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Search, Essential Facilities, and the Antitrust Duty to Deal

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Search, Essential Facilities, and the Antitrust Duty to Deal

Marina Lao



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By Marina Lao*

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I. INTRODUCTION

On January 3, 2013, the Federal Trade Commission (FTC) voted unanimously to close its nearly two-year antitrust investigation into Google’s search practices without filing a complaint.¹ Though the FTC did secure a consent decree involving patent licensing in Google’s mobile business,² it concluded that the firm’s practice of often favoring its own content in the presentation of search results, sometimes referred to as search “bias,”³ did not violate U.S. antitrust law.⁴ It determined that, though the practice may have an incidental negative impact on some competitors, it was a quality improvement that likely benefited consumers.⁵ Similarly, it concluded that Google did not selectively change its search algorithm to exclude competitors and impede competition, and that any disadvantage to competing websites was the collateral result of changes that likely improved the quality of Google’s search results.⁶

¹ See 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> [hereinafter FTC Statement Regarding Google’s Search Practices].

² See FTC Release, Google Agrees to Change Its Business Practices to Resolve FTC Competition Concerns in the Markets for Devices Like Smart Phones, Games and Tablets, and in Online Search, Jan. 3, 2013, <http://ftc.gov/opa/2013/01/google.shtm> [hereinafter FTC Release] (summarizing the terms of Google’s agreement under a Consent Order not to “seek injunctions to block rivals from using patents essential to key technologies”).

³ See, e.g., Joshua D. Wright, *Defining and Measuring Search Bias: Some Preliminary Evidence 3* (George Mason Law & Econ. Research Paper Series, Working Paper No. 12-14, 2011), available at <http://ssrn.com/abstract=2004649> (defining “search bias” for antitrust purposes in terms of the “differences in organic rankings attributable to the search engine ranking its own content [‘own-content bias’]”). See generally Daniel A. Crane, *Search Neutrality as an Antitrust Principle 1* (Univ. of Mich. Public Law Working Paper No. 256, 2011), available at <http://ssrn.com/abstract=1961742> (commenting that “bias” and “discrimination,” terms apparently used to describe search engines “prefer[ring] their own content on adjacent websites in search results,” are slippery terms and expressing skepticism of the “search neutrality” principle).

⁴ The FTC did obtain two voluntary concessions from Google relating to its search business: (1) Google will allow websites to opt out of display on Google’s vertical properties but remain in its organic search results, and (2) it will remove certain restrictions on the use of its search ad platform, AdWords, that might hamper advertisers’ management of their ad campaigns across multiple platforms. Commitment Letter from David Drummond, Google Inc., to Jon Leibowitz, Chairman of the FTC (Dec. 27, 2012), available at <http://www.ftc.gov/os/2013/01/130103googleletterchairmanleibowitz.pdf> [hereinafter Google’s Commitment Letter].

⁵ FTC Statement Regarding Google’s Search Practices, *supra* note 1, at 2 (“Notably, the documents, testimony and quantitative evidence the Commission examined are largely consistent with the conclusion that Google likely benefited consumers by prominently displaying its vertical content on its search results page.”).

⁶ See *id.* at 3 (“Similarly, we have not found sufficient evidence that Google manipulates its search algorithms to unfairly disadvantage vertical websites that compete with Google-owned vertical properties.

¶2 In terminating the investigation after concluding that Google had not made changes to its search results in order to “exclude actual or potential competitors and inhibit the competitive process,”⁷ the FTC seemed to have implicitly rejected the notion that a major search engine may not favor its proprietary content in search results unless that content is “objectively” superior to competing content. While some Google critics, particularly its competitors, disapproved of the outcome,⁸ the FTC’s decision is well-grounded. If Google did not act to impede competition, then it is difficult to identify an antitrust theory of liability for its search practices, even if they incidentally disadvantaged a competitor.

¶3 Seeking the competitive advantages inherent in vertical integration—which is what preferential treatment of one’s own property in search results is about—is usually not unlawful under antitrust law.⁹ The core issue that I will address in this article is whether the antitrust duty to deal and the essential facilities doctrine, nevertheless, provide an antitrust basis for prohibiting this practice, as some have suggested. I conclude that they do not.¹⁰ Apart from the Supreme Court’s recently expressed strong disfavor of both principles in *Verizon Communications, Inc. v. Law Offices of Curtis V. Trinko, LLP*,¹¹ there are other serious obstacles to the possible use of either principle to mandate “neutral” search rankings.

¶4 A threshold issue is monopoly power. Notwithstanding Google’s absolute size and acknowledged success, it is unlikely that Google has monopoly power in an antitrust sense. In a dynamic environment where users are increasingly turning to other Internet portals for information, it is inconsistent with market reality to view general search engines as completely distinct from other online information businesses vying for user attention and advertising dollars.¹² Moreover, regardless of how narrowly the relevant market is defined, monopoly power cannot be inferred from high market shares because

Although at points in time various vertical websites have experienced demotions, we find that this was a consequence of algorithm changes that also could plausibly be viewed as an improvement in the overall quality of Google’s search results.”)

⁷ *Id.* at 2.

⁸ See, e.g., *FairSearch: FTC Statement Not the Last Word, Premature*, FAIRSEARCH.ORG (Jan. 3, 2013), <http://www.fairsearch.org/general/fairsearch-ftc-settlement-not-the-last-word-premature/> (criticizing the FTC’s decision as “disappointing and premature”); ICOMP, *Statement on “Deeply Disappointing” FTC Google Decision*, London (Jan. 3, 2013), <http://newsroom.i-comp.org/statement-on-ftc-google-decision/>. FairSearch.org is an alliance of Google’s competitors. See *About FairSearch.org*, <http://www.fairsearch.org/about-fairsearch/> (last visited April 12, 2013) (listing the members of the organization, including Microsoft).

⁹ See, e.g., *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 276 (2d Cir. 1979) (“So long as we allow a firm to compete in several fields, we must expect it to seek the competitive advantages of its broad-based activity—more efficient production, greater ability to develop complementary products, reduced transaction costs, and so forth. These are gains that accrue to any integrated firm, regardless of its market share, and they cannot by themselves be considered uses of monopoly power.”); *Olympia Equip. Leasing Co. v. W. Union Tel. Co.*, 797 F.2d 370, 373, 375–76 (7th Cir. 1986) (holding that the sole provider of telex services did not violate section 2 of the Sherman Act when it told its sales staff to stop showing a list of outside vendors to its subscribers and adjusted its commissions to encourage them to sell more of the firm’s own terminals).

¹⁰ From the FTC’s focus on the primary purpose of Google’s algorithm and design changes—which it determined to be product improvement rather than the exclusion of competition—and not on Google’s “duties” toward its competitors due to its dominance as a search engine, it appears that the FTC ultimately did not view the “duty to deal” as a viable theory of antitrust liability. See generally *FTC Statement Regarding Google’s Search Practices*, *supra* note 1.

¹¹ 540 U.S. 398, 407–11, 415 (2004).

¹² See *infra* Part III-B-1.

of the unusual competitive constraints confronting Google.¹³ Users can switch from one search engine to another in an instant and, because of the nature of the product (search results), competing search engines have the ability to quickly meet any increase in user demand.

¶5 In addition to the market power issue, there are other critical problems with the potential application of either doctrine in the context of search. For the essential facilities doctrine,¹⁴ the requirements for its application to search results are unlikely to be satisfied.¹⁵ Even accepting the implicit assumption of those making an essential facility case that the *results listing* is the alleged essential facility, no Google rival has been “denied access”—quality competitor websites are still highly ranked for certain keywords, though perhaps not for others. Moreover, the law is clear that there is no obligation to share even an essential facility, if a resource is not sharable. Because the first-ranked position is obviously non-sharable, it is practically impossible to make a case for the application of the essential facilities doctrine to search rankings.

¶6 The general duty to deal presents another set of problems. It is difficult to see how Google taking the top spot for itself in the results page would meet the strict conditions that might trigger a duty to deal set forth in *Trinko*.¹⁶ There was no profitable preexisting business relationship that was “terminated,” causing a short-term loss of profits for Google when Google Maps, for example, “displaced” Mapquest in the top rank.¹⁷

¶7 Mandated assistance for a rival, the remedy for liability under either essential facilities or the duty to deal doctrine, poses another generally unexamined problem. Mandatory cooperation has never meant *free* access or assistance.¹⁸ How would mandatory access work when a search engine’s business model does not accept payment from a website for inclusion in its rank-ordered organic results? These are only a few of the incongruities with both antitrust principles in the search context.

¶8 Furthermore, neither essential facilities nor the duty to deal principle would apply if the incidental adverse effects of the search practices at issue are outweighed by the procompetitive benefits,¹⁹ or if there are legitimate business justifications for them.²⁰ The many user benefits of integrating a search engine’s proprietary content in its search results—such as incorporating a map, rather than linking to another website requiring yet

¹³ See *infra* Part III-B-2.

¹⁴ In general terms, to successfully invoke the essential facilities doctrine, a plaintiff must show that (1) a monopolist controls access to an essential facility (2) a competitor cannot reasonably duplicate the facility (3) the monopolist has denied access of the facility to a competitor, and (4) it is feasible for the monopolist to share access. *MCI Commc’ns Corp. v. AT&T*, 708 F.2d 1081, 1132–33 (7th Cir. 1983); see *infra* Part III.

¹⁵ See *infra* Part III-C.

¹⁶ *Trinko*, 540 U.S. at 409 (suggesting that the duty to deal is limited to situations where the monopolist terminated a preexisting profitable relationship with a competitor, which entailed a sacrifice of short-term profits for the monopolist). See *infra* Part IV-A.

¹⁷ See *infra* Part IV.

¹⁸ See *infra* Part V.

¹⁹ *Chi. Bd. of Trade v. United States*, 246 U.S. 231 (1918) (articulating the factors to be considered under the rule of reason). See *infra* Part VI.

²⁰ *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 604–05, 608–10 (1985) (suggesting that the refusal would not violate section 2 of the Sherman Act had there been non-pretextual business reasons for the refusal); *Eastman Kodak Co. v. Image Technical Servs., Inc.*, 504 U.S. 451, 483 n.32 (1992) (observing that a monopolist may refuse to deal with its rivals “if there are legitimate competitive reasons for the refusal”).

another query—are widely acknowledged.²¹ The practice is embraced not only by Google but also by other competing search engines with no ability to exercise market power, suggesting that it is a competitive strategy.

¶9 In addition to the doctrinal misfit of the “refusal to deal” rubric, the wisdom of prohibiting search engines from favoring their own content in search results (sometimes termed implementing search “neutrality”) is questionable as a matter of policy. Imposing search neutrality would likely jeopardize the search engine evolution and distort competition in the broad online information market.²² The concept of search neutrality is based on the “ten blue links” origin of search engines, where search and content occupied distinct spaces. If a search engine is restricted to its original contours and may only include a map with its search results, for example, after applying a neutral standard to select the map to be displayed—Google, Mapquest, or Bing—it is probable that no map would be included. It is difficult to see how this would benefit users.

¶10 This is not to suggest that search rankings can never give rise to an antitrust violation. There is a distinction between a simple preference for one’s own products and services, which is not and should not be unlawful, and unjustified acts to obstruct competition, which would be problematic.²³ But absent affirmative exclusionary acts, government or judicial intervention to impose neutrality, no matter how well-intentioned, could impede innovation, distort competition, and, ironically, undermine the core purpose of the antitrust laws.

¶11 This paper begins, in Part II, with a brief overview of search engines, their preference for their own content in unpaid search rankings, and the general antitrust narrative. Part III examines the historically narrowly construed essential facilities doctrine, including the question of market definition and market power, and the thorny concepts of essentiality, denial of access, and “nonrivalrousness.” Part IV discusses unilateral refusals to deal (not involving an essential facility), focusing on the sacrifice-of-profits limitation. Part V explores the compensation conundrum relating to the essential facilities doctrine and the general duty to deal in the search context. Part VI questions the often-embedded assumption that preference for one’s own property, framed in terms of denial of access or refusal to deal, is necessarily anticompetitive. It further suggests that the practice is likely a legitimate competitive strategy. Part VII raises policy issues, focusing on the risk that imposing search “neutrality” will freeze the search engine evolution and distort competition in the broader Internet information market.

II. SEARCH ENGINES, PREFERENCE FOR OWN CONTENT, AND THE ANTITRUST NARRATIVE

¶12 Search engines play an important role in making the Internet accessible and useful.²⁴ By aggregating and organizing the innumerable webpages on the Internet,²⁵ and

²¹ The FTC apparently acknowledges these benefits. See FTC Statement Regarding Google’s Search Practices, *supra* note 1 (“While Google’s prominent display of its own vertical search results on its search results page had the effect in some cases of pushing other results ‘below the fold,’ the evidence suggests that Google’s primary goal in introducing this content was to quickly answer, and better satisfy, its users’ search queries by providing directly relevant information.”).

²² See *infra* Part VII-B.

²³ See *infra* notes 269–72 and accompanying text.

²⁴ See Press Release, *comScore Releases July 2011 U.S. Search Engine Rankings*, COMSCORE (Aug. 10, 2011),

presenting what is relevant in response to search queries, search engines help users locate information on the Internet on practically any topic no matter how obscure.²⁶ And in so doing, they also help content providers connect with their audience. From a commercial perspective, search engines provide an efficient means for consumers to find businesses that best serve their needs and for businesses to reach consumers.²⁷ By reducing search costs, information costs, and transaction costs in ways unimaginable little more than a decade ago, search engines greatly facilitate voluntary transactions. But they are certainly not indispensable either for users searching for information or for businesses reaching potential customers in the digital world, especially in the last few years when social networks, such as Facebook, and powerful specialized sites, such as Amazon, have transformed the way many users seek information.²⁸

¶13 The technology behind the operation of search engines is complex and sophisticated.²⁹ Search engines continually search, index, and store (or cache) Internet content on their servers.³⁰ When a user enters a query, the search engine searches its index and cached content and generates two types of results: “organic” (or unpaid) results, and sponsored (or paid) links.³¹ The organic results traditionally consisted of rank-ordered links to webpages containing information the search engine deems most responsive to the search query³²—the so-called ten blue links—though they have evolved beyond that,³³ as I will discuss below. Content providers do not have to pay a search engine if links to their websites happen to appear in the organic results.³⁴

http://www.comscore.com/Press_Events/Press_Releases/2011/8/comScore_Releases_July_2011_U.S._Search_Engine_Rankings (reporting that in July 2011, over 17.1 billion search queries were conducted in the United States).

²⁵ Jesse Alpert & Nissan Hajaj, *We Knew the Web Was Big . . .*, THE OFFICIAL GOOGLE BLOG (July 25, 2008, 1:12 PM), <http://googleblog.blogspot.com/2008/07/we-knew-web-was-big.html> (estimating that there were, in 2008, more than one trillion webpages on the Internet and that more were appearing every day).

²⁶ One could, as one commentator said, search “mongolian gerbils” on Google and locate authoritative information on the subject on the Internet—information that one unfamiliar with the subject would have difficulty finding without a search engine. See James Grimmelmann, *The Google Dilemma*, 53 N.Y.L. SCH. L. REV. 939, 940 (2009) [hereinafter Grimmelmann, *The Google Dilemma*].

²⁷ See Press Release, *2010 Social Shopping Study Reveals Changes in Consumers’ Online Shopping Habits and Usage of Customer Reviews*, THE E-TAILING GROUP (May 3, 2010), <http://www.e-tailing.com/content/?p=1193> (reporting that 57% of consumers used a search engine to shop online).

²⁸ See *infra* notes 117–26, 152–65 and accompanying text.

²⁹ For good descriptions of the technology behind the operation of search engines, see Eric Goldman, *Deregulating Relevancy in Internet Trademark Law*, 54 EMORY L.J. 507, 532–51 (2005) [hereinafter Goldman, *Deregulating Relevancy*] (describing how search engines search the Internet and return ranked results); James Grimmelmann, *The Structure of Search Engine Law*, 93 IOWA L. REV. 1, 7–11 (2007) [hereinafter Grimmelmann, *Search Engine Law*] (providing an overview of how search engines work).

³⁰ See, e.g., Nancy Blachman & Jerry Peek, *How Google Works*, GOOGLEGUIDE (Feb. 2, 2007), http://www.googleguide.com/google_works.html. It is said that Google utilizes over 450,000 servers, and that its major competitors (Bing and Yahoo!) have comparable infrastructure support. See Grimmelmann, *The Google Dilemma*, *supra* note 26, at 942.

³¹ See, e.g., Nancy Blachman & Jerry Peek, *Results Page*, GOOGLEGUIDE (Feb. 2, 2007), http://www.googleguide.com/results_page.html.

³² See Goldman, *Deregulating Relevancy*, *supra* note 29, at 534–42 (describing the complex process by which search engines sort, rank, and return organic results in response to a query).

³³ See James Niccolai, *Yahoo Vows Death to the ‘10 Blue Links’*, PCWORLD (May 19, 2009, 5:40 PM), http://www.pcworld.com/article/165214/yahoo_vows_death_to_blue_links.html (previewing Yahoo!’s “better alternative to the traditional ‘10 blue links’”); Theo Vachovsky, *“I Don’t Need Ten Blue Links—Just Give Me the Answer!”*, BING SEARCH BLOG (Oct. 29, 2008, 3:55 PM), http://www.bing.com/community/site_blogs/b/search/archive/2008/10/29/i-don-t-need-ten-blue-links-just-

¶14

“Sponsored links,” the source of most of a search engine’s revenues,³⁵ are often search-based advertisements that are returned (and clearly identified as such) in the search results, along with the organic results.³⁶ Advertisers bid to win auctions for specific keywords, which would then lead to the placement of their links on the results pages for queries that include the keyword.³⁷ Because advertising space is limited, and pricing is based on the number of clicks on the sponsored link, all search engines apply a quality metric that effectively requires advertisers to bid higher per click the less relevant their link is to the search term (that is, the fewer the predicted number of clicks).³⁸ This has led to complaints against Google from some potential advertisers whose low scores effectively priced them out, or whose poor quality sites excluded them from bidding.³⁹ The issues raised by these allegations are distinct from those stemming from search engines’ favoring their own content in the organic results and will not be discussed in this article.

give-me-the-answer.aspx; *Facts about Google and Competition Better Answers*, GOOGLE, <http://www.google.com/competition/betteranswers.html> (last visited June 21, 2011) (“Sometimes the best, most relevant answer is a list of websites—our traditional ‘ten blue links.’ Other times the best answer might be a news article, sports score, stock quote, video, comparison shopping results, or a map.”). See also *infra* notes 39–42 and accompanying text.

³⁴ Nancy Blachman & Jerry Peek, *Ads*, GOOGLEGUIDE (Aug. 24, 2008), <http://googleguide.com/ads.html> (“Google never sells its search results.”).

³⁵ See KEN AULETTA, *GOOGLED: THE END OF THE WORLD AS WE KNOW IT* 16 (2009) (quoting former Google CEO Eric Schmidt saying, “We are in the advertising business”); VIRGINIA SCOTT, *GOOGLE (CORPORATIONS THAT CHANGED THE WORLD)* 76 (2008). As virtually everyone knows, users do not have to pay to conduct searches or use other features of a search engine; content providers are also not charged, even if their inclusion in the organic results leads to revenue-producing transactions. See, e.g., *The Power of Google: Serving Consumers or Threatening Competition?: Hearing Before the Subcomm. on Antitrust, Competition Policy and Consumer Rights of the S. Comm. on the Judiciary*, 112th Cong. 35-3620001 (2011) [hereinafter *Hearing on the Power of Google*] (statement of Susan A. Creighton, Partner, Wilson, Sonsini, Goodrich & Rosati), available at <http://www.gpo.gov/fdsys/pkg/CHRG-112shrg71471/pdf/CHRG-112shrg71471.pdf> (summarizing Google’s success in innovating while keeping its services free to users and also “provide[ing] free ‘promotion’ to high quality sites, including Google competitors, through the operation of its natural search functions).

³⁶ See Blachman & Peek, *supra* note 31.

³⁷ For discussions of search-based advertising, including its mechanics and pricing, see Grimmelmann, *Search Engine Law*, *supra* note 29, at 11–13; Geoffrey A. Manne & Joshua D. Wright, *Google and the Limits of Antitrust: The Case Against the Antitrust Case Against Google*, 34 HARV. J.L. & PUB. POL’Y 171, 193–94, 203–06 (2011) [hereinafter Manne & Wright, *Google and the Limits of Antitrust*].

³⁸ See Geoffrey A. Manne and Joshua D. Wright, *If Search Neutrality Is the Answer, What’s the Question?*, 16–17 (ICLE Antitrust & Consumer Protection Program White Paper Series, Lewis & Clark Law School Studies Research Paper No. 2011–14, 2011), available at <http://ssrn.com/abstract=1807951> [hereinafter Manne & Wright, *If Search Neutrality is the Answer, What’s the Question*] (explaining why the “click through” pricing system necessitates a relative weighting system, where a potential advertiser must bid higher per click the less relevant, and of poorer quality, its link is to the keyword).

³⁹ See, e.g., *TradeComet.com LLC v. Google, Inc.*, 693 F. Supp. 2d 370 (S.D.N.Y. 2010). TradeComet operates SourceTool, a website that focuses on businesses—a business-to-business directory that primarily lists product and service suppliers for businesses. TradeComet’s complaint alleged that Google’s implementation of a quality metric raised the amount it must pay Google per click causing it to fail to win a favorable advertisement placement on Google. This allegedly precluded SourceTool from gaining user traffic and attracting search advertisers in competition with Google. See Manne & Wright, *If Search Neutrality is the Answer, What’s the Question*, *supra* note 38, at 43–44. The complaint was dismissed on a Rule 12(b) motion based on a forum selection clause that TradeComet accepted when it participated in Google’s search advertising platform. 693 F. Supp. 2d at 373.

A. The “Ten Blue Links” and Beyond

¶15 Returning to the subject of the unpaid organic search results, search engines rely primarily on complex proprietary algorithms to assess the relative value of countless webpages,⁴⁰ though manual adjustments are occasionally made, usually to target web spam.⁴¹ The algorithms take into account numerous factors designed to determine the relevance and quality of the web content so that links can be returned in the order perceived to be most useful to the searcher.⁴² Each search provider’s algorithm, protected as a trade secret,⁴³ reflects its judgment as to what makes content responsive and valuable.⁴⁴ Because search engines attract advertisers by drawing users, and users like relevant results, search providers frequently update their algorithms and sometimes make manual tweaks to improve the results and to prevent spammers and scammers from “gaming” the algorithm.⁴⁵

¶16 Until about 2005, the lines between web content and search were clear. The role of general search engines, which did not create web content or provide other services, was simply to generate a list of the most useful websites for the user—the “ten blue links”—in response to a search query. All three major search engines have since redesigned their products and evolved into integrated information portals. Among the changes is a movement away from the traditional ten blue links to the incorporation of, or interface with, the search engine’s specialized search results.⁴⁶ This sometimes includes providing

⁴⁰ See Grimmelmann, *The Google Dilemma*, *supra* note 26, at 941–42 (explaining generally how Google’s search algorithm assesses the relative relevance of a website’s content to a user’s query).

⁴¹ See James Grimmelmann, *Google Replies to SearchKing Lawsuit*, LAW MEME @ YALE LAW SCHOOL, <http://lawmeme.research.yale.edu/modules.php%C2?name=News&file=article&sid=807> (analyzing Google’s answer to a lawsuit by SearchKing—thought by many to be operating a “link farm”—as a non-denial of SearchKing’s claim that Google had hand-tweaked the results to demote SearchKing’s link).

⁴² In the case of Google, PageRank, the proprietary algorithm that it uses to assess relevance and rank results, is said to incorporate over 200 variously weighted criteria selected by Google and is changed about 500 times a year. See James Grimmelmann, *Some Skepticism About Search Neutrality*, in THE NEXT DIGITAL DECADE: ESSAYS ON THE FUTURE OF THE INTERNET 435, 455 (Berin Szoka & Adam Marcus eds., 2011), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1742444 [hereinafter Grimmelmann, *Some Skepticism About Search Neutrality*]; see also Udi Manber, *Introduction to Google Search Quality*, THE OFFICIAL GOOGLE BLOG (May 20, 2008, 9:20 PM), <http://googleblog.blogspot.com/2008/05/introduction-to-google-search-quality.html> (describing how PageRank is now supplemented by other parts of the search system including “language models,” “query models,” “time models,” and “personalized models”); Manne & Wright, *If Search Neutrality Is the Answer, What’s the Question?*, *supra* note 38, at 15 (“These search algorithms generally parse out the content of the websites themselves to best answer a user’s inquiry. They then attempt to ascertain the context and nature of the user’s question in order to determine what factors—such as date, age of source, credible websites linking to the site in question, and so on—should sort the relevant results.”).

⁴³ See Manber, *Introduction to Google Search Quality*, *supra* note 42 (“There are two reasons [for maintaining Google’s secrecy]: competition and abuse. Competition is pretty straightforward. No company wants to share its secret recipes with its competitors. As for abuse, if we make our ranking formulas too accessible, we make it easier for people to game the system.”).

⁴⁴ See Eric Goldman, *Search Engine Bias and the Demise of Search Engine Utopianism*, 8 YALE J.L. & TECH. 188 (2006) (explaining that the choice of which factors to include in the algorithms and how to weigh each factor reflects the search engine’s editorial judgments about what content is valuable); Tom Zeller, Jr., *Gaming the Search Engine in a Political Season*, N.Y. TIMES, Nov. 6, 2006, <http://www.nytimes.com/2006/11/06/business/media/06link.html> (“Each engine has a slightly different magic formula for indexing the incomprehensibly huge universe of Web pages out there.”).

⁴⁵ See Grimmelmann, *Some Skepticism About Search Neutrality*, *supra* note 42, at 455 (stating that Google makes about 500 changes a year to its algorithm).

⁴⁶ See *supra* note 33; see also *The Evolution of Search in Six Minutes*, GOOGLE BLOG (Nov. 28, 2011,

a direct answer at the top of the organic results listing (the “OneBox” result),⁴⁷ integrating the search engine’s maps, images, videos, or information on places and products into the search results (“universal” or “blended” results), or linking to a search engine’s affiliated websites.⁴⁸ The usual explanation for this change is that it is an improvement to the search experience desired by users.⁴⁹

¶17 It is the blurring of the lines between content/service and searches that has generated the main antitrust criticism against Google: that it is allegedly foreclosing competition in vertical markets by featuring its own content more prominently in search results.⁵⁰ Though these changes are occurring at all three major general search engines—Google, Bing and Yahoo!⁵¹—Google has been the focus of the debate because it is the dominant search engine.

10:41 AM), <http://googleblog.blogspot.com/2011/11/evolution-of-search-in-six-minutes.html>.

⁴⁷ See, e.g., *Height of Statue of Liberty*, GOOGLE, <https://www.google.com/search?q=height%20of%20statue%20of%20liberty> (last visited April 13, 2013) (responding to a “height of statue of liberty” Google search query by providing its direct answer first in the results, followed by other traditional outbound links to relevant webpages such as Wikipedia and the National Park Service).

⁴⁸ An October 2010 study showed that one-third of all searches on the three major search engines, Google, Bing, and Yahoo!, produced “blended” results—including a search engine’s own non-web sources such as news, videos, or images. Interestingly, Bing included these blended results at a higher rate than Google (54% for Bing and 33% for Google). Eli Goodman & Eli Feldblum, *Blended Search and the New Rules of Engagement*, COMSCORE 6–8 (2010), http://www.comscore.com/Press_Events/Presentations_Whitepapers/2010/Blended_Search_and_the_New_Rules_of_Engagement.

⁴⁹ See Nicolai, *supra* note 33 (quoting a Yahoo! executive who noted that “[p]eople don’t really want to search . . . [t]heir objective is to quickly uncover the information they are looking for, not to scroll through a list of links to Web pages.”).

⁵⁰ See, e.g., FTC Statement Regarding Google’s Search Practices, *supra* note 1 (“Some vertical websites alleged that Google unfairly promoted its own vertical properties through changes in its search results page, such as the introduction of the “Universal Search” box, which prominently displayed Google vertical search results in response to certain types of queries, including shopping and local.”); Thomas Barnett, Op-Ed., *Google’s Search Tactics Warrant Antitrust Scrutiny: Tom Barnett*, BLOOMBERG (May 16, 2011 12:20 PM), <http://www.bloomberg.com/news/2011-05-16/google-s-search-tactics-warrant-antitrust-scrutiny-tom-barnett.html>; Tom Cheredar, *Yelp Cooperating with FTC on Antitrust Suit Against Google*, VENTUREBEAT (Sept. 21, 2011, 7:40 AM), <http://venturebeat.com/2011/09/21/yelp-joins-antitrust-lawsuit-against-google.html>; Bianca Bosker, *In Antitrust Battle Against Google, Smaller Rivals Say Web Giant is ‘Trying to Kill Them,’* HUFFINGTONPOST (Sept. 20, 2011), http://www.huffingtonpost.com/2011/09/20/google-antitrust-battle-smaller-rivals_n_972062.html (reporting that at the center of the federal antitrust investigation into Google are allegations concerning “the company’s use of its dominant position as a search engine to steer users to Google-owned sites”); Thomas Cantan & Amir Efrati, *Feds to Launch Probe of Google*, WALL ST. J., June 24, 2011, <http://online.wsj.com/article/SB10001424052702303339904576403603764717680.html> (noting that Expedia, Kayak.com, TripAdvisor, WebMD.com, Yelp.com, Citysearch.com, and Sabre Holders have all made these complaints against Google); Greg Sterling, *EU Antitrust Complaints Against Google Grow to Nine*, SEARCH ENGINE LAND (Aug. 2, 2011, 7:44 PM), <http://searchengineland.com/eu-antitrust-complaints-against-google-grow-to-nine-87915>.

⁵¹ See FTC Statement Regarding Google’s Search Practices, *supra* note 1 (“[O]ther competing general search engines adopted many similar [universal search] changes, suggesting that these changes are a quality improvement with no necessary connection to the anticompetitive exclusion of rivals.”).

B. Favoring a Search Engine's Specialized Search Results and the General Antitrust Narrative

¶18 A grievance commonly voiced against Google is that its search results tend to point search users to Google's own content and services.⁵² For example, if a search query (such as for "Starbucks") suggests that a user would likely find a map helpful, Google will automatically return a Google map showing the Starbucks locations closest to the user along with other usual links.⁵³ The same search conducted on Bing shows a similar result: a Bing map is returned at the top of the organic results as opposed to a Google or Mapquest map.⁵⁴ These complaints are most often made by specialized websites (sometimes called vertical search engines) that compete with Google to varying degrees⁵⁵—sites that focus on discrete categories of searches, such as Kayak or Expedia for travel, Nextag for product and price comparison, Yelp for restaurant reviews, and AOL's Mapquest for maps.⁵⁶

¶19 The essence of their grievance is that by allocating choice space on the results page for its own content in response to certain queries, the search engine deprives its rivals in ancillary markets of user traffic, thereby foreclosing them from competition in those markets.⁵⁷ That is, if a Google map is top-ranked when a user searches on Google.com for Starbucks, the user would have little incentive to navigate to a competing map site, such as Mapquest or Bing, thereby making it difficult for Mapquest or Bing to compete with Google in providing map content.⁵⁸ Or, if a search for "Los Angeles restaurants"

⁵² See, e.g., CONSUMER WATCHDOG, *Traffic Report: How Google Is Squeezing Out Competitors and Muscling Into New Markets* (June 2, 2010), <http://www.consumerwatchdog.org/resources/TrafficStudy-Google.pdf> (accusing Google of abandoning neutral search by "steering Internet searchers to its own services").

⁵³ See *Starbucks*, GOOGLE, <https://google.com/search?q=starbucks> (last visited April 13, 2013). However, in a search for "map sites," Google lists Bing maps first, followed by Mapquest second, in its organic results. See *Map Sites*, GOOGLE, <https://google.com/search?q=map%20sites> (last visited April 13, 2013).

⁵⁴ Curiously, given the passionate concerns that have been expressed on this issue, a recent study showed that the absolute level of own-content bias—that is, where a search engine's content is ranked higher on its own search engine than on competing search engines—was extremely low. See Wright, *Defining and Measuring Search Bias*, *supra* note 3, at 50. Moreover, to the extent that bias did exist, it was a more frequent occurrence on the non-dominant search engine Bing than on Google, which strongly suggests that the practice of favoring one's own content in search results is not a function of market power but is probably an efficient competitive strategy. See *id.*; see also Danny Sullivan, *Study: Google "Favors" Itself Only 19% of the Time*, SEARCH ENGINE LAND (Jan. 19, 2011, 5:22 PM), <http://searchengineland.com/survey-google-favors-itself-only-19-of-the-time-61675>.

⁵⁵ See Jeffrey Katz, *Google's Monopoly and Internet Freedom*, WALL ST. J., June 7, 2012 ("Google should provide consumers with access to the unbiased search results it was once known for—regardless of which company or organization owns the service."). Katz is the CEO of Nextag, a product comparison website that has complained about Google "biasing" its search results toward its own content about products.

⁵⁶ See Bosker, *supra* note 50.

⁵⁷ See, e.g., *Hearing on the Power of Google*, *supra* note 35, at 35–36 (statement of Jeff Katz, Chief Executive Officer, Nextag, Inc.), available at <http://www.gpo.gov/fdsys/pkg/CHRG-112shrg71471/pdf/CHRG-112shrg71471.pdf> (alleging that Google "rigs its results, biasing in favor of Google"); *id.* at 36–38 (statement of Jeremy Stoppelman, Co-founder and CEO, Yelp!, Inc.) (alleging that Google favors its own sites and "artificially promotes its own properties, regardless of merit"); Amir Efrati, *Rivals Say Google Plays Favorites*, WALL ST. J., Dec. 12, 2010, <http://online.wsj.com/article/SB10001424052748704058704576015630188568972.html>.

⁵⁸ See Adam Raff, Op-Ed., *Search, But You May Not Find*, N.Y. TIMES, Dec. 27, 2009, <http://www.nytimes.com/2009/12/28/opinion/28raff.html> ("[Google's] preferential placement of Google

produces universal search results—an integration of several business listings, maps, and reviews created or compiled by Google—at the very top, followed by a link to Yelp further down the page, presumably fewer people would navigate to Yelp’s website.⁵⁹

¶20

Some Google competitors also alleged that Google changed its search algorithms to specifically demote their rankings because of their competitive threat to Google in certain categories. For example, Foundem, a U.K. shopping comparison site, alleged that Google applied algorithm penalties against its website because of its competition with Google in the U.K. in product searches.⁶⁰ Google responded that its ranking algorithm merely reflected its view that websites with little original content, such as Foundem’s, are of low value to users.⁶¹ To support its argument, Google pointed out that the websites of some of its competitors (presumably with original content), such as Amazon, Shopping.com, and Expedia, typically rank very highly in search results.⁶²

¶21

While we do not know whether the FTC specifically examined Foundem’s allegations, the agency did generally conclude that Google had not selectively changed its algorithm to impede competition; rather, any demotions of competing websites were the incidental effects of changes that could be considered design improvements.⁶³ Given the vocal and widely publicized complaints made by Foundem’s founder,⁶⁴ it seems reasonable to assume that the FTC examined those specific allegations but found them wanting.⁶⁵

Maps helped it unseat MapQuest from its position as America’s leading online mapping service virtually overnight.”)

⁵⁹ See Bosker, *supra* note 50.

⁶⁰ See Raff, *supra* note 58 (asserting that Google’s “domination of the global search market and ability to penalize competitors while placing its own services at the top of its search results” created a “virtually unassailable competitive advantage” for Google).

⁶¹ See Emma Woollacott, *Google Hits Back Against Anti-Trust Complaints*, TGDAILY (Sept. 6, 2010, 9:01 AM), <http://www.tgdaily.com/business-and-law-features/51403-google-hits-back-against-anti-trust-complaints>; see also Geoffrey A. Manne, *The Problem of Search Engines as Essential Facilities: An Economic & Legal Assessment*, in *THE NEXT DIGITAL DECADE: ESSAYS ON THE FUTURE OF THE INTERNET* 424 (Berin Szoka & Adam Marcus eds., 2011), available at <http://ssrn.com/abstract=1747289> (explaining that spam sites and the like “can and do take advantage of predictable search results to occupy desirable search result real estate” and that often requires “a host of algorithm tweaks and even human interventions” to ensure the quality of the search results). For its part, Foundem relied on two positive comments from third parties to argue that its website was not of low quality. See *Foundem’s Google Story*, SEARCHNEUTRALITY.ORG (Aug. 18, 2009), <http://www.searchneutrality.org/foundem-google-story>. SearchNeutrality.org is a Foundem-created website with all content written by its founders. See *About*, SEARCHNEUTRALITY.ORG (Oct. 9, 2009), <http://www.searchneutrality.org/about>.

⁶² Woollacott, *supra* note 61. As any casual user of Amazon or Expedia would know, these websites, generally acknowledged to be of high quality, include a wealth of original content, such as user reviews on Amazon.

⁶³ See FTC Statement Regarding Google’s Search Practices, *supra* note 1.

⁶⁴ See James Temple, *Foundem Takes on Google’s Search Methods*, S.F. CHRON., June 26, 2011, at D-1, available at <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2011/06/25/BUDG1K29R9.DTL>; Charles Arthur, *Foundem Accuses Google of Using Its Power to Favour its Own Links*, THE GUARDIAN, Nov. 30, 2010, <http://www.guardian.co.uk/technology/2010/nov/30/google-foundem-ec-competition-rules> (discussing the EU investigation and Foundem’s claims).

⁶⁵ Allegations that Google’s algorithm unfairly affected a website’s ranking have also been consistently rejected by courts on the grounds that search results are a search engine’s opinion protected by the First Amendment. See, e.g., *Search King, Inc. v. Google Tech.*, No. CIV-02-1457-M, 2003 WL 21464568 (W.D. Okla. May 27, 2003); *Kinderstart.com, LLC v. Google, Inc.*, No. C 06-2057 JF (RS), 2007 WL 831806 (N.D. Cal. Mar. 16, 2007); see also Eugene Volokh & Donald M. Falk, *First Amendment Protection for Search Engine Search Results*, THE VOLOKH CONSPIRACY (April 20, 2012), <http://www.volokh.com/wp-content/uploads/2012/05/SearchEngineFirstAmendment.pdf> (arguing that

¶22 If, as the FTC found, Google did not specifically demote the ranking of competitors to foreclose competition, then it is difficult to identify a basis for antitrust liability for its search practices. Because a search engine’s ranking decisions are made unilaterally, any antitrust cause of action must necessarily be based on monopolization (or attempted monopolization) under section 2 of the Sherman Act.⁶⁶ Mere possession of monopoly power is, of course, insufficient to constitute monopolization—the defendant must also have engaged in “exclusionary conduct” in the achievement or maintenance of that power.⁶⁷ But seeking the competitive advantages that flow to a firm from integration, which is what the preferential treatment of one’s own products or services is about, is usually not considered exercise of monopoly power and is not unlawful.⁶⁸

¶23 Thus, embedded in any argument that Google violates antitrust law simply by preferring its own content is an assumption that Google has a “duty to deal” (whether or not involving an essential facility). That is, it presumes that Google has a duty to return search results based on an “objective” or “neutral” standard and may not automatically display its own proprietary content more prominently. For absent such a duty, a search engine’s practice of preferring its own content over competing content in the presentation of search results, in and of itself, could not constitute exclusionary conduct that would give rise to section 2 liability.

¶24 In the following sections, I will consider the two duty to deal principles on their own terms and will suggest that the imposition of such a duty in the display of search results is incoherent. But, preliminarily, I will briefly note that it is unclear whether search and content should be considered separate markets or whether search engines’ progression into content (and the merging of search and content) would be more aptly characterized as a product redesign.⁶⁹

¶25 The Internet information market is highly dynamic with products and services constantly evolving and redefining themselves. In this environment, it may be

search engine results represent each search engine’s editorial judgment of which content to include and, as such, are fully protected by the First Amendment).

⁶⁶ 15 U.S.C. § 2 (2006) (declaring it unlawful for any person to “monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations.”); 15 U.S.C. § 1 (2006) (requiring, in section 1 of the Sherman Act, concert of action between two or more market participants and, therefore, foreclosing unilateral action by a firm from giving rise to an antitrust violation under that section).

⁶⁷ The offense of monopolization is often said to require proof of the possession of monopoly power in a relevant market, and “the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.” *United States v. Grinnell Corp.*, 384 U.S. 563, 570–71 (1966). The “willful acquisition or maintenance” language is generally understood to refer to improper conduct that excludes competition (or “exclusionary conduct”). *See, e.g., Pac. Bell Tel. Co. v. Linkline Commc’ns, Inc.*, 555 U.S. 438, 458 (2009) (noting that a section 2 monopolization case requires a showing that “a defendant’s monopoly power rests, not upon ‘skill, foresight and industry,’ but upon exclusionary conduct” (citations omitted)); *Rambus Inc. v. Fed. Trade Comm.*, 522 F.3d 456, 463 (D.C. Cir. 2008) (“The critical question is whether Rambus engaged in exclusionary conduct, and thereby acquired its monopoly power in the relevant markets unlawfully.”).

⁶⁸ *See, e.g., Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 276 (2d Cir. 1979) (finding that seeking the efficiencies and other advantages that accrue to any integrated firm is not considered use of monopoly power, regardless of the firm’s market share).

⁶⁹ While the FTC refers to Google’s content as its “vertical properties” and frames the issue in terms of whether Google acted to “disadvantage vertical websites that compete with Google-owned vertical properties,” it is interesting to note that it ultimately said that Google’s prominent display of its own content in Universal Search “was a product design change.” FTC Statement Regarding Google’s Search Practices, *supra* note 1.

inappropriate to define the search engine based strictly on its first-generation attribute (search), and to classify additional features and improvements (such as universal search) later integrated into the search engine product as vertical markets. Since essential facility and foreclosure are typically predicated on separate markets, there would be no basis to speak in terms of those concepts in the absence of separate markets. For now, however, let us set aside this issue and simply consider the duty to deal and essential facility paradigms on their own terms.

III. ESSENTIAL FACILITIES

¶26 In general terms, the essential facilities doctrine holds that where a monopolist has bottleneck control over an input or resource (facility) essential for competition, usually in a secondary market, and the facility cannot be duplicated, the monopolist must share access to that facility with its competitors in the secondary market if it is feasible to do so.⁷⁰ To those who fear Google’s possible “leverage” of its leading position in one area (general search) into other business areas, the doctrine may seem promising.⁷¹ However, a closer look shows that the doctrine is legally incongruous in the context of search.

¶27 In *Trinko*, the Supreme Court severely restricted a monopolist’s antitrust duty to deal with rivals,⁷² and in the process made clear its deep skepticism of the essential facilities doctrine.⁷³ It described the doctrine as having been “crafted by some lower courts”⁷⁴ and refused to recognize (or repudiate) it.⁷⁵ But even before *Trinko*, courts rarely required monopolists to assist their rivals under section 2, whether or not the duty to assist was couched in terms of sharing access to an essential facility.⁷⁶ The rationale for this caution centers on economic concerns that mandated dealings would decrease incentives for investment and innovation, which would undermine the underlying

⁷⁰ See PHILLIP E. AREEDA & HERBERT HOVENKAMP, *FUNDAMENTALS OF ANTITRUST LAW* ¶ 771a (4th ed. 2012).

⁷¹ There is considerable economic debate over whether monopoly leverage makes sense as an anticompetitive strategy. Chicago School scholars have long argued that it does not because a monopolist cannot increase its total profits through monopoly extension, due to the single-monopoly profit theory. Therefore, monopoly leverage must be motivated by efficiency concerns such as the desire to eliminate double marginalization. See, e.g., ROBERT H. BORK, *THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF* 372–75 (1978). Post-Chicago scholars have countered that the single monopoly profit theory only holds under a strict set of conditions, such as when the complementary products are consumed in fixed proportions, which seldom exist in real world markets. See, e.g., Nicholas Economides & William N. Hebert, *Patents and Antitrust: Application to Adjacent Markets*, 6 J. TELECOMM. & HIGH TECH. L. 455, 465 n.39 (2008); Louis Kaplow, *Extension of Monopoly Power Through Leverage*, 85 COLUM. L. REV. 515, 525–38 (1985). For the purposes of this article, I will (without entering the debate) assume that monopoly leverage can be a rational business strategy for a vertically integrated monopolist so as to examine the duty to deal and essential facilities doctrine in the search context on their own terms.

⁷² *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP.*, 540 U.S. 398 (2004).

⁷³ *Id.* at 410–11 (commenting dismissively on the essential facilities doctrine).

⁷⁴ *Id.* at 410.

⁷⁵ *Id.* at 411 (“We have never recognized such a doctrine and we find no need either to recognize it or to repudiate it here.” (citation omitted)).

⁷⁶ See Glen O. Robinson, *On Refusing to Deal With Rivals*, 87 CORNELL L. REV. 1177, 1206–07 (2002) (observing that “lower courts have adopted a conservative approach to imposing a duty to share essential facilities” and that the success rate of plaintiffs in these cases is very low); Spencer Weber Waller, *Areeda, Epithets, and Essential Facilities*, 2008 WIS. L. REV. 359, 363–64 (2008) (concluding that plaintiffs rarely won essential facility cases).

purposes of antitrust law.⁷⁷ The following section examines the highly limited use of the essential facilities doctrine and suggests that the conditions for its possible application are wanting, in almost every respect, in the context of search rankings.

A. Natural Monopoly and Public Utilities—Restrictive Commonalities in the Foundational Cases

¶28 Though the Supreme Court in *Trinko* refuted the notion that any of its earlier decisions should be read as endorsing the essential facilities doctrine,⁷⁸ it stopped short of repudiating it. Thus, it is informative to briefly examine two Supreme Court cases most often cited (until *Trinko*) as essential facility precedents, *United States v. Terminal Railroad Association of St. Louis*⁷⁹ and *Otter Tail Power Co. v. United States*,⁸⁰ before turning to a few lower court decisions that established and developed the specific test for the doctrine.⁸¹

¶29 In *Terminal Railroad*, a coalition of railroad companies that had purchased control of a railroad bridge across the Mississippi River in St. Louis, along with other terminal facilities, refused to grant competing railroads access to those facilities.⁸² The bridge was indispensable to the competing railroads and the railroad was critical to transportation in that era. In *Otter Tail*, the defendant was a vertically integrated, regulated power company that generated wholesale power, engaged in its retail distribution, and also owned the transmission lines. The power company refused to “wheel” wholesale power through its transmission lines for municipalities that wanted to operate their own retail distribution systems.⁸³ Access to the transmission lines was obviously essential for the

⁷⁷ See *Trinko*, 540 U.S. at 407–08; see also Phillip Areeda, *Essential Facilities: An Epithet in Need of Limiting Principles*, 58 ANTITRUST L.J. 841, 851 (1990) (“[A]ny essential facilities doctrine must recognize [limitations]. . . . [These include] the general concern that the defendant never would have built a [facility] of that size and character in the first place if he had known that he would be required to share it. Required sharing discourages building facilities such as this, even though they benefit consumers.”). The general disapproval of the imposition of a duty to deal may also be a visceral reaction against what some consider to be the doctrine’s infringement of another’s property rights, which includes the right to exclude others if she so wishes. See, *id.* at 852 n.46 (“The trouble with . . . the essential facilities notion is that [it] start[s] with the assumption that all business assets are subject to sharing. Do we really want to assume that everything we have is up for grabs?”).

⁷⁸ See *Trinko*, 540 U.S. at 410 (dismissively describing the doctrine as merely a creation of the lower courts).

⁷⁹ *United States v. Terminal R.R. Ass’n of St. Louis*, 224 U.S. 383 (1912).

⁸⁰ *Otter Tail Power Co. v. United States*, 410 U.S. 366 (1973).

⁸¹ A third Supreme Court decision sometimes considered an essential facility case is *Associated Press v. United States*, 326 U.S. 1 (1945). *Associated Press* did not involve a traditional natural monopoly or public utility, but it had peculiarities that suggest that it was more of a section 1 conspiracy case. It involved a combination of some 1,200 newspapers, forming the Associated Press (AP), who pooled their efforts to produce and distribute news. The association’s bylaws permitted any existing member to veto member applications from its rivals. This was clearly concerted action and not a simple unilateral refusal to deal. The veto provision was also particularly problematic as it seemed to have had no purpose other than to protect incumbents from potential competition. The selective rejection of applications, turning on nothing more than the applicant’s status as an existing member’s rival, places this case squarely in the section 1 conspiracy category, and some lower courts have declined to view *Associated Press* as a precedent for unilateral refusal-to-deal cases. See, e.g., *Alaska Airlines, Inc. v. United Airlines, Inc.*, 948 F.2d 536, 542 (9th Cir. 1991).

⁸² For details of the facts of the case, see Abbott B. Lipsky, Jr. & J. Gregory Sidak, *Essential Facilities*, 51 STAN. L. REV. 1187, 1195–98 (1999).

⁸³ *Otter Tail*, 410 U.S. at 368–72.

municipalities because there was no other way to transport the wholesale power from its source to the municipalities' local distribution systems.

¶30 A commonality in *Terminal Railroad* and *Otter Tail* is that both facilities in question were natural monopolies: each enjoyed large economies of scale relative to demand such that the market could only efficiently support a single producer or provider.⁸⁴ *Otter Tail* was additionally a price-regulated public utility.⁸⁵

¶31 Of two lower court cases generally credited with developing the doctrine, one, *MCI Communications Corp. v. AT&T*,⁸⁶ clearly involved a natural monopoly facility, and the other, *Hecht v. Pro-Football, Inc.*,⁸⁷ concerned a facility that closely resembled one. AT&T, the then-regulated integrated telephone monopolist in *MCI*, had a natural monopoly in local telephone service,⁸⁸ but its long-distance monopoly was threatened by emerging competition. AT&T was able to foreclose competition in the long-distance market by refusing to allow its emerging competitors to interconnect with its local telephone system.⁸⁹

¶32 While *Hecht's* government-subsidized stadium may not fit our usual conception of a classic natural monopoly, it can be analogized to one: the fact that public subsidies were necessary for its construction suggests that the market probably could not have supported one stadium, let alone two. That government money was involved in the building of the facility was very likely an additional factor that tipped the scales toward requiring shared access.

¶33 One commentator has noted that virtually every case that has found a duty to provide access to an essential facility has, in fact, involved a natural monopoly or regulated utility.⁹⁰ Indeed, the leading antitrust treatise asserts that the doctrine could only be even arguably appropriate in those situations.⁹¹ Facilities that constitute natural monopolies generally make the strongest cases for compulsory access because, by definition, the construction of competing facilities would be economically inefficient; at the same time, the absence of access would eliminate downstream competition.⁹²

⁸⁴ See ALFRED E. KAHN, *THE ECONOMICS OF REGULATION: INSTITUTIONAL ISSUES* 119–25 (1971) (discussing the economics of natural monopoly and the undesirability of competition in natural monopoly markets). The railroad bridge could accommodate all traffic, and building another railroad bridge, even if it were possible, would have been economically inefficient and socially wasteful. The same was also true for the transmission lines in *Otter Tail*; it was economically efficient to have only a single set of transmission lines, which apparently had sufficient capacity to serve all.

⁸⁵ *Otter Tail Power* operated under long-term municipally granted franchises and was partially regulated by the then-Federal Power Commission under the Federal Power Act. *Otter Tail*, 410 U.S. at 369–72.

⁸⁶ *MCI Commc'ns Corp. v. AT&T. Co.*, 708 F.2d 1081 (7th Cir. 1983).

⁸⁷ *Hecht v. Pro-Football, Inc.*, 570 F.2d 982 (D.C. Cir. 1977).

⁸⁸ *MCI*, 708 F.2d at 1133 (“Given present technology, local telephone service is generally regarded as a natural monopoly and is regulated as such.”).

⁸⁹ See *id.* at 1132. Access to the local exchange is needed to originate and complete long distance calls on landlines.

⁹⁰ Robinson, *supra* note 76, at 120607. But for a noteworthy exception see *Gamco, Inc. v. Providence Fruit & Produce Bldg., Inc.*, 194 F.2d 484 (1st Cir. 1952) finding the refusal to renew a tenant's lease for space in a building specially located and equipped for wholesale marketing of produce was actionable under the essential facilities doctrine.

⁹¹ See AREEDA & HOVENKAMP, *supra* note 70, ¶ 771c (recognizing natural monopoly, price-regulated monopoly utilities, and publicly owned facilities such as sports arenas as the “only three situations in which an essential doctrine is even arguably appropriate”).

⁹² See Marina Lao, *Networks, Access, and “Essential Facilities”: From Terminal Railroad to Microsoft*, 62 SMU L. REV. 557, 567–68 (2009) (discussing why natural monopoly facilities make the strongest

¶34 If the doctrine were indeed limited to natural monopolies and public utilities, it would have no application in any case against Google based on its search practices. Google's search engine, which handles only about two-thirds of the general search traffic,⁹³ does not fit the natural monopoly or public utility framework.⁹⁴ While search engines may benefit from economies of scale, there are clearly commercially viable general search engines that compete with Google,⁹⁵ notably Yahoo! and Microsoft's Bing, which together have an approximate 30% share of general search traffic.⁹⁶ New search providers, such as DuckDuckGo and Blekko, have succeeded in obtaining venture capital funding, suggesting that at least some investment experts believe that there is still room for additional search engines.⁹⁷ Thus, the market reality does not support the arguments of some commentators that Google's search engine is a natural monopoly.⁹⁸

¶35 Analogizing search engines to public utilities would be even more forced. The term "public utility" generally refers to providers of indispensable services affected with the public interest, such as water and electricity.⁹⁹ Because the services involved are vital, special obligations to serve all within a particular area at regulated prices are usually imposed on the provider in return for a public franchise and other government privileges.¹⁰⁰ Even if search engines are deemed indispensable to modern life, they do not conform to the public utility model. In contrast to the typical public utility, search engines are already universally and freely available (to anyone with a computer with Internet access) without any government incentives and price regulation, and they clearly have no government-granted franchise.¹⁰¹ To the extent that the scope of the essential facilities doctrine is limited to natural monopolies and public utilities, the doctrine should have no application in the context of search.

essential facility cases).

⁹³ See Zack Whittaker, *comScore: Google, Bing Gain Search Share as Yahoo Dips*, ZDNET (March 12, 2012), <http://www.zdnet.com/blog/btl/comscore-google-bing-gain-search-share-as-yahoo-dips/71334> (citing comScore data showing that Google had 66.4% share of the general search traffic in February 2012).

⁹⁴ See generally Mark A. Jamison, *Should Google Search Be Regulated as a Public Utility?* 6, 10 (University of Florida—Warrington College of Business Administration, Public Utility Research Center working paper) (March 25, 2012), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2027543 (making the case that Google search is neither a natural monopoly nor a public utility).

⁹⁵ See THE SEARCH ENGINE LIST, <http://www.thesearchenginelist.com/> (last visited April 11, 2013) (providing a list of all search engines).

⁹⁶ See Whittaker, *supra* note 93 (citing comScore data showing that Microsoft's Bing and Yahoo had 15.3% and 13.8%, respectively, of the general search traffic in February 2012, and Ask and AOL had 3% and 1.5% respectively).

⁹⁷ See Jamison, *supra* note 94, at 8, 10.

⁹⁸ *But see, e.g.,* Oren Bracha & Frank Pasquale, *Federal Search Commission? Fairness, Access, and Accountability in the Law of Search*, 93 *Cornell L. Rev.* 1149, 1180–82 (2008) (arguing that Google search exhibits the characteristics of a natural monopoly and should be regulated by the government as such).

⁹⁹ See *Chas. Wolff Packing Co. v. Court of Indus. Relations*, 262 U.S. 522, 538–39 (1923).

¹⁰⁰ See Barbara A. Cherry, *The Political Realities of Telecommunications Policies in the U.S.: How the Legacy of Public Utility Regulation Constrains Adoption of New Regulatory Models*, 2003 *MICH. ST. DCL L. REV.* 757, 762 (2003); Jamison, *supra* note 94, at 2.

¹⁰¹ Cf. Adam Thierer, *The Perils of Classifying Social Media Platforms as Public Utilities* 38 (Mercatus Center at George Mason University, Working Paper No. 12-11, 2012), *available at* <http://ssrn.com/abstract=2025674> (arguing that social networks, such as Facebook, are not public utilities for various reasons, including the fact that they are "already available to everyone and are almost universally free of charge"). Search engines are similar to social networks in this regard.

B. Monopoly Power

¶36 However, no case has explicitly restricted the doctrine in this manner, notwithstanding its real-world limited application. Instead, the Seventh Circuit imposed strict rules in *MCI*: the plaintiff must show that (1) a monopolist controls access to an essential facility, (2) a competitor cannot reasonably duplicate the facility, (3) the monopolist has denied access of the facility to a competitor, and (4) it is feasible for the monopolist to share access.¹⁰² Virtually every lower court that has subsequently considered an essential facility claim has adopted this stringent *MCI* standard.¹⁰³

¶37 As a threshold matter, under *MCI*, the owner of an alleged essential facility must have monopoly power in a properly defined market.¹⁰⁴ Defining the market involving search is extremely difficult, if not impossible, because of the dynamic environment in which search engines compete.¹⁰⁵ But, regardless of how the market is defined, it is doubtful that we can infer monopoly power from a search engine's high *share* of general search traffic. The competitive reality of the search business shows that even the largest search engine is vulnerable to competition and is constrained from acting anticompetitively.¹⁰⁶

1. Defining the Market in a Rapidly Changing Internet World

¶38 Google is often said to be a monopolist in search and search advertising¹⁰⁷ but, in reality, not much effort has been made to define the relevant market or to properly

¹⁰² See *MCI Commc'ns Corp. v. AT&T Co.*, 708 F.2d 1081, 1132–133 (7th Cir. 1983). These rules reflected the reasoning previously stated by the D.C. Circuit in *Hecht v. Pro-Football, Inc.*, 570 F.2d 982, 992–93 (D.C. Cir. 1977).

¹⁰³ See, e.g., *Integrgraph Corp. v. Intel Corp.*, 195 F.3d 1346, 1356–57 (Fed. Cir. 1999); *Caribbean Broad. Sys. v. Cable & Wireless PLC*, 148 F.3d 1080, 1088 (D.C. Cir. 1998); *Ideal Dairy Farms, Inc. v. John Labatt, Ltd.*, 90 F.3d 737, 748 (3d Cir. 1996); *City of Anaheim v. S. Cal. Edison Co.*, 955 F.2d 1373, 1380 (9th Cir. 1992); *Laurel Sand & Gravel, Inc. v. CSX Transp., Inc.*, 924 F.2d 539, 544 (4th Cir. 1991); *Del. & Hudson Ry. Co. v. Consol. Rail Corp.*, 902 F.2d 174, 179 (2d Cir. 1990); *Advanced Health-Care Servs., Inc. v. Radford Cmty. Hosp.*, 910 F.2d 139, 150–51 (4th Cir. 1990); *City of Malden, Mo. v. Union Elec. Co.*, 887 F.2d 157, 160 (8th Cir. 1989); *Ferguson v. Greater Pocatello Chamber of Commerce*, 848 F.2d 976, 983 (9th Cir. 1988); *McKenzie v. Mercy Hosp.*, 854 F.2d 365, 370 (10th Cir. 1988), *overruled on other grounds by Systemcare, Inc. v. Wang Labs, Corp.*, 117 F.3d 1137 (10th Cir. 1997).

¹⁰⁴ See, e.g., *Alaska Airlines, Inc. v. United Airlines, Inc.*, 948 F.2d 536, 546–57 (9th Cir. 1991) (holding that a computerized reservation system could not be an essential facility where its control did not give the airline the power to “eliminate competition in a market downstream from the facility”) (emphasis in original); *Ill. Bell Tel. Co. v. Haines & Co.*, 905 F.2d 1081 (7th Cir. 1990) (finding that alleged essential facility does dominate a defined relevant market), *vacated on non-antitrust grounds*, 499 U.S. 944 (1991); *City of Malden, Mo. v. Union Elec. Co.*, 887 F.2d 157 (8th Cir. 1989) (approving jury instructions requiring relevant market definition in an essential facility case); *Paladin Assocs., Inc. v. Mont. Power Co.*, 328 F.3d 1145, 1163 (9th Cir. 2003) (rejecting essential facility claim where defendant lacked market power in its gas transmission facilities).

¹⁰⁵ See *infra* Part III-B-1.

¹⁰⁶ See *infra* Part III-B-2.

¹⁰⁷ See, e.g., *Hearing on the Power of Google* 33–35 (statement of Thomas O. Barnett, Partner, Covington & Burling, LLP) (“Google dominates online search in the U.S. . . . Moreover, Google’s search dominance has enabled it also to dominate paid search advertising.”); Manne & Wright, *Google and the Limits of Antitrust*, *supra* note 37, at 194 (referring to the colloquial reference to Google as “the dominant search and search advertising provider in an online search market comprised of Google, Microsoft, and Yahoo!” and questioning its antitrust relevance); Bosker, *supra* note 50 (writing that the federal antitrust investigation into Google centers on “the company’s use of its dominant position as a search engine” to allegedly disadvantage its competitors in other markets). The assumption that Google has substantial

evaluate whether it has monopoly power in an antitrust sense.¹⁰⁸ Data shows that Google handles approximately two-thirds of U.S. general search queries¹⁰⁹ and receives about three-quarters of all U.S. search-based advertising spending.¹¹⁰ Thus, working backwards, the underlying assumptions of the statements that Google is a monopolist must be that the relevant markets consist of general search (queries on general search engines) and search-based advertising, and that substantial market power can be inferred from high market shares. Both assumptions are suspect, however, given that search engines compete in an environment characterized by unceasing change.¹¹¹

¶39

An antitrust market is basically the smallest grouping of products or services that a firm would need to control in order to raise prices profitably without competitive constraints. Defining the market generally entails identifying and including all reasonable substitutes available to the buyer for the seller's product.¹¹² In the Internet world, where new technologies frequently emerge to displace the old and products are in a constant state of change, this is an almost hopeless task.¹¹³ But while the relevant market may be practically impossible to define, it is unlikely to be as narrow as general search (on the user side) and search-based advertising (on the advertiser side)¹¹⁴ because both users and advertisers have reasonable alternatives to general search engines for their needs.¹¹⁵

monopoly power in search is also implicit in the commentaries arguing for the need to regulate Google's dominant search engine. See generally Bracha & Pasquale, *supra* note 98.

¹⁰⁸ For the few articles that have addressed the market definition issue in search, see Manne & Wright, *Google and the Limits of Antitrust*, *supra* note 37, at 194–203; Mark R. Patterson, *Google and Search Engine Market Power* (Fordham Univ. Sch. of Law, Research Paper No. 2047047, 2012), available at <http://ssrn.com/abstract=2047047> (discussing generally the difficulties of assessing Google's market power and tentatively suggesting pricing of Google's search advertising as a means of measuring power).

¹⁰⁹ See Whittaker, *supra* note 93 (citing February 2012 comScore data showing Google's share of general search traffic was 66.4%, while Bing and Yahoo! had 15.3% and 13.8%, respectively).

¹¹⁰ See Brian Womack, *Google Increases U.S. Search Market Share as Yahoo Slips, ComScore Says*, BLOOMBERG (Nov. 9, 2011, 6:17 PM), <http://www.bloomberg.com/news/2011-11-09/google-gains-u-s-search-market-share-in-october-comscore-says.html> (reporting comScore data showing that Google has about 76% of search-based advertising dollars while Microsoft and Yahoo! collectively have 16%).

¹¹¹ See, e.g., Jamison, *supra* note 94, at 12 (“[T]he definition of search and the technologies of search are moving targets. For example, Apple is not considered a direct rival [of Google] in general search, but its Siri product could be the next generation of search. . . . Services such as Yelp and UrbanSpoon for restaurants, and MapQuest for locations, are constantly changing and redefining the meaning of search.”); Stephen D. Houck, *The Microsoft Case and Google*, 5 CPI ANTITRUST CHRONICLE (May 14, 2012) <https://www.competitionpolicyinternational.com/the-microsoft-case-and-google/> (arguing that consumers have many options and, given the unceasing change and innovation that characterize competition on the Internet, Google search does not have durable market power).

¹¹² See *United States v. E.I. du Pont Nemours & Co.*, 351 U.S. 377 (1956) (appraising the cross-elasticity of demand and determining whether the product in question has reasonable substitutes; if it does, the reasonable substitutes should be included in the market definition).

¹¹³ There is seldom any econometric data available to determine cross-elasticities of demand in very dynamic markets, and qualitative assessments as to reasonable substitutes may be imprecise. Also, where technology changes rapidly, it is perilous to assume that the contours of a market will remain stable for any length of time.

¹¹⁴ Search engines are multi-sided platforms, and thus there is more than one market definition. It is generally assumed that the relevant market on the user side is general search (search conducted on general search engines) and that the relevant market on the advertiser side is search advertising. For a discussion of multi-sided platforms, which include search engines and social networks, see generally David S. Evans, *Governing Bad Behavior by Users of Multi-Sided Platforms*, 28 BERKELEY TECH. L.J. 1201.

¹¹⁵ For a detailed analysis of the market definition issue in search, see generally Manne & Wright, *Google and the Limits of Antitrust*, *supra* note 37.

¶40 Users who are interested in a specific category of content can, and often do, turn to specialized websites for information, bypassing general search engines.¹¹⁶ Studies show that search on these specialized sites, which include Amazon, eBay, and Facebook, now accounts for over one-third of all web searches.¹¹⁷ Amazon and eBay alone handle ten times more product searches than Google.¹¹⁸

¶41 Social networks, such as Facebook and Twitter, present another alternative to general search engines in certain contexts. Though we normally do not associate social networks with search, they offer features for finding information that increasingly appeal to users.¹¹⁹ Facebook now far surpasses Google as the most visited site on the Internet,¹²⁰ and its competitive challenge is expected to further intensify as it strengthens its alliance with Bing, which already powers Facebook searches.¹²¹ Twitter's timely search feature has reportedly already prompted a competitive response from Google—a recent tweaking of its algorithm to provide more timely search.¹²²

¶42 Mobile apps may also be considered a substitute for search in certain contexts for a large segment of Internet users.¹²³ As with social networks, while we may not

¹¹⁶ See Eli Goodman, *Searcher Intent: Why Vertical Search is Now Giving Ground to Core Search*, SEARCH ENGINE WATCH (Sept. 27, 2011), http://www.comscore.com/Insights/Blog/Searcher_Intent_Why_Vertical_Search_is_Now_Giving_Ground_to_Core_Search, (“If you only desire travel searches, you best go to an Online Travel Agent because they are the only ones that really understand your travel needs and won’t inundate you with extraneous results. Same idea with shopping engines or job search sites – the results you get will be filtered to the right universe of results you’re seeking.”).

¹¹⁷ See *id.* (“In August 2011, of the 27 billion searches conducted on desktops in the United States, more than one-third occurred on non-search engines. Search on sites like Amazon, eBay, and Facebook has been growing faster than (and therefore gaining market share from) the core search engines for years.”). Goodman, however, reports that this growth of searches on non-search engines has leveled off as general search engines have refined their algorithms to better understand the intent behind searcher’s search queries.

¹¹⁸ See Jacques Bughin et al., *The Impact of Internet Technologies: Search*, MCKINSEY & CO. (July, 2011), http://www.gstatic.com/ads/research/en/2011_Impact_of_Search.pdf.

¹¹⁹ See *id.* at 7, 13 (showing, in a study published in 2011, that “30 percent of US Internet users now use social networks to find content” and “users are increasingly navigating to websites from links on social networks”).

¹²⁰ See NIELSEN, STATE OF THE MEDIA: THE SOCIAL MEDIA REPORT 2, 5 (Q3 2011), <http://www.nielsen.com/content/dam/corporate/us/en/reports-downloads/2011-Reports/nielsen-social-media-report.pdf> (showing in the 2011 report that users spend over five times as much time on social networks and blogs as on search engines, and more time on Facebook than the next four most popular web brands combined).

¹²¹ See Nick Wingfield, *A Revamping of Bing in the Battle for Search Engine Supremacy*, N.Y. TIMES, May 10, 2012, at B1, available at <http://www.nytimes.com/2012/05/11/technology/bing-search-engine-to-be-revamped-as-war-against-google-intensifies.html?pagewanted=all> (reporting on the deepening of the Bing/Facebook alliance).

¹²² See Claire Cain Miller, *Google Changes Search Algorithm, Trying to Make Results More Timely*, N.Y. TIMES BITS BLOG (Nov. 3, 2011, 1:23 PM), <http://bits.blogs.nytimes.com/2011/11/03/google-changes-search-algorithm-trying-to-make-results-more-timely> (“The new algorithm is a recognition that Google, whose dominance depends on providing the most useful results, is being increasingly challenged by services like Twitter and Facebook, which have trained people to expect constant updates with seconds-old news.”).

¹²³ The momentum is shifting toward using smartphones rather than computers to access information available on the Internet. See Jenna Wortham, *A Billion-Dollar Turning Point for Mobile Apps*, N.Y. TIMES, Apr. 10, 2012, at A1, available at <http://www.nytimes.com/2012/04/11/technology/instagram-deal-is-billion-dollar-move-toward-cellphone-from-pc.html> (giving the shift in momentum as one reason for Facebook’s recent deal to purchase Instagram, a mobile app start-up, for \$1 billion).

immediately associate mobile apps with search, they fulfill aspects of that function.¹²⁴ An increasing number of Americans use smartphones,¹²⁵ and smartphone users are increasingly using apps, as opposed to mobile search, to access information on the Internet.¹²⁶

¶43 Like users, advertisers also have alternatives to Google's general search engine platform. The objective of advertisers who purchase search-based advertising on search engines is to promote their products or brand to potential customers. To the extent that users now spend much of their online time using social networks, these networks are a logically attractive alternative or supplemental advertising platform for advertisers. Unsurprisingly, a recent survey of online advertisers showed the greatest growth of online advertising spending in 2011 occurred on Facebook.¹²⁷

¶44 While advertising on Facebook is in the form of "display ads," there is no apparent economic reason for treating display ads and search-based advertising as being in distinct, relevant markets.¹²⁸ If display ads are included in the relevant market with search-based advertising, Google does not have sufficient market share to be considered a monopolist. Facebook currently leads in the display ads category with about 30% share, while Google trails with less than 5%.¹²⁹ To limit the relevant market (on the advertiser side of search engines) to search-based advertising seems to show a disconnect with competitive reality.¹³⁰

¶45 My purpose in this discussion is not to try to define the relevant antitrust market for search, because it is likely impossible to do so in a morphing and open Internet world. Rather, it is simply to suggest that this market cannot be as narrow as general search for users or search advertising for advertisers. Search engines, social networks and mobile devices, their related technologies and business models, and user behavior are evolving so rapidly that it is unrealistic to view general search engines as completely distinct from other forms of competition in the digital information world.

¹²⁴ See John Battelle, *The Evolving Search Interface: Mobile Drives Search as App*, JOHN BATTELLE'S SEARCH BLOG (Jan. 15, 2010), http://battellemedia.com/archives/2010/01/the_evolving_search_interface_mobile_drives_search_as_app.php ("On their face, these apps don't seem like search at all. Except they are.")

¹²⁵ *Smartphones Continue to Gain Share as US Usage Plateaus*, EMARKETER (April 9, 2012), <http://www.emarketer.com/Mobile/Article.aspx?R=1008958> (projecting that smartphone use will reach about 60% of the American population by 2016).

¹²⁶ See Aaron Goldman, *Mobile Matters: 15 Mobile Search Stats that Ring True*, SEARCH INSIDER (Oct. 19, 2011, 10:30 AM), <http://www.mediapost.com/publications/article/160766/mobile-matters-15-mobile-search-stats-that-ring-t.html> ("Behold the biggest threat to mobile search—apps. . . . It's much easier to interact with content through an app than through Web pages.")

¹²⁷ See ECONSULTANCY DIGITAL MARKETERS UNITED, *Sample: Online Advertisers Survey Report 2011*, at 5 (Sept. 2011), <http://econsultancy.com/us/reports/online-advertising-survey/downloads/4073-sample-online-advertisers-survey-report-2011-pdf> 2011) ("The fastest growing area of investment is *Facebook advertising*, where almost three-quarters . . . of respondents say they have increased spending in the last 12 months.")

¹²⁸ See Jamison, *supra* note 94, at 17 (citing a 2011 survey finding that 23% of online advertisers had recently shifted budget from search to display ads).

¹²⁹ ClickZ, *ComScore: Facebook's Share of Display Ads Reaches 28%*, MASHABLE (Jan. 31, 2012), <http://mashable.com/2012/01/31/comscore-facebook-share-ads/>.

¹³⁰ In fact, there is some evidence that online and *offline* advertisements compete with each other as well. See generally Avi Goldfarb & Catherine Tucker, *Search Engine Advertising: Channel Substitution When Pricing Ads to Context*, 57 MGMT. SCI. 458 (2011).

2. Inference of Durable Monopoly Power?

¶46 More importantly, regardless of *how* the market is defined, it is doubtful that monopoly power can be inferred from a high market *share*, given the nature of competition in search and on the Internet generally. Unhappy search engine users can instantly switch from one search engine to another without incurring any penalties or costs. Google’s market share is also vulnerable to erosion from new waves of products or services (not general search engines) that are able to satisfy consumers’ evolving preferences in the way they seek and experience Internet information.¹³¹ On the advertisers’ side of the platform, advertising spending logically follows users. Thus, Google’s market position in online advertising can be no stronger or more durable than its market position with users.

¶47 In antitrust, market share in a properly defined market is often used as a proxy for market power:¹³² monopoly power is inferred from a firm’s substantial market share within the defined market, though the inference may be qualified by ease of entry.¹³³ Market share is normally a reasonable surrogate for power because firms with large market shares can typically raise prices profitably without competitive constraints. Their small rivals’ competitive response will usually be limited because these rivals lack the capacity to quickly increase output to meet the demand of the dominant firm’s disaffected customers. Thus, a dominant firm is not constrained by the fear of losing substantial sales to its rivals if it raises prices or otherwise acts anticompetitively.

¶48 In the context of search, however, this analysis does not hold, and high market shares are not good surrogates for market power. It *is* possible for smaller search engines, such as Bing and Yahoo!, to constrain Google because they can easily and immediately “increase output” to serve the needs of unhappy Google users looking for an alternative. A search engine’s “product” is information (search results) automatically generated by an algorithm that is available. Thus, “product expansion” to meet increased demand basically means automatically applying an existing algorithm to answer more search queries, which can be easily accomplished with no time lag, unlike the product expansion of other more prototypical goods and services. While a search engine might have to expand its server capacity if demand from new users increases significantly, this limitation is small compared to the costs and other usual difficulties of output expansion for the typical good or service.

¶49 Additionally, switching to another search engine is easy for users. There are no switching costs and no user lock-in. Studies show that a majority of users regularly use

¹³¹ See, e.g., Houck, *supra* note 111, at 7 (discussing the mutability of competition on the Internet and why it is not conducive to durable market power for Google).

¹³² See, e.g., *United States v. Aluminum Corp. of Am.*, 148 F.2d 416, 424 (2d Cir. 1945) (stating that 90% market share is clearly sufficient to constitute a monopoly, 60–64% is unlikely to be sufficient, and 33% is clearly not enough to find monopoly power).

¹³³ In contemporary antitrust analysis, courts often look to entry barriers to qualify inferences drawn from market shares. Ease of entry could rebut the inference of market power from high market shares. See, e.g., *United States v. Microsoft Corp.*, 253 F.3d 34, 54–55 (D.C. Cir. 2001) (stating that looking only at market share to infer market power can be misleading but finding that barriers to entry existed to protect Microsoft’s operating systems market share); *Tops Mkts., Inc. v. Quality Mkts., Inc.*, 142 F.3d 90, 99 (2d Cir. 1998) (finding that, though a 70% share of the relevant market was strong evidence of monopoly power, it was rebutted by ease of entry); *Reazin v. Blue Cross & Blue Shield of Kan.*, 899 F.2d 951, 967 (10th Cir. 1990) (considering entry barriers, supply and demand elasticities, and other factors when drawing inferences from market share data).

more than one search engine,¹³⁴ and 89% would use a different search engine if they could not find the information they were seeking with their preferred engine.¹³⁵ A well-publicized incident involving a one-hour glitch on Google in 2009¹³⁶ illustrates both the ease of turning to another search engine and users' readiness to do so if their preferred engine fails to meet their expectations. In that one hour of poor Google performance, the number of Yahoo! searches doubled, indicating that a large number of Google users had immediately moved to Yahoo!, though they returned to Google when the problem was solved.¹³⁷

¶150 This suggests that, despite its current high market share in general search, Google does not have much market power in an antitrust sense as there are competitive constraints on its ability to act anticompetitively. The history of search is, in fact, replete with examples of companies with dominant shares that quickly lost their dominance when superior products became available or when consumer preferences simply changed. AltaVista and Lycos, for example, were popular search engines in the early Internet days but have largely disappeared.¹³⁸ In 1998, the year that Google was incorporated,¹³⁹ *Fortune* declared that Yahoo! had "won the search wars."¹⁴⁰ Yet Google surpassed Yahoo! only a few years later.¹⁴¹ Google should be no more insulated from competition than the earlier dominant search engines if it ceases to be innovative, if it ceases to anticipate user desires, or if a better product is introduced.

¶151 Durability of market power is also less likely in a dynamic market, where products constantly evolve and new competitors (and new forms of competition) frequently emerge to change the face of competition. For example, while Apple may not be a direct

¹³⁴ See Alex Chitu, *Google's Competition is One Click Away*, GOOGLE OPERATING SYSTEM (May 11, 2009, 2:37 AM), <http://googlesystem.blogspot.com/2009/05/googles-competition-is-one-click-away.html> (referring to a 2008 Forrester study finding that 55% of United States Internet users regularly use more than one search engine); see also Op-Ed, *The Google Algorithm*, N.Y. TIMES, July 15, 2010, at A30, available at <http://www.nytimes.com/2010/07/15/opinion/15thu3.html> (pointing out that Google competitors are only a click away).

¹³⁵ Press Release, PERFORMICS, Search Engine Usage Study: 92 Percent of Searchers Click on Sponsored Results (Sept. 28, 2010), <http://www.performics.com/news-room/press-releases/Search-Engine-Usage-Study-92-Percent/1422> (showing that Google users use a different search engine at least occasionally, and 89% of users try another search engine if their preferred engine does not generate the information they are looking for).

¹³⁶ See Marissa Mayer, "This Site May Harm Your Computer" on Every Search Result?!?!, GOOGLE: OFFICIAL BLOG (Jan. 31, 2009), <http://googleblog.blogspot.com/2009/01/this-site-may-harm-your-computer-on.html> (describing the problem which consisted of a message "This site may harm your computer" being included with every Google search result).

¹³⁷ See Jessica E. Vascellaro, *Fresh Evidence That Search Is Still Competitive? Not So Fast*, WALL ST. J. BLOGS: DIGITS (Mar. 17, 2009, 4:29 PM), <http://blogs.wsj.com/digits/2009/03/17/fresh-evidence-that-search-is-still-competitive-not-so-fast/>.

¹³⁸ See Phillip Bump, *Flashback from 1998: When Altavista, Lycos, and Blue Mountain Arts Ruled the Web*, GEEKOSYSTEM, (Mar. 23, 2012, 12:15 PM), <http://www.geekosystem.com/1998-web-traffic-stats/>.

¹³⁹ *Our History in Depth*, GOOGLE, <http://www.google.com/intl/en/about/company/history.html> (last visited June 2, 2012).

¹⁴⁰ Randall E. Stross, *How Yahoo! Won the Search Wars Once Upon a Time, Yahoo! Was an Internet Search Site with Mediocre Technology. Now it has a Market Cap of \$2.8 Billion. Some People Say it's the Next America Online*, CNNMONEY: FORTUNE (Mar. 2, 1998), http://money.cnn.com/magazines/fortune/fortune_archive/1998/03/02/238576/index.htm.

¹⁴¹ See Hearings on the Power of Google, *supra* note 35, at 38–40 (statement of Susan A. Creighton, Partner, Wilson, Sonsini, Goodrich & Rosati); see also *Our History in Depth*, *supra* note 139 (indicating that Google officially became the world's largest search engine in June 2000 when it had indexed over one billion websites).

Google competitor in search, its new Siri product could develop into the future generation of search.¹⁴² Existing market players and rivals are also entering into joint ventures that expand or change the contours of the market.¹⁴³ One example is the Bing/Facebook alliance which, among other things, is expected to provide a new search experience by tapping into the user's Facebook network.¹⁴⁴ In the face of the rapid transformation and innovation occurring on the Internet, it is unlikely that Google could exercise monopoly power.

¶52 On the advertising side, it is also doubtful that Google has durable monopoly power. Logically, if general search engine users increasingly turn to Facebook or other non-general search engines for information and entertainment, advertisers will adjust their advertising budgets accordingly. Indeed, a survey showed that advertising spending on Facebook, not search engines, experienced the greatest growth in 2011, and that 35% of online advertisers had moved budget from search advertising to advertising on Facebook.¹⁴⁵

¶53 Businesses are also free to advertise on multiple search engines (assuming they win the keyword auctions) since they are not bound by any exclusive contracts with Google.¹⁴⁶ Since search-based advertising costs are based on the number of user clicks on a paid link,¹⁴⁷ firms can purchase search advertising on more than one search engine without having to effectively double or triple their advertising spending. If users leave Google for Bing, for example, an advertiser with paid links on both search engines would likely experience an increase in user clicks on its search advertisements on Bing and a decrease in the clicks on its paid links on Google. Thus, an increase in the firm's advertising costs on Bing would probably be roughly evened out by a corresponding decrease in costs for the same advertising on Google, making search-based advertising on more than one search-engine economically viable.¹⁴⁸

¶54 In short, no matter how the market for search engines is defined on either the user or advertiser side, it is unlikely that Google's current significant market share will give it durable monopoly power. The open and dynamic Internet information market in which Google competes is simply not conducive to the exercise of monopoly power. Indeed, none of the characteristics usually associated with monopoly power—high prices, lack of

¹⁴² See Dan Kaplan, *Siri, Quora, and the Future of Search*, TECHCRUNCH (Oct. 16, 2011) <http://techcrunch.com/2011/10/16/siriquora-and-the-future-of-search>.

¹⁴³ See Wingfield, *supra* note 121 (reporting on the strengthening of ties between Bing and Facebook).

¹⁴⁴ Search results on Bing for "best hotels in Maui," for example, would include relevant information, recommendations, and pictures gleaned from the postings of the user's Facebook friends. See *id.* The user could then also interact with those friends and seek additional information from them without leaving the Bing results page. See *id.*

¹⁴⁵ See Jamison, *supra* note 94, at 17 (citing an eConsultancy 2011 report).

¹⁴⁶ See *AdWords Terms and Conditions*, GOOGLE (Aug. 22, 2006), https://www.google.com/intl/en_us/adwords/select/TCUSbilling0806.html (containing no exclusivity obligations).

¹⁴⁷ See Manne & Wright, *If Search Neutrality Is the Answer, What's the Question*, *supra* note 37, at 16–17 (discussing the click-through pricing system of "sponsored links" or search-based advertisements).

¹⁴⁸ One of two changes Google voluntarily committed to make in its search practices was to eliminate a particular restriction on the use of its search advertising platform. The removal of the restriction would facilitate advertisers' management of their ad campaigns across different search engines. See Google's Commitment Letter, *supra* note 4; FTC Release, *supra* note 2.

innovation, unresponsiveness to customers, complacency, and indifference toward competitors¹⁴⁹—seem applicable to Google.

C. Essentiality, Denial of Access, and “Nonrivalrousness” Concepts

¶155 In addition to monopoly power, other elements must be satisfied before the essential facilities doctrine can be successfully invoked: the “facility” controlled by the monopolist must be essential and practically infeasible to duplicate, the monopolist must have denied competitors access to it, and the facility must be capable of being shared.¹⁵⁰ The latter two factors—denial of access and the sharability (nonrivalrousness) of the facility—have been mostly overlooked in the debate on search ranking. On the first factor, essentiality, critics tend to generally assert that Google is the gateway to the Internet, and thus essential for both users and websites,¹⁵¹ but do not discuss the issue in greater depth.

1. Essentiality

¶156 Essentiality has always been strictly construed, perhaps because firms in a competitive economy are normally expected to rely on their own resources to compete. To be deemed essential, a facility or input must be critical to competitive viability, not merely desirable or superior to the alternatives.¹⁵² In *Alaska Airlines, Inc. v. United Airlines, Inc.*,¹⁵³ the Ninth Circuit concluded, after analyzing a number of cases, that “[a] facility that is controlled by a single firm will be considered ‘essential’ only if control of the facility carries with it the power to *eliminate* competition in the downstream market.”¹⁵⁴ Moreover, the “power to eliminate competition must not be momentary, but must be at least relatively permanent.”¹⁵⁵

¶157 Every key essential facility case that has mandated access has involved a resource that unmistakably met this strict standard. For example, absent access to the railroad

¹⁴⁹ See *United States v. Aluminum Corp. of Am.*, 148 F.2d 416, 427 (2d Cir. 1945) (“Many people believe that possession of unchallenged economic power deadens initiative, discourages thrift and depresses energy; that immunity from competition is a narcotic, and rivalry is a stimulant, to industrial progress; that the spur of constant stress is necessary to counteract an inevitable disposition to let well enough alone.”).

¹⁵⁰ See *MCI Commc’ns Corp. v. AT&T*, 708 F.2d 1081, 1132–33 (7th Cir. 1983); *Hecht v. Pro-Football, Inc.*, 570 F.2d 982, 992–93 (D.C. Cir. 1977).

¹⁵¹ See, e.g., Bracha & Pasquale, *supra* note 98, at 1152–71 (elaborating on the argument that search engines serve as gatekeepers of the Internet and calling for their regulation).

¹⁵² See, e.g., *Castelli v. Meadville Med. Ctr.*, 702 F. Supp. 1201, 1209 (W.D. Pa. 1988), *aff’d*, 872 F.2d 411 (3d Cir. 1989) (finding that a small-town hospital was not an essential facility for an excluded doctor, where the doctor could perform surgical procedures in other reasonable alternative facilities, including in an outpatient setting in an office); see also *McKenzie v. Mercy Hosp.*, 854 F.2d 365, 371 (10th Cir. 1988); *Twin Labs., Inc. v. Weider Health & Fitness*, 900 F.2d 566, 569 (2d Cir. 1990) (rejecting essential facilities claims where the plaintiff wanted to be able to advertise in a competitor’s magazine—the alleged essential facility—because, the court held, it was free to create its own magazine or advertise through other channels); *Areeda*, *supra* note 77, at 852 (adding that “critical to the plaintiff’s competitive viability” means that the plaintiff cannot compete effectively without it and practical alternatives or duplication are not available).

¹⁵³ *Alaska Airlines, Inc. v. United Airlines, Inc.*, 948 F.2d 536 (9th Cir. 1991).

¹⁵⁴ *Id.* at 544; see also *City of Anaheim v. S. Cal. Edison Co.*, 955 F.2d 1373, 1380 n.5 (9th Cir. 1992) (citing *Alaska Airlines* on this point, though not reaching the factual issue in the case).

¹⁵⁵ *Alaska Airlines*, 948 F.2d at 544 n.11.

bridge in *Terminal Railroad*, railroad competition in the region would have been impossible (and duplicating the bridge was not reasonably feasible given the terrain and prohibitive costs).¹⁵⁶ Similarly, without access to the monopolist utility's transmission lines in *Otter Tail*, the municipalities could not have competed in the retail distribution of power; they would have had no means to transmit the power purchased wholesale to the local distribution systems.¹⁵⁷ Like the railroad bridge, the transmission lines were not practically feasible to duplicate. AT&T's local telephone exchanges in *MCI* were likewise indispensable to any long-distance telephone service competitor, because interconnection was absolutely necessary to either originate or complete long-distance calls. The entire local exchange network was also practically infeasible to duplicate.¹⁵⁸

¶158 Where a reasonable functional alternative to a facility exists, courts have generally rejected essentiality arguments. For example, the Third Circuit affirmed a finding that the only hospital in a small town was not essential for an excluded doctor because alternative settings for surgical procedures existed—such as outpatient care in a doctor's office.¹⁵⁹ In a case where a downstream competitor wanted access to a dominant firm's magazine for advertising, the Second Circuit found that the “facility” was not essential since the plaintiff could advertise through other channels or create its own magazine.¹⁶⁰ The need for stringency in the essentiality standard is not particularly controversial and has been embraced by even the doctrine's strongest champions.¹⁶¹

¶159 Google's search engine can hardly be considered “essential” under this strict standard or even under a more lenient one. There are other comparable search engines, notably Bing and Yahoo!, and possibly newer ones such as DuckDuckGo and Blekko, to which users can easily switch without incurring any costs, and through which websites can reach potential customers.¹⁶²

¶160 Moreover, search engines themselves are not essential portals from the perspective of any side in the multi-sided search engine platform. For users, while search engines may be useful, they are not indispensable for reaching information on the internet. We can access any website by typing its uniform resource locator (URL) into a browser, or from links appearing on other websites, in emails, or on social networks.¹⁶³ Many Internet users often know which websites they wish to access without conducting a search.¹⁶⁴ A recent report shows, for example, that a large percentage of traffic to the top

¹⁵⁶ *United States v. Terminal R.R. Ass'n of St. Louis*, 224 U.S. 383, 395–97 (1912).

¹⁵⁷ *Otter Tail Power Co. v. United States*, 410 U.S. 366, 369–70 (1973).

¹⁵⁸ *MCI Commc'ns Corp. v. AT&T*, 708 F.2d 1081, 1132–33 (7th Cir. 1983).

¹⁵⁹ *Castelli v. Meadville Med. Ctr.*, 702 F. Supp. 1201, 1209 (W.D. Pa. 1988), *aff'd*, 872 F.2d 411 (3d Cir. 1989); *see also* *McKenzie v. Mercy Hosp.*, 854 F.d 365, 371 (10th Cir. 1988); Scott D. Makar, *The Essential Facility Doctrine and the Health Care Industry*, 21 FLA. ST. U. L. REV. 913, 927–43 (1994) (surveying a line of unsuccessful essential facilities cases in the health care area).

¹⁶⁰ *Twin Labs., Inc. v. Weider Health & Fitness*, 900 F.2d 566, 569 (2d Cir. 1990).

¹⁶¹ *See* Waller, *supra* note 76, at 376 (“[T]he very definition of infrastructure means that questions of open access would not arise in the first place if the plaintiff can compete without access to the defendant's facility or can duplicate that facility itself.”); Brett Frischmann & Spencer Weber Waller, *Revitalizing Essential Facilities*, 75 ANTITRUST L.J. 1, 11 (2008).

¹⁶² *See supra* notes 97–99, 137–40 and accompanying text.

¹⁶³ *See* BUGHIN ET AL., *supra* note 118, at 13 (showing that users navigate to online content through various features or websites, in addition to search engines, including social networks, search toolbars, bookmarks, portal websites, links from friends via email, and direct entry of web address).

¹⁶⁴ *See* David Gelles, *Facebook's Grand Plan for the Future*, FIN. TIMES (Dec. 3, 2010, 5:24 PM), <http://www.ft.com/cms/s/2/57933bb8-fcd9-11df-ae2d-00144feab49a.html#axzz1H27SlrZM> (noting that

thirty websites is not routed to them through Google,¹⁶⁵ which suggests that a search engine, though useful, is not essential for customer access.

¶161 More importantly, there are increasingly additional sources that are not general search engines to which users can turn to locate useful information. Specialized websites, such as Amazon, eBay, and Tripadvisor, are already popular with users whose queries pertain to products and services.¹⁶⁶ Facebook and other social networks are also rapidly becoming important portals of online information;¹⁶⁷ a recent McKinsey study shows that about one-third of U.S. Internet users now use social networks to find content.¹⁶⁸ Mobile apps provide another convenient way to access Internet information for smartphone users,¹⁶⁹ who reportedly far prefer apps to mobile search in certain contexts because of their relative ease of use.¹⁷⁰ As more people use smartphones and as more apps are developed, mobile apps could become an even more important avenue for seeking digital information.

¶162 For content and service providers, Google's search platform is also not strictly essential. Ranking high in the organic results of the most popular search engine is undoubtedly an excellent way to reach potential customers. Studies have shown that top rankings on a results page receive the vast majority of all user attention, with the first spot receiving twice as many user clicks as the second.¹⁷¹ But providers that have been displaced by a search engine's own content in the coveted top ranking, or who otherwise fail to attain the high ranking that they desire, certainly have alternative ways of attracting customers.¹⁷²

¶163 They can purchase advertising through a wide range of media, including search-based advertising on any general search engine, display ads on Facebook and other websites, or on more traditional offline broadcast and print advertising platforms.¹⁷³ Alternatively, providers can enter into creative alliances with other market participants; one such example is the recent Bing/Yelp deal which will result in excerpts of Yelp restaurant reviews being prominently featured in searches on Bing.¹⁷⁴ They can also expand their mobile apps, as Yelp has recently done, to allow smartphone users to access

while many computer users use a search engine as an access point to the Internet, many more do not).

¹⁶⁵ CITIGROUP, INC., *Citi's Annual Net Influence Report*, at 3 (Feb. 5, 2012), <https://ir.citi.com/Nz%2FXjA8taabnbYmERmo1s9uJ10gHQZa35F5WBi9%2B98T18SNeGUKS4g%3D%3D> (reporting that Google accounts for only 16% of traffic to the top thirty websites).

¹⁶⁶ See *supra* notes 117–120 and accompanying text.

¹⁶⁷ See *supra* notes 118–34 and accompanying text.

¹⁶⁸ BUGHIN ET AL., *supra* note 118, at 7.

¹⁶⁹ See *supra* notes 123–26 and accompanying text.

¹⁷⁰ See *supra* note 126.

¹⁷¹ See Daniel Ruby, *The Value of Google Result Positioning*, CHITIKA INSIGHTS (May 25, 2010), <http://insights.chitika.com/2010/the-value-of-google-result-positioning> (showing that the top-ranked result received more than a third of users clicks, the second-ranked received about 17%, and the tenth-ranked less than 3%).

¹⁷² See *supra* notes 127–29 and accompanying text.

¹⁷³ The evidence is mixed as to whether online and offline advertising are reasonable substitutes for each other. Some studies suggest that they are, while others show that offline advertising is not as effective as online advertising for online-only retailers. See Manne & Wright, *Google and the Limits of Antitrust*, *supra* note 37, at 197–98 (discussing various studies and anecdotal evidence).

¹⁷⁴ See AP, *Yelp Serves Restaurant Reviews to Microsoft's Bing*, USA TODAY (June 14, 2012), <http://www.usatoday.com/tech/news/story/2012-06-14/yelp-bing/55600758/1>.

their services directly, bypassing search engines.¹⁷⁵ Though being top-ranked in Google’s organic results may be a superior (and free) platform for targeting potential customers relative to the alternatives, that reason alone probably will not suffice to render Google’s search platform “essential” for competitive viability.

¶164 Almost inextricable from the essentiality concept is the infeasibility of duplication requirement.¹⁷⁶ It must be shown that the functionality of the facility, not necessarily the facility itself, cannot be reasonably duplicated or obtained from another source.¹⁷⁷ From a rival content provider’s perspective, the functionality of Google search is the platform’s ability to help the rival reach potential customers in an ancillary market in which Google also competes. Thus, to the extent that there are ways for businesses to promote themselves other than through high visibility in the top ranks of the organic results, duplication of the facility would be considered reasonably feasible.

2. Is There Denial of Access?

¶165 Denial of access, which must be found under the *MCI* test,¹⁷⁸ is generally clear-cut and a non-issue in essential facility cases. However, in the case of search, the question is complicated and largely overlooked. It is not even clear which is the alleged essential facility. If it is the search engine, then there is no denial of access at all. The websites of Google’s vertical rivals, such as Mapquest or Kayak, are readily accessible to anyone using Google search via various keywords (or via searching the business name, or a portion of it). They are not excluded from the search process, though for certain queries, Google may display its own property prominently, whereas a rival website is lower in the rankings or is not shown at all.

¶166 For example, enter “map sites” (or “Mapquest”) into the Google search box, and the organic results listing will lead off with a link to the Mapquest site. However, if a user enters “Starbucks,” Google will automatically return a Google map marking the Starbucks locations closest to the user along with the usual relevant links.

¶167 As another example, type in “travel sites” as the search query in Google, and the organic search results will display links to Google’s major competitors in travel in the following order: Kayak, Expedia, Hotwire, Priceline, Orbitz, Travelocity, Travelzoo, and Tripadvisor.¹⁷⁹ But if one enters “Newark to San Francisco” as the search query, Google will return its “universal search” results (listing a few select flights and integrating a flight search box) ahead of links to the major travel sites.

¹⁷⁵ Anthony Ha, *Yelp’s Jeremy Stoppelman on Mobile: Apps Account for Majority of Weekend Searches, Ads Coming Soon*, TECHCRUNCH.COM (Aug. 1, 2012), <http://techcrunch.com/2012/08/01/yelp-mobile-ads/>.

¹⁷⁶ See, e.g., *MCI Commc’ns Corp. v. AT&T*, 708 F.2d 1081, 1132 (7th Cir. 1983) (setting forth “a competitor’s inability practically or reasonably to duplicate the essential facility” as the second element necessary to establish liability under the essential facilities doctrine); *Hecht v. Pro-Football, Inc.*, 570 F.2d 982, 99–93 (D.C. Cir. 1977).

¹⁷⁷ See Robinson, *supra* note 76, at 1211–12 (“What is important is not whether a particular asset owned by a monopolist can be duplicated but whether the specific economic uses performed by the asset can be replicated.”).

¹⁷⁸ *MCI*, 708 F.2d at 1132–33 (setting forth “the denial of the use of the facility to a competitor” as the third element necessary to establish liability under the essential facilities doctrine).

¹⁷⁹ *Travel Sites*, GOOGLE, <http://google.com/search?q=travel%20sites> (last visited April 12, 2013).

¶68 In a search for “restaurant review sites” on Google, Urbanspoon and Yelp top the organic results listing.¹⁸⁰ However, a search for “San Francisco restaurants” will yield Google’s universal search results, which include a number of San Francisco restaurant listings along with Google maps pinpointing their locations, and some Google reviews, followed by the traditional links to Yelp, OpenTable, and Zagat. Because Google’s proprietary content appears first, links to Yelp and other top-ranked external sites appear near the middle of the results page rather than at the top, as was the case when “restaurant review sites” was the search query.

¶69 Since no competitor website is excluded from the Google search platform itself for competitive reasons,¹⁸¹ the implicit premise of any denial of access claim must be that the *ranked results listing* is the alleged essential facility. But even accepting this dubious notion of what constitutes the essential facility in search, it is still not clear that a Google rival has been “denied access.” As shown, quality competitor websites, such as Mapquest or major travel or review sites, are still highly ranked for certain keywords, though perhaps not for other keywords or perhaps not as highly ranked as they were before Google expanded into content. But it is conceptually difficult to equate this outcome to denial of access unless one takes the position that “access” requires nothing less than access to top ranking for *all* search terms that might reasonably direct traffic to one’s business.

¶70 Though the issue has rarely been discussed, there is nothing to suggest that courts would (or should) interpret “denial of access” this loosely. Such a construction seems untenable under the usual understanding of those words. Moreover, courts have consistently construed essentiality strictly and, even before *Trinko*, have taken a conservative approach to the essential facilities doctrine.¹⁸²

3. “Nonrivalrousness,” or the Feasibility of Sharing

¶71 An important related issue that commentators have tended to overlook is whether the alleged essential facility is capable of being shared in the context of search.¹⁸³ A monopolist is not required to “share,” no matter how essential its facility may be to competition, if “sharing would be impractical or would inhibit the defendant’s ability to serve its customers adequately.”¹⁸⁴ It was for that reason that the Ninth Circuit Court of Appeals rejected essential facility claims in two cases that were factually similar to *Otter Tail* except on the issue of the feasibility of sharing.

¹⁸⁰ *Restaurant Review Sites*, GOOGLE, <http://google.com/search?q=restaurant%20review%20sites> (last visited April 12, 2013).

¹⁸¹ Sometimes websites are removed from Google’s search index for non-competitive reasons, such as spam content or child pornography. But apart from those limited categories (which have obvious pro-consumer and social justifications for exclusion), Google does not exclude sites from its index.

¹⁸² See *supra* notes 152–61 and accompanying text; see also Robinson, *supra* note 76, at 1232 (“A review of the lower court opinions indicates that lower courts are quite conservative in their application of the essential facilities doctrine.”).

¹⁸³ The feasibility of providing the facility is an element necessary to establish liability under the essential facility doctrine. See, e.g., *MCI*, 708 F.2d at 1132–33; *Hecht v. Pro-Football, Inc.*, 570 F.2d 982, 992–93 (D.C. Cir. 1977).

¹⁸⁴ *Hecht*, 570 F.2d at 992–93.

¶72 In *City of Anaheim v. Southern California Edison Co.*¹⁸⁵ and *City of Vernon v. Southern California Edison Co.*,¹⁸⁶ the utility company defendant would not allow municipalities access to its transmission lines to transmit wholesale power purchased from another vendor to their own local distribution systems. The reason for the refusal was that the utility planned to use the full capacity of the lines if inexpensive power were to become available for its own purchase.¹⁸⁷ Though, as in *Otter Tail*, the transmission lines were clearly essential to the municipalities if they were to run their own retail power distribution, the Ninth Circuit held that the monopolist utility was not under any obligation “to cease using its facility so that [its rival] can begin using it.”¹⁸⁸ To require it to do so would “stand[] the essential facilities doctrine on its head.”¹⁸⁹ Even the strongest contemporary advocates of the essential facilities doctrine seem to agree, setting as a condition for application under their theory the “nonrivalrous” nature of the facility or resource.¹⁹⁰ “Nonrivalrous” means that the resource can be accessed and used by multiple persons at the same time—that is, a resource that is capable of being shared.¹⁹¹

¶73 In the context of search, if the *search engine* is the alleged essential facility, then “shareability” does not present a problem—multiple persons can access the search engine at the same time. But, in that case, there would be no denial of access. There is no allegation that the website of a Google rival, such as Mapquest, Expedia or Tripadvisor, has been excluded from the search process. The claim is merely that Google’s search methodology tends to favor its own content and feature it prominently in response to certain search queries.

¶74 Thus, the essential facility argument must be premised on the notions that the *ranked results listing* is itself the essential facility, and that the lack of access to a desired top ranking constitutes denial of access. However, in that case, the “facility” is clearly not nonrivalrous. There is only one first-ranked position, one second-ranked, and so on. Where a facility cannot accommodate both the monopolist-owner and its rival, the law is clear that the monopolist does not have to “share,” no matter how essential access may be to competition. If there is no legal obligation to share in that situation, there would naturally be no need for the search engine to adopt a “neutral” standard for the allocation of the scarce resource—top-ranking. Rather, the search engine has the right to use the non-sharable resource itself.

¹⁸⁵ *City of Anaheim v. S. Cal. Edison Co.*, 955 F.2d 1373 (9th Cir. 1992).

¹⁸⁶ *City of Vernon v. S. Cal. Edison Co.*, 955 F.2d 1361 (9th Cir. 1992).

¹⁸⁷ *City of Anaheim*, 955 F.2d at 1381 (“Edison’s reason for denying firm access was simply that when Northwest Power was available and inexpensive Edison was fully using its capacity to import that power into its whole system.”); *City of Vernon*, 955 F.2d at 1366 (“Vernon fails to demonstrate just why Edison is required to cease using its own facility so that Vernon can begin using it. This is not a situation where Edison had no use for the facility and arbitrarily denied someone else its use.”).

¹⁸⁸ *City of Vernon*, 955 F.2d at 1366; *see also City of Anaheim*, 955 F.2d at 1381 (“It is a situation where Edison can use its own facility in full to obtain inexpensive power. The Cities seem to contend that Edison has to disable itself so that they can get cheap power. The law requires no such thing.”).

¹⁸⁹ *City of Vernon*, 955 F.2d at 1367 (“Edison clearly had a use for its lines. . . . [T]he demand that Edison turn over its facility to a city simply because the city could save money by obtaining cheaper power stands the essential facility doctrine on its head.”) (citing *City of Anaheim*, 955 F.2d at 1381).

¹⁹⁰ *See Frischmann & Waller, supra* note 161, at 12–13 (incorporating into the definition of an infrastructure—to which the essential facility doctrine could apply—the requirement that the resource is one that “may be consumed non-rivalrously,” that is, it is “sharable”); Waller, *supra* note 76, at 373 (same).

¹⁹¹ *See Frischmann & Waller, supra* note 161, at 12–13.

¶75 Thus, even accepting the argument that access to its top ranking for a slew of specific keywords is essential for competitive viability, Google has no legal obligation to give up its non-sharable property—the prime spot on its results page—to a competitor, regardless of which product (e.g. Google Maps, Mapquest or Bing Maps) is better by some “objective” metric. Because rankings are inherently *not* nonrivalrous, invoking the essential facility principle in the context of search results seems incongruous.

IV. UNILATERAL REFUSAL TO DEAL AND SACRIFICE OF PROFITS

¶76 The essential facilities doctrine is basically a subset of the general antitrust duty to deal. Even where no essential facility is involved, a monopolist’s unilateral “refusal to deal” with a competitor can give rise to liability under section 2 of the Sherman Act in exceptional circumstances.¹⁹² However, basing section 2 liability on pure unilateral refusals has always been somewhat controversial because it comes quite close to finding an antitrust violation for no-fault monopolization.¹⁹³ Thus, just as with the essential facilities doctrine, the general duty to deal has been applied only sparingly.¹⁹⁴ There are, in fact, few conceptual differences between the two antitrust principles, and antitrust commentators tend to merge or blend the discussion of these doctrines.¹⁹⁵ A general duty to deal, not tied to an essential facility, is no more appropriate (or likely to be found applicable) for Google’s search rankings under *Trinko* than the essential facilities doctrine.

A. Termination of Prior Profitable Relationship Evidencing Sacrifice of Short-Term Profits

¶77 In *Trinko*, the most recent Supreme Court case involving a monopolist’s alleged duty to deal, a unanimous Supreme Court reiterated that “as a general matter, the Sherman Act ‘does not restrict the long recognized right of [a] trader or manufacturer engaged in an entirely private business, freely to exercise his own independent discretion as to parties with whom he will deal.’”¹⁹⁶ In addition, the Court bluntly said that antitrust law disfavors the imposition of duties to deal because of concerns about their disincentive

¹⁹² See, e.g., *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 601 (1985) (“The high value that we have placed on the right to refuse to deal with other firms does not mean that the right is unqualified.”).

¹⁹³ Even earlier cases that took a more aggressive approach toward monopolization have implicitly rejected the notion of liability for no-fault monopolization. See *United States v. Aluminum Co. of Am.*, 148 F.2d 416, 430 (2d Cir. 1945) (cautioning that a “single producer may be the survivor out of a group of active companies, merely by virtue of his superior skill, foresight, and industry. . . . The successful competitor, having been urged to compete, must not be turned upon when he wins.”).

¹⁹⁴ See, e.g., *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP.*, 540 U.S. 398, 408 (2004) (“Under certain circumstances, a refusal to cooperate with rivals can constitute anticompetitive conduct and violate § 2. We have been very cautious in recognizing such exceptions, however, because of the uncertain virtue of forced sharing and the difficulty of identifying and remedying anticompetitive conduct by a single firm.”).

¹⁹⁵ Perhaps one distinction is that courts have not tried to craft a systematic test for unilateral refusals to deal as they have for the essential facilities doctrine, but have tended to focus on the particular facts of a case, including the monopolist’s intent. Compare *Aspen Skiing*, 472 U.S. 585, with *MCI Commc’ns Corp. v. AT&T Co.*, 708 F.2d 1081 (7th Cir. 1983).

¹⁹⁶ *Trinko*, 540 U.S. at 408 (alteration in original) (citations omitted) (quoting *United States v. Colgate & Co.*, 250 U.S. 300, 307 (1919)).

effect on investments and innovations.¹⁹⁷ While *Trinko* did not repudiate *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, which found a section 2 violation based on a dominant firm's unjustified refusal to deal with a competitor,¹⁹⁸ it severely limited *Aspen's* scope and described the case as being “at or near the outer boundary of § 2 liability.”¹⁹⁹

¶78 *Aspen* involved a ski operator who, after becoming dominant in the relevant market,²⁰⁰ would not continue to join its rival in offering a highly popular and profitable joint multi-day, all-Aspen ski ticket.²⁰¹ The operator also refused to sell its daily ski tickets—an item it normally sold to the public—in bulk to the competitor, even at the full retail price, so as to prevent the competitor from cobbling together an alternative to the terminated joint ticket.²⁰² The Court concluded that the jury could infer anticompetitive intent from the defendant's willingness to sacrifice short-term profits by terminating a profitable prior relationship with its rival.²⁰³

¶79 The *Trinko* Court construed *Aspen* very narrowly, limiting it to its facts. It read *Aspen's* imposition of a duty to deal as hinging on the monopolist's termination of a preexisting profitable course of dealing with its rival, which evidenced a “willingness to forsake short-term profits to achieve an anticompetitive end.”²⁰⁴ The theory is that a monopolist's voluntary sacrifice of short-term profits makes no economic sense and suggests “a calculation that its future monopoly retail price would be higher,”²⁰⁵ which could justify an exception to the general no duty to deal rule. Accordingly, the Court suggested that, before unilateral refusals can give rise to section 2 liability, there must usually be a prior profitable business relationship between the monopolist and its competitor, the termination of which entailed a short-term sacrifice of profits for the monopolist.

¹⁹⁷ *Id.* at 407–08.

¹⁹⁸ 472 U.S. 585.

¹⁹⁹ *Trinko*, 540 U.S. at 409.

²⁰⁰ The defendant Ski Co. initially owned only one of the four ski mountain facilities in Aspen but later (through acquisitions) owned three. For some reason, it did not appeal the lower court's definition of the relevant market as consisting of downhill skiing in Aspen. Under this definition, ski resorts outside of Aspen were excluded, which allowed Ski Co. to be characterized as a monopolist. A good argument could have been made that the relevant geographic market should not have been so limited because skiers dissatisfied with the offerings in Aspen could easily visit ski resorts elsewhere. However, because the defendant did not appeal the market definition and the finding of market power, the only issue before the Supreme Court was whether the defendant's unilateral refusal to deal satisfied the conduct element of section 2.

²⁰¹ *Aspen Skiing*, 472 U.S. 585, 603 (1985) (“[T]he monopolist elected to make an important change in a pattern of distribution that had originated in a competitive market and had persisted for several years.”).

²⁰² The joint multi-day ski ticket was popular with skiers because it allowed them to ski on all four ski mountains in Aspen (three owned by defendant and one by plaintiff) over a period of days. When it was discontinued because of the defendant's refusal to deal, the plaintiff tried to purchase daily tickets for defendant's ski mountains in order to include them in a ski package with daily tickets for its own mountain, as a substitute for the terminated popular joint ticket. *See Aspen Skiing*, 472 U.S. at 589, 593–94.

²⁰³ *Aspen Skiing*, 472 U.S. at 608 (noting that the jury could have concluded from defendant's refusal to make profitable sales of tickets to plaintiff that it “elected to forego these short-run benefits because it was more interested in reducing competition in the Aspen market over the long run by harming its smaller competitor”); *id.* at 610–11 (“Thus the evidence supports an inference that Ski Co. was not motivated by efficiency concerns and that it was willing to sacrifice short-run benefits and consumer goodwill in exchange for a perceived long-run impact on its smaller rival.”).

²⁰⁴ *Trinko*, 540 U.S. at 409 (commenting on *Aspen Skiing*, 472 U.S. 585 (1985)).

²⁰⁵ *Id.*

¶80 These conditions cannot be satisfied in the context of Google’s favoring its own content and services in returning relevant search results. No search engine can reasonably be said to have a prior course of dealing with a firm based on the fact that its algorithm has previously returned a link to the firm’s webpage in response to a search query. A search engine generates results for millions upon millions of search queries every day. To view it as having a preexisting business relationship with every entity whose website link has been automatically included in a results page, free of charge, goes beyond the general understanding of the concept of a business relationship or course of dealing.

¶81 But even if a website’s previous top ranking in various search results could be characterized as a prior course of dealing with a search engine, subsequent “termination” of the relationship by the search engine (by taking the top rank for itself) does not require the search engine to sacrifice short-term profits. Google, like Bing and Yahoo!, does not charge websites any fees when its algorithm returns a link to them and, therefore, “termination” of the “relationship” does not cost Google lost profits. Nor is there evidence that by giving preference to its own content, Google has suffered a drop in its advertising revenues. Stated differently, even if Google or Bing can be said to have terminated a prior course of dealing with Mapquest when it started returning its own maps instead of a first-ranked link to Mapquest, this “termination” does not entail any sacrifice of short-term profits for the search engine. Nor can the “termination” be considered economically irrational but for the exclusionary effect it would have on Mapquest. Thus, the *Aspen* factors that *Trinko* seems to require are absent, and it is difficult to envision a court applying an *Aspen*-like duty to deal in connection with Google’s search rankings.

B. Lorain Journal?

¶82 Notably, in its *Trinko* decision, the Court made no reference to *Lorain Journal Co. v. United States*,²⁰⁶ a 1951 case relied upon by the *Aspen* Court to find the existence of a duty to deal.²⁰⁷ Given that *Trinko* arguably left *Lorain Journal* untouched, it is necessary to consider whether there are parallels between Google’s preference for its own content and the defendant’s conduct in *Lorain Journal* that could justify applying *Lorain Journal*’s rationale to Google search to find antitrust liability.

¶83 In *Lorain Journal*, the Court found a section 2 violation where the sole newspaper serving the area refused to accept advertisements from businesses that also advertised or planned to advertise on a newly established radio station, the area’s only other disseminator of news and advertising.²⁰⁸ The publisher’s objective was to “cut off [the radio station’s] bloodstream of existence—the advertising revenues,”²⁰⁹ in order to regain its monopoly in the dissemination of news and advertising in the area.²¹⁰ To execute its plan, the newspaper monitored the radio station’s broadcasts to identify its advertisers,

²⁰⁶ *Lorain Journal Co. v. United States*, 342 U.S. 143 (1951).

²⁰⁷ *Aspen Skiing* 472 U.S. at 601–03.

²⁰⁸ *Lorain Journal*, 342 U.S. at 146–49.

²⁰⁹ *Id.* at 149.

²¹⁰ *Id.* at 151 (“[T]he publisher’s attempt to destroy WEOL (was in fact an attempt to end the invasion by radio of the Lorain newspaper’s monopoly” of the mass dissemination of local news and advertising in Lorain).

then terminated their advertising contracts and would only renew them after the advertisers ceased advertising on the radio.²¹¹

¶84 While *Lorain Journal* is usually considered a unilateral refusal to deal case—standing for the proposition that a monopolist’s right to choose with whom it will do business is not unqualified²¹²—the case, in fact, was not about a pure unilateral refusal. Rather, it involved exclusive dealing, or a conditional refusal. The monopolist publisher’s willingness to do business with its advertising customers was contingent on their agreement to exclusivity. This conduct, specifically aimed at the “complete destruction and elimination” of the radio station,²¹³ is qualitatively very different from a dominant search engine simply favoring its own products and services over that of its competitors in its display of search results. To be comparable to *Lorain Journal*, there would have to be a particular unjustified act or condition aimed at excluding competition, such as Google specifically demoting a website as a penalty for advertising on Bing or Yahoo!, for soliciting an advertiser for its own website in competition with Google, for refusing to purchase advertising on Google, or for otherwise presenting a competitive threat. Absent such specific acts of exclusion, Google’s choice to display its own property more prominently in search results bears little resemblance to *Lorain Journal*.²¹⁴

V. THE COMPENSATION CONUNDRUM

¶85 There are other problematic issues common to both the general duty to deal and the essential facilities doctrine as possible legal tools for mandating search “neutrality.” Preliminarily, it is extremely difficult to determine what a truly “neutral” result would be²¹⁵ and who would (and should) have the right to make that qualitative judgment.²¹⁶ Even if we can somehow sort out these complex issues, it is important to note that compulsory access does not mean *free* access.²¹⁷ Courts have never ordered a monopolist-defendant to grant *uncompensated* access or provide free assistance to a rival in a pure essential facility or duty to deal case. Indeed, no case has even held that any compensated dealing must be at the competitive price.²¹⁸ That mandatory access does not

²¹¹ *Id.* at 149.

²¹² See *Aspen Skiing*, 472 U.S. at 601–02 (describing *Lorain Journal* as squarely holding that the important right of a firm not to deal with other firms is not unqualified).

²¹³ *Lorain Journal*, 342 U.S. at 150.

²¹⁴ In any event, whatever the vitality of *Lorain Journal*, it seems hard to apply to Google because favoring its own property in the display of search results cannot really be characterized as refusing to deal with others.

²¹⁵ See Grimmelmann, *Some Skepticism About Search Neutrality*, *supra* note 42, at 443–45 (disputing the notion that search queries can have objectively right and wrong answers and explaining that search itself is subjective).

²¹⁶ See Volokh & Falk, *supra* note 65 (making the case that search engine results reflect a search engine’s editorial judgment of relevant content that is fully protected by the First Amendment).

²¹⁷ Even those who advocate revitalizing the essential facilities doctrine have emphasized this point. See Frischmann & Waller, *supra* note 161, at 11 (“[Open access] does not mean that access is free.”).

²¹⁸ The Supreme Court recently held that an upstream monopolist with no duty to deal is free to charge whatever wholesale price it wishes to a competitor in the retail market, but did not say whether the monopolist would have the same discretion if it had a duty to deal with the retail competitor. *Pac. Bell Tel. Co. v. Linkline Commc’ns, Inc.*, 555 U.S. 438 (2009). However, given that the Sherman Act generally allows a monopolist to charge monopoly prices, there is no logical argument why a monopolist that is vertically integrated would not be permitted to sell its input or make available its resource at the wholesale level at a monopoly price as well.

mean free access is also implicit in cases cautioning that courts should not be thrust into a role requiring them to determine prices at which the forced sharing must take place.²¹⁹ In fact, the difficulty of setting prices to ensure just compensation to the monopolist for granting access is one reason for the general judicial reluctance to order compulsory access in the first place.²²⁰

¶86 Though the issue has not been explicitly addressed, the notion that mandated dealings require compensation for the monopolist seems correct as a matter of private property right. The freedom to choose with whom one wishes to do business or not do business is associated with the right to exclude, which is a property right.²²¹ Mandated access necessarily involves a compromise of the monopolist's exclusive property rights. Therefore, to be consistent with private property rights, not even a monopolist should generally be required to permit an uncompensated intrusion on its property right—its right to exclude—for the greater good of facilitating competition.²²²

¶87 To the extent that compulsory dealing requires compensation to the monopolist, it is difficult to see how courts can mandate access in terms of search results. A search engine cannot be compelled to offer its competitors access to the choice locations on its results pages without reasonable compensation. At the same time, under Google's business model, web publishers are not charged if the search algorithm returns links to their websites in response to any search query. It seems unlikely that any firm would (or should) be ordered to alter its business model—in the case of search engines, to take payment for ranking a particular rival site in the organic results (assuming that it is even possible to determine fair compensation)—just to facilitate compulsory dealing. This compensation conundrum further highlights the incongruity of the duty to deal and essential facility paradigms in the context of search.

VI. COMPETITIVE EFFECTS AND LEGITIMATE JUSTIFICATIONS?

¶88 Those who advocate prohibiting Google from displaying specialized search results seem to assume that a practice that happens to be in Google's self-interest is necessarily anticompetitive. However, as some commentators have suggested, that assumption does not seem valid.²²³ Google is often faulted for having dislodged the previously dominant

²¹⁹ See, e.g., *Trinko*, 540 U.S. at 408 (stating, as a reason for severely limiting the duty to deal, the fact that courts are not suited to determine the proper price for any forced sharing); Deborah A. Garza et al., *Antitrust Modernization Comm'n Report and Recommendations* 102 (2007), http://govinfo.library.unt.edu/amc/report_recommendation/amc_final_report.pdf (“[F]orced sharing requires courts to determine the price at which such sharing must take place, thereby transforming antitrust courts into price regulators, a role for which they are ill suited.”).

²²⁰ See *Trinko*, 540 U.S. at 408 (“Enforced sharing also requires antitrust courts to act as central planners, identifying the proper price, quantity, and other terms of dealing—a role for which they are ill suited.”).

²²¹ See *Kaiser Aetna v. United States*, 444 U.S. 164, 176 (1979) (holding that the government could not require owners of a marina to make it open to the public without compensating the owners, based on a property right analysis).

²²² See Robinson, *supra* note 76, at 1192 (analogizing mandatory dealing to “a private power of eminent domain”). But see Michael A. Carrier, *Cabining Intellectual Property Through A Property Paradigm*, 54 DUKE L.J. 1, 80–83 (2004) (arguing that the property right to exclude is not as absolute as it is often claimed to be and cataloguing the limits on property rights).

²²³ See generally Grimmelmann, *Some Skepticism About Search Neutrality*, *supra* note 42, at 450–52 (giving examples of Google's ranking decisions that are both in its self-interest and also benefit users);

Mapquest and Yahoo! Maps when it “put its own [map] service atop all others for generic address searches.”²²⁴ Yet Google Maps has been praised as “groundbreaking when launched” and an “astonishingly clever” service.²²⁵ Moreover, when a search engine automatically returns its map when it surmises from a query that a user would like to see a map, it benefits most users by directly providing them the information that they probably need instead of linking them to another site where they must enter another query. Because a practice that is good for Google can also enhance consumer welfare, it is important not to short-circuit the competitive effects analysis, which should focus on the effects on *consumers* and not on competitors.

¶189

In order to find antitrust liability under the rule of reason, a court must find that a business practice alleged to be exclusionary has anticompetitive effects that are not outweighed by its procompetitive benefits.²²⁶ The standard economic theory of harm for unilateral refusals is foreclosure: the exclusion of competition, usually in a downstream market, to the detriment of consumers.²²⁷ In the context of search, the basic foreclosure argument seems to be that Google’s favoring of its own content and services would deprive competing vertical providers of user traffic, diminish their sales and advertising revenues, and impair their product development.²²⁸ Kayak and Expedia, for example, have contended that if Google favors its own travel products, they would have to turn to less efficient alternatives to reach consumers, hampering their ability to compete effectively with Google in travel search.²²⁹ To the extent that the highest-ranked search result usually receives substantially more clicks than the second-ranked, which receives more clicks than the third-ranked and so on,²³⁰ failure to place at the top of the search results would likely result in some foreclosure.

Crane, *supra* note 3, at 5–6 (approving of universal search results and the need for search engines to have the freedom to make strategic choices regarding embedding additional functions in their search engines that were formerly performed by external websites).

²²⁴ See TRAFFIC REPORT, *supra* note 52, at 5.

²²⁵ See Grimmelmann, *Some Skepticism About Search Neutrality*, *supra* note 42, at 452. See also John Carroll, *Google Maps and Innovation*, ZDNET (Oct. 12, 2005), <http://www.zdnet.com/blog/carroll/google-maps-and-innovation/1499> (lauding Google Maps).

²²⁶ See *United States v. Microsoft Corp.*, 253 F.3d 34, 58–59 (D.C. Cir. 2001) (en banc) (per curiam) (“[T]o be condemned as exclusionary, a monopolist’s act must have an ‘anticompetitive effect.’ . . . [I]f a plaintiff successfully establishes a *prima facie* case under § 2 by demonstrating anticompetitive effect, then the monopolist may proffer a [nonpretextual] ‘procompetitive justification’ for its conduct. . . . [I]f the monopolist’s procompetitive justification stands un rebutted, then the plaintiff must demonstrate that the anticompetitive harm of the conduct outweighs the procompetitive benefit.”).

²²⁷ See Michael H. Riordan and Steven C. Salop, *Evaluating Vertical Mergers: A Post-Chicago Approach*, 63 ANTITRUST L.J. 514 (1995) (discussing the foreclosure issue raised by vertical integration).

²²⁸ See, e.g., *Hearing on the Power of Google*, *supra* note 107, at 13 (Statement of Thomas O. Barnett) (“Google’s tactics foreclose the ability of other sites to compete on the merits and to achieve the scale necessary to succeed. Without search traffic and the resulting revenues, these sites are unable to deliver innovative content and better services to consumers. Further, websites and content creators often must spend more money on paid search advertising to offset in part their loss of visibility, taking away further resources from investment in innovation.”).

²²⁹ See Margot Williams, *Expedia is Worried About Google/ITA Deal*, INSIDEGOOGLE (July 12, 2010, 12:13 PM), <http://insidegoogle.com/2010/07/expedia-is-worried-about-googleita-deal/>. See also Ashby Jones, *The Google/Antitrust Story Continues With Objections to ITA Purchase*, WSJ LAW BLOG (Oct. 26, 2010, 9:05 AM), <http://blogs.wsj.com/law/2010/10/26/the-googleantitrust-story-continues-with-objections-to-ita-purchase/>.

²³⁰ See *supra* note 171 and accompanying text.

¶90 However, it is doubtful that there would be *substantial* foreclosure, which is required for antitrust liability.²³¹ As discussed above, businesses have other reasonable options for reaching potential customers. In fact, for the top thirty websites, which include many of Google's competitors in ancillary markets (such as Kayak, Yelp, Amazon, eBay, Expedia, Travelocity and Priceline), a study shows that these websites rely on Google for only 16% of their user traffic.²³² This suggests that, while access to the most desirable space on a results page is obviously desirable, and the lack of access may have some foreclosure effect, the effect is not sufficiently substantial to raise antitrust concerns.

¶91 Furthermore, antitrust law is consumer-centric—it protects “competition, not competitors,”²³³ which means that our focus must be on the impact of Google's practice of favoring its own services on search *users*, not on competing websites. The practice would not be anticompetitive if it is good for search users even if it also happens to benefit Google.²³⁴ An example given by Professor James Grimmelmann involving Foundem and some price-comparison sites is instructive in this regard. Grimmelmann argues that many of these sites are “worthless” and “junk,” and that a ranking system that incorporates a penalty for them would be a service to most users.²³⁵ Since Google also offers product searches, such a penalty on some price-comparison sites might incidentally give it some competitive advantage. In other words, a practice that could improve Google's position vis-à-vis a competitor may also be *pro*-competitive.

¶92 Similarly, the use of universal search results, which effectively favors the search engine's own content and services, cannot be presumed anticompetitive simply because it may adversely affect some rival content providers. When Google integrates its own proprietary content into the search results along with the traditional blue links, it probably does reduce user traffic to the sites of its competitors in those vertical markets. However, commentators seem to agree that the introduction of universal search is a beneficial phenomenon.²³⁶ Viewed from the perspective of search *users* and not rival websites, the

²³¹ Usually, foreclosure of at least 40% of the relevant market is required for antitrust liability but a lower percentage can suffice where competitors were prevented from achieving the critical mass needed to pose a threat to the monopolist. *See, e.g.,* Jonathan M. Jacobson, *Exclusive Dealing, “Foreclosure,” and Consumer Harm*, 70 ANTITRUST L.J. 311, 324 n.85 (2002) (listing decisions illustrating use of the 40% threshold).

²³² *See* CITIGROUP, INC., *supra* note 165.

²³³ *Brown Shoe Co. v. United States*, 370 U.S. 294, 320 (1962) (quoted by *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 488 (1977)).

²³⁴ *See* FTC Statement Regarding Google's Search Practices, *supra* note 1 (acknowledging that Google's algorithm and design changes may weaken Google's vertical competitors but “could reasonably be viewed as improving the overall quality of Google's search results”).

²³⁵ *See* Grimmelmann, *Some Skepticism About Search Neutrality*, *supra* note 42, at 450 (using examples to explain why applying penalties to reduce many vertical search sites' rankings is beneficial to users). Grimmelmann is widely acknowledged to be a technologically savvy commentator, due to his significant prior experience in the computer industry. *See* James Grimmelmann, NEW YORK LAW SCHOOL, http://www.nyls.edu/faculty/faculty_profiles/james_grimmelmann (last visited April 12, 2013).

²³⁶ *See, e.g.,* Crane, *supra* note 3; Wingfield, *supra* note 121 (commenting favorably on the Bing/Facebook alliance which would allow Bing to integrate data from Facebook into its search results); Ryan Singel, *Times Case for Gov Regulation of Google Search Is Weak*, WIRED.COM (Jul. 16, 2010, 3:35 PM), <http://www.wired.com/business/2010/07/nyt-google-regulation/> (“Clearly, the map is useful to searchers, who'd much rather see a map than a link to one. While that might be bad for Mapquest's business, it's not bad for users . . . Microsoft's Bing and Yahoo are doing similar things, and are going even beyond that. Search on a music artist on Yahoo and you get an information box, with a bio, a picture

inclusion of maps and local results, for example, is almost certainly positive since it helps users get the information that they are seeking more directly and efficiently.

¶93 To the extent that some content integration may not be as obviously beneficial, it is reasonable to be concerned that Google might indiscriminately prefer its own content in a way that degrades its search results, to the detriment of consumers. One factor, however, is likely to weigh against this possibility: Google’s dependence on search-based advertisements. Google does not presently sell retail goods or services, or receive fees from websites to which it directs user traffic. Nor does it receive commissions based on its product search offerings, unlike many comparison-shopping sites.²³⁷ Because Google depends primarily on search-based advertising for its profitability and a large user base attracts advertisements, increasing or retaining its user base is critical to Google’s success.²³⁸ To protect and expand its user base in the face of intense competition from other general search engines, Facebook, and other portals of online information all vying for consumer attention, Google must continually anticipate user expectations in its search results and other offerings.

¶94 If Google degraded its search results by deliberately omitting or demoting quality websites simply because they compete with Google in various market segments, it would risk losing users to other search engines and to non-general search engine competitors.²³⁹ A loss of user base would likely mean a loss of advertising revenue. Google’s market incentives, therefore, are to satisfy and exceed user expectations, which should help counterbalance whatever self-interested motivations Google might otherwise have to promote its own services over its competitors regardless of their impact on user experience. In fact, in closing its investigation of Google, the FTC cited evidence that showed Google *demoted* its own content when market tests revealed that a higher ranking detracted from the user experience.²⁴⁰

¶95 There is also evidence that the movement toward universal search results and other integration of (or interfacing with) a search engine’s own services represents the search engine’s competitive strategy.²⁴¹ These strategies are employed, not only by Google, but also by Bing and Yahoo!.²⁴² Since neither Bing nor Yahoo! has sufficient share of the

and links to songs you can stream. . . . While that may reduce the traffic to a band . . . it’s hard to argue that’s anti-competitive or a disservice to users.”).

²³⁷ See Singel, *supra* note 236 (“Google doesn’t make its money from referring traffic to websites the way that say the shopping search engine TheFind does.”).

²³⁸ Evans, *supra* note 114, at manuscript 4–6 (explaining strategies for increasing value for multi-sided platforms, which include the search engine).

²³⁹ See Singel, *supra* note 236 (“The better the real results, the more often users will come back in the long run and the more likely that in one of their searches, they decide to click the ads, instead of a link That means rigging your algorithm is the worst thing a search engine can do and would be the fastest way to lose users to a competing search engine.”).

²⁴⁰ See FTC Statement Regarding Google’s Search Practices, *supra* note 1 (“For example, contemporaneous evidence demonstrates that Google would typically test, monitor, and carefully consider the effect of introducing its own vertical content on the quality of its general search results, and would demote its own content to a less prominent location when a higher ranking adversely affected the user experience.”).

²⁴¹ See Wright, *supra* note 3, at 47 (concluding from his empirical study that search bias “emerged as an efficient competitive strategy, allowing search engines to differentiate their products in ways that benefit consumers”).

²⁴² See *id.* (showing, in his study, that the absolute level of search engine “bias” was extremely low, but to the extent that it existed, it was seen more frequently in Bing search results than in Google); Benjamin Edelman & Benjamin Lockwood, *Measuring Bias in “Organic” Web Search*, BENEDELMAN.ORG (Jan. 19,

search traffic to exercise market power, it is generally safe to assume that the practice is more likely an effective form of competition than an anticompetitive strategy.²⁴³

¶196 If the trend toward universal search results is primarily a manifestation of search engine evolution and competition,²⁴⁴ it would mean that the practice is supported by a legitimate business justification. It is clear from *Aspen* and earlier cases that competitive justifications excuse unilateral refusals to deal.²⁴⁵ In fact, *Aspen* suggests that if a legitimate business justification exists, a refusal is deemed to be appropriate without the need to balance its competitive effects.²⁴⁶ The law on essential facility seems to be the same with respect to this issue.²⁴⁷

¶197 Given the rapid pace at which the online information sector evolves, it seems unlikely that Google can afford to be complacent. The broad Internet market in which Google competes is one that experiences what economist Joseph Schumpeter famously referred to as the “perennial gales of creative destruction” that blow through our economy benefiting society.²⁴⁸ In this highly dynamic environment, change is a constant, and new technologies continually emerge changing the competitive landscape.²⁴⁹ Well-known specialized websites such as Amazon and Kayak, for example, now have powerful search capabilities, and Amazon, in particular, is hardly just a large web store.²⁵⁰ Facebook is gaining on Google as the online destination for users, and some have predicted that its

2011), <http://www.benedelman.org/searchbias/> (showing, through a study, that both Yahoo and Google engage in some search bias); Singel, *supra* note 236 (giving examples of Microsoft’s Bing and Yahoo! apparently going beyond what Google does, and finding that it’s hard to argue that it is bad for users).

²⁴³ See FTC Statement Regarding Google’s Search Practices, *supra* note 1 (“We also note that other competing general search engines adopted many similar design changes, suggesting that these changes are a quality improvement with no necessary connection to the anticompetitive exclusion of rivals.”).

²⁴⁴ See Wright, *supra* note 3, at 46 (concluding, from his study of search bias, that search engines’ favoring of their own content is driven by “the evolution of consumer preferences for more sophisticated and useful search results”).

²⁴⁵ See *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585, 604–05, 608–10 (1985) (suggesting that the refusal would not violate section 2 of the Sherman Act had there been non-pretextual business reasons for the refusal); *Eastman Kodak Co. v. Image Technical Servs.*, 504 U.S. 451, 483 n.32 (1992) (observing that a monopolist may refuse to deal with its rivals “if there are legitimate competitive reasons for the refusal”).

²⁴⁶ See *Aspen Skiing*, 472 U.S. at 608. The Supreme Court in *Aspen* did not call for any balancing of the competitive gains from a refusal to deal against the anticompetitive losses; rather it suggested that had Aspen Skiing’s proffered business justifications not been pretextual, no liability would have arisen from its refusal to deal.

²⁴⁷ See, e.g., *Morris Commc’ns Corp. v. PGA Tour, Inc.*, 364 F.3d 1288, 1295 (11th Cir. 2004); *City of Anaheim v. S. Cal. Edison Co.*, 955 F.2d 1373, 1381 (9th Cir. 1992) (“[The monopolist] could still deny access if it had legitimate business reasons for that denial.”); *City of Vernon v. S. Cal. Edison Co.*, 955 F.2d 1361, 1366 (9th Cir. 1992) (noting that the plaintiff ultimately has the burden of proving that the defendant’s refusal to share access was without a legitimate business justification); *United Asset Coverage, Inc. v. Avaya, Inc.*, 409 F. Supp. 2d 1008, 1047 (N.D. Ill. 2006). See also *MCI Commc’ns Corp. v. AT&T Co.*, 708 F.2d 1081 (7th Cir. 1983) (implying that there would be no liability had AT&T’s proffered business justification for refusing to provide interconnection to its facility been non-pretextual); *Areeda*, *supra* note 77, at 852 (arguing that “legitimate business purpose always saves the defendant” and that, once the defendant comes forward with a legitimate business purpose, the burden is on the plaintiff to overcome the claim).

²⁴⁸ JOSEPH SCHUMPETER, *CAPITALISM, SOCIALISM AND DEMOCRACY* 84 (1942).

²⁴⁹ See Farhad Manjoo, *The Great Tech War of 2012: Apple, Facebook, Google, and Amazon Battle for the Future of the Innovation Economy*, FAST COMPANY, Nov. 2011, <http://www.fastcompany.com/magazine/160/tech-wars-2012-amazon-apple-google-facebook>.

²⁵⁰ See *id.* (naming Amazon as one of the four large companies that “don’t recognize any borders” and “encroach further and further into one another’s space”).

network could replace Google as the search engine and navigator for its community of users.²⁵¹ And smartphones have moved users towards more mobile-app-centric Internet consumption rather than a web approach to the Internet.²⁵²

¶98 One would expect general search engines (including Google), faced with intense competition on various fronts, to evolve and innovate in order to remain competitive. This trend supports the assertion that the search engine evolution—from a pure search tool to merging content into search—is primarily a *competitive* strategy designed to satisfy consumer desires to have the most relevant information presented quickly and in a user-friendly format.²⁵³ If that is the case, the practice of a search engine favoring its own content in search results would be supported by a legitimate business justification.²⁵⁴

VII. POLICY CONSIDERATIONS

¶99 The above discussion has highlighted the doctrinal incongruity of juxtaposing essential facility and the antitrust duty to deal in the context of search rankings. It is also worth considering whether policy concerns might tilt in favor of a broader construction of these doctrines. I do not believe they do. To the contrary, policy considerations seem to further strengthen the case for the current restrictive approach.

A. *Incentives to Innovate and Invest as a Macro Policy Rationale*

¶100 The usual macro argument in favor of strictly limiting the duty to deal and the essential facilities doctrine is that mandated dealings with rivals would decrease the incentives for investment and innovation.²⁵⁵ In *Trinko*, the Supreme Court voiced those concerns, saying:

Firms may acquire monopoly power by establishing an infrastructure that renders them uniquely suited to serve their customers. Compelling such firms to share the source of their advantage is in some tension with the underlying purpose of

²⁵¹ See Farhad Manjoo, *Why Facebook Will Win*, FAST COMPANY, Nov. 2011, <http://www.fastcompany.com/magazine/160/why-facebook-will-win> (“The promise of Facebook lies in its servers, in the data it collects about how we interact with one another and with brands. . . . Facebook now boasts more than 800 million users around the world. More than half of them log in every single day, and more than 2 million posts a day are liked and commented upon.”); see also *supra* notes 119–22 and accompanying text.

²⁵² See *supra* notes 123–26 and accompanying text.

²⁵³ This is an assertion that all search engines have made. See, e.g., Greg Sterling, *Yahoo: We’re Moving From Web of Pages to Web of Objects*, SEARCH ENGINE LAND (May 19, 2009), <http://searchengineland.com/yahoo-were-moving-from-web-of-pages-to-web-of-objects-19524> (explaining Yahoo!’s move beyond ten blue links as “more closely aligning user intent with search results and mapping those to real-world tasks”).

²⁵⁴ See *supra* notes 241–43 and accompanying text.

²⁵⁵ See *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP*, 540 U.S. 398, 407–08 (2004); see also R. Hewitt Pate, *Refusals to Deal and Essential Facilities*, Testimony Submitted to DOJ/FTC Hearings on Single Firm Conduct, Jul. 18, 2006, *available at* http://www.justice.gov/atr/public/hearings/single_firm/docs/218649.htm (asserting that “the fact that the defendant has a highly valued facility is a reason to *reject* sharing, not to *require* it,” because compulsory sharing will reduce incentives to invest).

antitrust law, since it may lessen the incentive for the monopolist, the rival, or both to invest in those economically beneficial facilities.²⁵⁶

¶101 The theory underlying this argument is that compelling a monopolist to share its advantage with a rival would prevent it from fully appropriating the rewards of its investment, leading the monopolist to reduce its investment, and resulting in less innovation.²⁵⁷ The rival, assured of access to the source of the monopolist’s advantage, would be less motivated to find a creative alternative to it.²⁵⁸ Additionally, the knowledge that they may not be able to reap the full rewards of their investment might adversely affect investors’ willingness to invest and innovate in the future.²⁵⁹

¶102 These incentive concerns, though widely accepted, seem overstated. It is difficult to know the actual long-term economic effect of placing some limitations on a monopolist’s reward through the imposition of a duty to deal in limited circumstances.²⁶⁰ While reducing returns on investment in innovation through compulsory sharing may reduce future investments at the margins, economic analysis cannot tell us how much less investment and whether it would actually decrease useful innovation. Moreover, mandatory sharing may unleash innovation and competition from *rivals* in the downstream market, which ought to be taken into account in the calculus of the total effects of compulsory access on innovation. Economic analysis, no matter how rigorous, is probably inadequate to make these assessments.²⁶¹ Therefore, I am somewhat skeptical of incentive effects as a *macro* policy rationale against compulsory access.

B. *The Risk of Freezing Search Evolution and Innovation and Distorting Competition*

¶103 In the specific instance of search engines, however, imposing search “neutrality” may actually impede their organic growth, rather than merely reduce incentives to innovate in an abstract sense. In the search context, “sharing access” probably means that a search engine would have to find a neutral way to determine whose content—its own or a competitor’s—should be provided or ranked first on the results page. However, if a search engine has to make that determination before returning a map, for example, in search results in response to a query suggesting that the user might be interested in one, probably *no* map will be included. Moreover, no universal search results would likely be

²⁵⁶ *Trinko*, 540 U.S. at 407–08.

²⁵⁷ See Howard A. Shelanski, *Unilateral Refusals to Deal In Intellectual and Other Property*, 76 ANTITRUST L.J. 369, 380 (2009) (“In discussions of why refusals to deal should be legal, courts and commentators usually emphasize the potential deterrent effect of mandatory dealing on the investment incentives of the would-be defendant and of all others who would see imposition of liability as a signal of what might await them should their business succeed too well.”).

²⁵⁸ See *Alaska Airlines, Inc. v. United Airlines, Inc.*, 948 F.2d 536, 549 (9th Cir. 1991) (“Every time the monopolist asserts its market dominance” by refusing to grant access to a resource to its competitor, that competitor “has more incentive to find an alternative supplier, which in turn gives alternate suppliers more reason to think that they can compete with the monopolist.”).

²⁵⁹ Shelanski, *supra* note 257.

²⁶⁰ *Id.* at 381–82 (explaining that there may be cases where mandatory dealing would not interfere with investment incentives and where imposing liability for unilateral refusal to deal would not be economically harmful).

²⁶¹ See *id.* at 394 (“Because the path of innovation is likely much harder to predict than short-term changes in price and output levels, it will be impossible in most cases definitively to calculate the comparative static and dynamic welfare effects of economic conduct.”).

offered, effectively freezing the natural growth and the contours of a general search engine.²⁶² It is difficult to see how that result would benefit users.

¶104 In the early days of Google, search and content were clearly distinct, and the role of a general search engine was to simply apply its algorithm to millions of websites to generate a list of results deemed most responsive to the search query: the so-called ten blue links. But it makes sense for general search engines to apply and extend their expertise into specialized search. Once they do, it makes sense for them to integrate those specialized results or content into the general search results, especially when that is what users apparently want.²⁶³ Not allowing general search engines to make these strategic choices would effectively lock them in a dated vision of search and freeze the search engine evolution.²⁶⁴ While this would benefit Google's *competitors* in vertical markets, it would almost certainly be a negative development for users.

¶105 Moreover, limiting search engines to their original contours would distort competition. In a world where the various portals of online information are morphing and redefining themselves,²⁶⁵ no one—probably not even Google and the other significant players—knows how this industry will evolve and what it will look like in a few years. At this time, there is fierce competition among Google, Facebook, Apple, and Amazon.²⁶⁶ Preventing general search engines from organically transforming themselves, as other online information sectors are doing, would artificially interfere with the natural process of competition that is presently occurring.

¶106 Some might argue that application of essential facilities or the duty to deal to impose search “neutrality” would not, in fact, obstruct the search engine evolution because these principles can only possibly be applied against Google, the dominant general search provider.²⁶⁷ The other major search engines, notably Bing and Yahoo!, do not have sufficient share of the general search traffic to expose them to section 2 liability, regardless of how narrowly the market may be defined.²⁶⁸ Thus, they would remain free to design their search services as they see fit, including embedding their own content into the search results. In other words, only Google, by virtue of its dominance among

²⁶² Crane, *supra* note 3, at 5–6 (giving examples of universal search results and arguing that disallowing them would freeze the evolution of the search engine).

²⁶³ See, e.g., Shashi Seth, *A New Era of Search is About the Answers, Not Just the Links*, TECHCRUNCH (May 7, 2009), <http://techcrunch.com/2011/05/07/search-answers-not-just-links/> (quoting a Yahoo! executive who observed that users want to be able to get the answers they need without having “to interact with a page of traditional blue links”); Singel, *supra* note 236 (“[T]he whole industry is moving away from what it now dismisses as ‘10 blue links’—with the goal of providing answers to user queries instead of straight search results.”).

²⁶⁴ Crane, *supra* note 3, at 6 (“Unless the search engine is to remain stuck in the ten blue links paradigm, search engine companies must have the freedom to make strategic choices about the design of their services, including the decision to embed proprietary functions traditionally performed by websites in the engine’s search properties.”).

²⁶⁵ See Manjoo, *supra* note 249 (describing how the four major American companies that have come to define the information world—Amazon, Apple, Facebook, and Google—are increasingly moving beyond their borders and encroaching into one another’s space).

²⁶⁶ See *id.* (detailing some of the initiatives of each of the four companies and how these initiatives compete against those of the other three firms).

²⁶⁷ The first element of the offense of monopolization under section 2 of the Sherman Act requires proof of possession of monopoly power in the relevant market. *United States v. Grinnell Corp.*, 384 U.S. 563, 570–71 (1966).

²⁶⁸ Bing and Yahoo! handle approximately 15 percent and 14 percent, respectively, of the general search traffic in the United States. See Whittaker, *supra* note 93 (citing comScore data).

general search engines, would be subject to a special obligation to “evolve” in a neutral manner even if the essential facilities doctrine or the general duty to deal were to apply in the search context.

¶107 Such a “solution,” however, would present its own set of problems. It would lock *only* Google into place in the development of search engines while allowing Microsoft’s Bing, Yahoo!, and other rivals to improve and adapt to the changing competitive environment. While dominant firms are sometimes held to a different antitrust standard than their smaller rivals,²⁶⁹ antitrust law has long recognized that even monopolists “should be free to compete like everyone else.”²⁷⁰ Indeed, “[a] monopolist, no less than any other competitor, is permitted and . . . encouraged to compete aggressively on the merits.”²⁷¹ In a rapidly changing Internet world where dominance can evaporate in an instant,²⁷² a selective handicapping of the firm with current dominance in this manner would be troubling. Preventing Google from innovating and adding features similar to those provided by other major general search engines, which users apparently want, seems to be poor antitrust policy.

¶108 That a search engine should be allowed to favor its own content does not mean that *no* conduct relating to search rankings could or should be condemned under antitrust law. A distinction should be drawn between a simple preference for one’s own products and services, on the one hand, and unjustified affirmative conduct to block the competitive process, on the other. The former merely reflects efforts by an integrated firm to derive the competitive benefits that flow from being in different productive activities. It is not, in and of itself, an unlawful exercise of monopoly power²⁷³ that should be prohibited.

¶109 The latter is more comparable to *Lorain Journal*, discussed above,²⁷⁴ and to the well-known *United States v. Microsoft Corp.* case.²⁷⁵ Microsoft had affirmatively and aggressively prohibited computer makers from installing a browser (Netscape Navigator) that competed against Microsoft Explorer, and took steps to block the competing browser from being distributed through Internet service providers and independent software vendors.²⁷⁶ In the case of Java, Microsoft reconfigured the Windows version of the program to create incompatibility and deceived Java developers about it, causing them to create programs that could only run on the Windows version of Java.²⁷⁷ Those were

²⁶⁹ For example, unilateral acts by a firm without monopoly power can never constitute an antitrust violation whereas a similar act by a monopolist that has the effect of unreasonably excluding competition could give rise to liability under section 2 of the Sherman Act. See 15 U.S.C. § 2 (2006).

²⁷⁰ *Olympia Equip. Leasing Co. v. W. Union Tel. Co.*, 797 F.2d 370 (7th Cir. 1986); see also *Verizon Commc’ns Inc. v. Law Offices of Curtis V. Trinko, LLP.*, 540 U.S. 398, 407–08 (2004) (cautioning against lessening a monopolist’s incentive to innovate by compelling them to share their competitive advantage with rivals).

²⁷¹ *Foremost Pro Color, Inc. v. Eastman Kodak Co.*, 703 F.2d 534, 544 (9th Cir. 1983).

²⁷² See Manjoo, *supra* note 249 (“[T]he best tech companies stay at their peak for a decade tops,” though Amazon, Apple, Facebook, and Google may be different because they have shown “competitive excellence, strategic genius, and superb execution.”).

²⁷³ See, e.g., *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 276 (2d Cir. 1979) (stating that it is not unlawful for integrated firms to seek the efficiencies and other competitive benefits that accrue to them because of their involvement in several fields).

²⁷⁴ *Lorain Journal Co. v. United States*, 342 U.S. 143 (1951); see also *supra* notes 206–14 and accompanying text.

²⁷⁵ *United States v. Microsoft Corp.*, 253 F.3d 34 (D.C. Cir. 2001).

²⁷⁶ *Id.* at 60–61.

²⁷⁷ *Id.* at 74–77.

affirmative acts that sought to interfere with the competitive process, and the court correctly found them to be exclusionary.²⁷⁸

¶110 Giving priority to a search engine's own proprietary content in the presentation of search results is quite different because it does not affirmatively thwart a competitor's efforts to compete. It would be a different matter if Google, for example, made an algorithm change specifically to demote a website's ranking in retaliation for its buying advertisements on other search engines or Facebook, for soliciting advertisers for its website in competition with Google, for refusing to buy advertisements from Google, or simply for being a competitive threat. In that case, its conduct would go beyond the simple preference for one's own property and would more closely parallel the conduct at issue in *Lorain Journal* or *Microsoft*.

C. "Big is Bad"?

¶111 One final policy consideration is Google's absolute size. While modern antitrust law does not target "bigness," there has historically been some fear of an excessive concentration of economic power, which could also lead to undue political influence.²⁷⁹ It seems that some of the antitrust focus on Google may be driven in part by these unspoken sentiments. The concern may be that, even if Google is not acting to exclude competition and may not even have monopoly power in an antitrust sense, its size and skill alone could crush competitors if nothing is done to clip its wings.

¶112 If fear of Google's absolute size and its having a hand in too many businesses is the true impetus behind various proposals to regulate Google, then there should be more comprehensive and thoughtful consideration of the nuances and implications of pursuing such a course of action. Google is big, but so are Facebook, Apple and Amazon.²⁸⁰ If we are concerned with Google becoming an information monopolist in a generic non-antitrust sense of the word *monopolist*, we should probably be equally concerned with the other information monopolists and their straying outside of their original sectors.²⁸¹ However, if we limit the freedom of these dynamic firms to innovate across the information economy due to fears of excessive concentration of economic power, what would be the efficiency and innovation tradeoffs?

¶113 Given that these companies are currently among the most innovative and successful in our economy, those concerned about firm size should seriously consider whether the dangers that might be associated with bigness are sufficiently acute to compel courts and antitrust enforcers to interfere with their organic growth, absent affirmative exclusionary conduct. In markets characterized by constant technological upheaval, there is considerably less reason to fear absolute size since there is not much correlation between size and staying power. As an example, as recently as 2000, AOL was widely viewed as

²⁷⁸ *Id.* at 61–62, 65–66, 76.

²⁷⁹ See generally LOUIS D. BRANDEIS, *THE CURSE OF BIGNESS* (1934); Robert Pitofsky, *The Political Content of Antitrust*, 127 U. PA. L. REV. 1051, 1053–54 (1979).

²⁸⁰ See Manjoo, *supra* note 249 (discussing the battle among Apple, Facebook, Google, and Amazon for the future of the innovation economy); see also *Research and Markets: Gang of Four (and Possibly Five) Apple, Google, Facebook, Amazon—and PayPal*, BUSINESS WIRE, Mar. 23, 2012, <http://www.businesswire.com/news/home/20120323005260/en/Research-Markets-Gang-Possibly-Apple-Google-Facebook>.

²⁸¹ See Manjoo, *supra* note 249 (describing how Amazon, Apple, Facebook, and Google are all expanding beyond their boundaries and encroaching into one another's space).

an information giant with an unassailable position. The AOL and Time Warner merger in 2000 provoked dire predictions of the rise of “new totalitarianisms” and corporate “Big Brother.”²⁸² Only a decade later, AOL is almost a non-factor in the online information world. Predictions about AOL’s possible monopolization of instant messaging and so forth expressed then seem quaint today.²⁸³

¶114 Other examples of established information titans being displaced by small start-ups with new visions and new technologies abound in the information world. Facebook, which started only in the mid-2000s (and whose founder is still in his twenties), quickly supplanted the then-social media goliath, MySpace,²⁸⁴ and is now widely viewed as one of Google’s most formidable competitors.²⁸⁵ Google itself started little more than a decade ago, at a time when Yahoo! was the dominant search company.²⁸⁶ It overtook Yahoo! in 2004 in the number of active U.S. users,²⁸⁷ and almost completely changed the way users interact with the Internet.

¶115 Whatever the merits of the argument that “big is bad” in other contexts (such as in banking), creating special limiting rules for any of the so-called information monopolists seems unwarranted when the durability of power does not appear to be strongly correlated with size. When competition for user attention online is so intense, concerns over possible exploitation of the public by Google or any information “monopolist” for that matter seem overstated.

VIII. CONCLUSION

¶116 Even in an earlier era, when U.S. antitrust enforcement was much more aggressive than it is today, it was understood that it is not a violation of antitrust law for “any integrated firm, regardless of its market share,” simply to “seek the competitive advantages of its broad-based activity—more efficient production, greater ability to

²⁸² Norman Soloman, *AOL Time Warner: Calling the Faithful to Their Knees*, FAIR.ORG (Jan. 2000), <http://www.fair.org/media-beat/000113/html>; Robert Scheer, *Confessions of an E-Columnist*, ONLINE JOURNALISM REVIEW (Jan. 14, 2000), <http://www.ojr.org/ojr/workplace/1017966109.php>.

²⁸³ See generally Adam Thierer, *A Brief History of Media Merger Hysteria: From AOL-Time Warner to Comcast-NBC*, PROGRESS ON POINT, Dec. 2, 2009, available at <http://www.pff.org/issues-pubs/pops/2009/pop16.25-comcast-NBC-merger-madness.pdf>.

²⁸⁴ As late as in 2007, MySpace was considered close to a monopoly in the social network market. See Victor Keegan, *Will MySpace Ever Lose Its Monopoly?*, THE GUARDIAN, Feb. 7, 2007, <http://www.guardian.co.uk/technology/2007/feb/08/business.comment>. MySpace soon lost its lead to Facebook; Rupert Murdoch, who had purchased MySpace for \$580 million in 2005, subsequently sold it for only \$35 million in June 2011. See Brian Stelter, *News Corporation Sells MySpace for \$35 Million*, N.Y. TIMES MEDIA DECODER BLOG (June 29, 2011, 2:31 PM), <http://mediadecoder.blogs.nytimes.com/2011/06/29/news-corp-sells-myspace-to-specific-media-for-35-million>.

²⁸⁵ See Nick Wingfield, *Facebook (and Microsoft) vs. Google*, N.Y. TIMES TECHNOLOGY BLOG: BITS (May 17, 2012, 12:00 PM), <http://bits.blogs.nytimes.com/2012/05/17/facebook-vs-google-and-microsoft> (“As Facebook inches toward an I.P.O., it’s Google’s turn to feel the sting of a younger competitor passing a key milestone that will fill its war chest and, if history repeats itself, lead to a new wave of battles over the Internet.”).

²⁸⁶ In 1998, Yahoo! was widely believed to have won the competition for search engine users. See Stross, *supra* note 140. That was the year that Google was incorporated. *Google Timeline*, GOOGLE <http://www.google.com/about/company/history> (last visited April 12, 2013).

²⁸⁷ See *Hearing on the Power of Google*, *supra* note 35, at 6–10 (testimony of Eric Schmidt, Executive Chairman, Google, Inc.).

develop complementary products, reduced transaction costs, and so forth.”²⁸⁸ In giving a prominent position to its own or its affiliates’ content and services in the unpaid results page, Google is effectively availing itself of the efficiencies derived from its engagement in several fields. That, as the Second Circuit stated in *Berkey Photo*, “cannot by [itself] be considered use[] of monopoly power.”²⁸⁹

¶117 In an effort to find an antitrust basis to prohibit this practice, some have invoked the essential facilities doctrine or the more general antitrust duty to deal. However, these two principles simply do not fit in the context of search results. Google’s absolute size and involvement in many segments of the information market tend to obscure the fact that it probably lacks monopoly power in an antitrust sense. It is doubtful that Google can foreclose competition in search, let alone in the dynamic and free-form information market in which it faces competitors such as Facebook, Apple, Amazon, and others. If the past is any guide, competitive challenge could also come from some as yet unknown tech visionary—a future Steve Jobs, Larry Page, Sergei Brin, or Mark Zuckerberg.

¶118 Probably no one, not even Google, can predict how long search engines as they currently exist will continue. In this environment, it would be particularly inappropriate to base antitrust liability on the notion that search engines are essential platforms for users seeking information and for firms reaching out to potential customers. Moreover, the conditions for the application of both antitrust principles in the search context are wanting in almost every respect.

¶119 Policy considerations also do not seem to support prohibiting search engines from favoring their own content. “Search neutrality” would likely impede the natural evolution of search engines and constrain innovation. While Google’s size may give one pause, size provides less protection from competition in the dynamic information market in which Google competes. Google is no less vulnerable to market forces than Yahoo!, which Google displaced as the dominant search engine, or than other previous business giants, such as IBM. Like these previous industry leaders, Google may one day lose its market position as a result of the normal workings of the marketplace if it is slow to appreciate changes in consumer preference or to recognize the importance of an emerging technology.

¶120 The core objective of antitrust law is to enhance consumer welfare by preventing artificial restraints on competition. Antitrust enforcers should be vigilant in ensuring that Google and other dominant firms do not affirmatively impede competition or interfere with the competitive process. At the same time, it would be a mistake to limit even a dominant firm’s freedom to improve its product—such as through universal search results in the case of Google—out of well-intentioned concerns about the impact of these developments on competitors.

²⁸⁸ *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 276 (2d Cir. 1979).

²⁸⁹ *Id.*

