. This is not a recipe for the litigation nightmares industry advocates so frequently invoke. Rather, it is a matter of establishing some entity outside of Google (and other very large internet companies), whether as a result of competition law, consumer protection law, or other principles of commercial fairness, that has authority to review and offer its judgment on such questions.

What that entity ultimately does about its findings is not my central concern at this time. Simply informing consumers about potential biases would be a valuable public service. Indeed, Google itself often deflects complaints about its services by arguing that consumer education is the solution. If Google is serious about valuing openness, it should welcome such scrutiny.

VII. REGULATION'S RATIONALE: THE GROWING PREVALENCE OF CREDENCE SERVICES AND MULTI-SIDED PLATFORMS IN A COMPLEX ECONOMY

There are two critical rationales for holding search engines to higher standards than ordinary internet companies. First, they operate not only as simple sellers of services, but as multisided platforms, bringing together advertisers, consumers, and all manner of other cultural and political entities. That status, as intermediaries that users must use and trust for reliability, flags the history of regulation of communications networks as a potential model for search regulation.

Second, search is, in many circumstances, a “credence service.” To understand its uniqueness, compare it with other

52. Andrew Carroll, *Don't Be Evil. . . Unless it Increases Revenue: What the Operation of Credit Rating Agencies Can Teach Us About Google*, 31 TEMP. J. SCI., TECH., & ENV. L. 93, 117 (“The similarities between the problems existing within both CRAs and Google make Dodd-Frank a good starting point for regulating Google. Requiring an internal documentation process as well as yearly reviews by a regulatory agency could also be applied to Google's ranking process. By implementing such oversight, the government would be able to ensure that the objectivity proclaimed by Google is actually being instituted without the risk of outside manipulation that is created by public disclosure.”).

53. See Frank Pasquale, *Beyond Innovation and Competition: The Need for Qualified Transparency in Internet Intermediaries*, 104 NW. U. L. Rev. 105 (2010).

services. Consumers can immediately assess the value of ordinary goods and services: a car is either cleaned or it is not; a drinking glass either holds liquids or fails to. Government agencies also help to keep other quality concerns out of mind. Most of the time, we don't need to independently test our food for *E. coli*, or reweigh a box of cereal to assure it really contains 10 ounces of bran flakes. We can assume the Food and Drug Administration, and a state board of weights and measures, have sufficiently vetted quality. Experience goods and services are a bit more of a challenge to find and evaluate: only after consumption can you really say whether, say, a given song is worth purchasing, or a restaurant has lived up to its reputation.⁵⁴

Credence goods and services are more perplexing: it is often difficult to assess their quality accurately even after they have been purchased and used. When a non-lawyer seeks legal advice about a complex situation, it's very hard for him or her to know if he has been well served. Similarly, a patient may need to seek a second opinion about a doctor's diagnosis. In these scenarios, the consumer himself may not even be able to assess the quality of the service after experiencing it; only time (or an expert) will reveal the level of quality. Thus the "credence" nomenclature: the ordinary consumer must trust the provider more than an ordinary vendor, because it's expensive (and sometimes impossible) to know if the provider has actually given her best efforts (let alone provided appropriate advice or care).⁵⁵

Search is also often a credence service: you would probably not be using a search engine if you already knew what you wanted. And rare is the person who takes the time to compare results at one search engine with those at another. Moreover, given the importance of personalization to many good search results, it's hard to imagine how this could even be done: the service provided by the search engine with more data about your prior searching habits may be entirely different than one working from a blank slate.

Is it too much to ask for some entity outside of Google to be able to "look under the hood" and understand what is going on in

54. See Philip Nelson, *Information and Consumer Behavior*, 78(2) *Journal of Political Economy* 311–29 (1970), available at [http://193.146.160.29/gtb/sod/usu/\\$UBUG/repositorio/10290324_Nelson.pdf](http://193.146.160.29/gtb/sod/usu/$UBUG/repositorio/10290324_Nelson.pdf).

55. Both the legal and medical professions are heavily regulated in part in order to protect consumers against information asymmetries they can't easily redress. Both doctors and lawyers must pass exams to demonstrate that they actually know what they are doing, engage in continuing education to keep their skills sharp, and often buy malpractice insurance in order to be sure that victims of their mistakes enjoy some kind of compensation. Conflicts of interests must be minimized and disclosed when they arise.

plausibly contested scenarios? If so, such an abdication of administrative responsibility in the face of technical complexity bodes ill not merely for a level competitive playing field, but for democratic and judicial processes themselves in an era of technological advance.⁵⁶ The FTC flirts with irrelevance if it disdains the technical tools necessary to understand a modern information economy.

VIII. AGAINST DIGITAL FEUDALISM

Is there any natural limit to the aspirations of a large internet company like Google? As Siva Vaidhyanathan noted in his thoughtful 2010 book *The Googlization of Everything*, Google's stated goal is to "organize the world's information." As more economic value is concentrated in virtual products and automation, this aspiration becomes all the more striking. Organizing global information flows and archives is a few short steps from organizing global economic activity itself. That aspiration is the natural extension of Wall Street demands for constant corporate growth. Tech giants are already huge—in mid-2012, Apple alone contributed to 20% of the gains of the S&P 500, and Facebook's initial market valuation was based on assumptions that it would gain 10% of all global advertising budgets by 2020. Eyeing these figures, Google's own push for constant growth is a bit more understandable.

If antitrust law continues to decline in power and scope, we should expect a digital replay of the domination of monopolistic trusts in the late nineteenth century. As central to our era's economy as railroads were to that time, these companies are likely to exploit their infrastructural status for as long as they can convince regulators and politicians that their market domination is the natural price of innovation.

For anyone wowed by a free service like Gmail, Google's expansionary moves might seem a welcome intervention. Many fields need a dose of data-driven results and user-friendly design. Nevertheless, regulators should be concerned about Google using its dominance in general purpose search to leverage undue power in other, more specialized fields. We either commit to a 21st century antitrust law capable of detecting and deterring misuses of

56. Several authors have commented on the fading relevance of law (and, by implication, democracy) when technological imperatives are assumed to trump public values. *See, e.g.*, DANILLO ZOLO, *DEMOCRACY AND COMPLEXITY: A REALIST APPROACH* (1992); WILLIAM E. SCHEUERMAN, *LIBERAL DEMOCRACY AND THE SOCIAL ACCELERATION OF TIME* (2004).

power online, or we allow centralizing tendencies to concentrate innovation in the few mega-firms capable of gathering critical data and promoting new services on an ever-less-level playing field.