

University of Michigan Law School

University of Michigan Law School Scholarship Repository

Law & Economics Working Papers

11-18-2011

Search Neutrality as an Antitrust Principle

Daniel A. Crane

University of Michigan Law School, danocrane@umich.edu

Follow this and additional works at: https://repository.law.umich.edu/law_econ_current



Part of the [Antitrust and Trade Regulation Commons](#)

Working Paper Citation

Crane, Daniel A., "Search Neutrality as an Antitrust Principle" (2011). *Law & Economics Working Papers*. 40.

https://repository.law.umich.edu/law_econ_current/art40

This Article is brought to you for free and open access by University of Michigan Law School Scholarship Repository. It has been accepted for inclusion in Law & Economics Working Papers by an authorized administrator of University of Michigan Law School Scholarship Repository. For more information, please contact mlaw.repository@umich.edu.

Search Neutrality as an Antitrust Principle

Daniel A. Crane*

Given the Internet's designation as "the Great Equalizer,"¹ it is unsurprising that non-discrimination has emerged as a central aspiration of web governance. But, of course, "bias," "discrimination," and "neutrality" are among the slipperiest of regulatory principles. One person's "bias" is another person's "prioritization."

Fresh on the heels of its initial success in advocating a net "neutrality principle,"² Google is in the rhetorically uncomfortable position of trying to stave off a corollary principle of "search neutrality." Search neutrality has not yet coalesced into a generally understood principle, but at its heart is some idea that Internet search engines ought not to prefer their own content on adjacent websites in search results but should instead employ "neutral" search algorithms that determine search result rankings based on some "objective" metric of relevance.

Count me a skeptic. Whatever the merits of the net neutrality argument, a general principle of search neutrality would pose a serious threat to the organic growth of Internet search. Although there may be a limited case for antitrust liability on a fact-specific basis for acts of "naked exclusion" against rival websites, the case for a more general neutrality principle is weak. Particularly as Internet search transitions from the "ten blue links" model of just a few years ago to a model where search increasingly engines take on the function of providing end information or interactive interfaces to website information, a neutrality principle becomes incoherent.

I. FROM TEN BLUE LINKS TO INTEGRATED INFORMATION PLATFORM

A. Ten Blue Links

Much of the discourse about search neutrality seems to be predicated on dated assumptions. This is forgivable, since Internet search is evolving at such a rapid pace that much information is stale shortly after it hits the ether. Still, as with any highly

* Professor of Law, University of Michigan. I am grateful to various individuals at both Google and Microsoft for discussing these issues with me. All views expressed are solely my own. Elizabeth Cuneo provided excellent research assistance.

¹ See, e.g., *The Great Equalizer*, Remarks by William E. Kennard, Chairman, Federal Communications Commission, June 5, 2000, available at <http://www.fcc.gov/Speeches/Kennard/2000/spwek014.html>.

² See Benjamin Edelman, *Bias in Search Results? Diagnosis and Response* (on file with author) (reporting that "Google's management and public policy staff have spoken in favor of network neutrality").

dynamic sector, the alacrity with which state of the art becomes state of the past is a reason to favor a mildly Schumpeterian suspicion that antitrust interventions may find it hard to keep pace with the market.

In any event, much of the conversation about a search neutrality principle seems to envision the world of search circa, say, 2005. In this world, the relevant Internet consisted of two different segments—websites and search engines.³ Websites were the Internet’s information wells, places users went to access content. Search engines were not ultimate information but only ways to access information, or intermediate information about ultimate information. In this way, search engines’ role was clear: generate a list of the “best and most useful websites” so that users could leave the search engine and get “to the right place as fast as possible.”⁴ With the aid of mathematical algorithms, search engines would respond to users’ queries by providing “ten blue links,” or ten uniform resource locators (or URLs) and a short (fair use doctrine protected) extract for each result. Each link was then rank-ordered according to the search terms users entered.⁵ This mechanical “intuition” determined the likelihood that pages would match what the user was seeking.⁶

In this paradigm, original sin entered the world with vertical integration. Once search engine companies began to integrate vertically by operating websites, they were tempted to manipulate the previously objective search algorithms to favor their own sites in their search results. Thus, in response to a query suggesting an interest in finding driving directions, Google might prioritize a link to Google Maps in its search results at the expense of MapQuest. Given a sufficient dominance in search, Google might then over time erode MapQuest’s market position and entrench Google Maps as the dominant driving direction site.⁷

³ See generally Rufus Pollack, *Is Google the Next Microsoft? Competition, Welfare and Regulation in Internet Search*, <http://ssrn.com/abstract=1265521>.

⁴ David Scheff, *Playboy Interview: Google Guys*, PLAYBOY, September 1, 2004 (reprinted in Google Inc., Aug. 18, 2004 Form 424B4 (filed Aug. 19, 2004), <http://www.secinfo.com/d14D5a.14cZu.htm#1stPage>).

⁵ See *The Power of Google: Serving Consumers or Threatening Competition?: Hearing Before the S. Subcomm. on Antitrust, Competition Policy and Consumer Rights*, 112th Cong. 2 (2011) (statement of Eric Schmidt, Executive Chairman, Google Inc.).

⁶ *Id.*

⁷ Indeed this is the argument advanced by Adam Raff, co-founder of Foundem, an internet technology firm that runs a vertical search website in the United Kingdom. According to Raff, Google’s “preferential treatment of Google Maps helped it unseat MapQuest from its position as America’s leading mapping service virtually overnight.” 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>. Further, the company’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” that, when deployed, “toppled” incumbents, “suppressed” new entrants, and “imperiled” innovation. *Id.*

In a moment, I will suggest that the “ten blue links” vision of Internet search is woefully inadequate as an assumption for imposing a search neutrality principle. But, first, let us consider the “ten blue links” paradigm on its own terms.

From an antitrust perspective, the ten blue links account seems to entail a standard problem of monopoly leverage following vertical integration. Think AT&T in 1975. Queue all of the usual arguments.⁸ Monopoly leverage makes no sense because the search engine monopolist would merely cannibalize its own advertising revenues in search by raising the price in the adjacent website. Response: the one monopoly profit argument only holds if the complementary goods are consumed in fixed proportions, which search services and sites are not. Further, advertisers, not consumers, pay directly for most search services and website functions, and advertisers do not experience websites and search engines as complementary, but rather substitute, outlets. Counter-response: Vertical integration eliminates double marginalization and hence leads to lower prices. And so forth.

Assuming for the sake of the argument that leveraging from a dominant search engine to an adjacent website is, in theory, a rational business move if the dominant firm can pull it off, one may ask whether this vision has any correlation with reality. The principle sticking point with the story is the assumption that just because a search engine is dominant vis-à-vis other search engines it has the power to promote or demote adjacent websites to its advantage and in a way that seriously affected the overall competitiveness of the adjacent market. This would only be true if search engines were indispensable portals for accessing websites. They are not. Users link to websites from many origins—for example, bookmarks, links on other websites, or links forwarded in e-mails—other than search engines. Even dominant search engines account for a relatively small percentage of the traffic origins.

For example, when Google acquired the travel search software company ITA in 2011, rivals complained that Google would use its dominance in search to steer consumers to a Google travel site instead of rival sites like Expedia.com, traveLOCITY, or Priceline.com. But even if Google did that, it is hard to imagine that this could be fatal to rival travel search sites. According to compete.com data, the volume of traffic into the three big travel search sites that originated with a Google search is small—12% for Expedia and 10% for traveLOCITY and priceline.⁹ The percentages of Google-originated traffic coming into Yahoo! travel and Bing travel (Microsoft’s service) were even smaller—7% and 4% respectively.

One has to be careful with search origin data of this sort. It might be that Google accounts for the immediate origin in only a small percentage of cases, but accounts for the initial search leading to a particular site in a much larger percentage of cases. For

⁸ See generally Geoffrey A. Manne & Joshua D. Wright, *If Search Neutrality is the Answer, What’s the Question?* (Working paper 2011).

⁹ PowerPoint Presentation, ITA Intro for Third Parties, provided by Google, on file with author.

example, users may begin with a Google search, link to an intermediate site, and then link to the ultimate site. If there is a high amount of path dependence in search—meaning that the search engine a user begins with has a large influence on where they end up, regardless of the number of intermediate steps—then the exercise of market power at the first search stage could have effects far downstream.

Still, it is unlikely that search engines are anything approaching essential facilities for most websites. Even studies that attribute a large share of search origin to Google generally have Google accounting for significantly less than 50% of website's traffic.¹⁰ Newer sites may be more reliant on search origins than more established sites,¹¹ but even newer sites have options—such as advertising in other media or purchasing sponsored links—that do not require a high search rank to obtain traffic.

Thus, a major flaw in the monopoly leverage story that even if a particular search engine were dominant as a search vehicle, search engines are not necessarily dominant when it comes to reaching websites. In most cases, a critical mass of users know where they want to go without conducting a search. Manipulation of a search engine to favor particular sites might induce more traffic to come into the site, but it seems unlikely that it could foreclose customers from reaching competitive sites.

B. Integrated Information Portal

1. Changing Patterns of Internet Search

The ten blue links vision of Internet search is outdated. Increasingly, search engines are not merely providing intermediate information but ultimate information, the answers themselves. Or, if the search engine remains a step removed from the ultimate information, it is integrated with the ultimate information.¹² Increasingly, it is not

¹⁰ See Omar Khan, *How Much of an Average Website's Traffic Comes from Google?*, www.islco.com/blog/how-much-average-websites-traffic-comes-google. (reporting that search drove 61% of all visits to 21 sampled websites and that Google organic search drove an average of 41% of traffic to the sampled websites) (visited May 20, 2011); <http://blumenthals.com/blog/2011/01/11/how-much-traffic-do-local-sites-get-from-google/> (reporting that in 2009, 36.9 percent of the total traffic from the studied sites came from Google search).

¹¹ <http://www.roi.com.au/beginners-search-engine-marketing/what-of-website-traffic-should-be-generated-from-search-engines/> (reporting that between 70% and 80% of all web traffic to newly established websites from search engines).

¹² An October 2010 study published by comScore, Inc. indicated that one third of all searches performed on the Big 3 search engines contained a non-web source like news, videos, or images within their results. In particular, Bing and Google included these “blended results” 54% and 33% of the time, respectively. ELI GOODMAN & ELI FELDBLUM, *BLENDED SEARCH AND THE NEW RULES OF ENGAGEMENT*, 6-8 (comScore 2010), http://www.comscore.com/Press_Events/Presentations_Whitepapers/2010/Blended_Search_and_the_New_Rules_of_Engagement.

accurate to speak about search engines and websites as distinct spaces or the relationship between search and content as vertical. The lines are blurring at ether speed.

Driving this progression are users' own preferences. As the head of Yahoo Labs and Yahoo's search strategy explained in 2009, "People don't really want to search. Their objective is to quickly uncover the information they are looking for, not to scroll through a list of links to Web pages."¹³ Consequently, search engines are no longer just focusing on document retrieval. Instead, they are working towards direct question answering.¹⁴ By figuring out the "intent" of the person conducting the search and then displaying all the related content that he might want to see, search engines are shifting away from the paradigmatic ten blue links towards a world of richer results.¹⁵

Consider a few examples—examples which may only hold as of the precise date of this writing, May 1, 2011. Go to Google and type "How tall is the Empire State Building?" In the search results, before the display of the now proverbial ten blue links, you will find the following nugget: "Best guess for Empire State Building Height is 1,250 Feet." This is ultimate information—probably enough to satisfy most high school students doing research papers—not a blue link. To be sure, if you want to dig further, the "show sources" button will let you ask for sources and blue links will appear. But for many users, the search engine itself is the end of the road—the answer.

Now go to Bing and type "new york to rome." After an initial sponsored link appears a conventional flight universal search box of the type Internet users are accustomed to seeing inside the walled garden of an airline website or a traditional travel site: From and to, leave and return with calendar functionality. A small side panel lists price estimates for various departure dates. We are still within the search engine but clearly beyond the world of blue links. Conventional website functionality appears comingled with traditional search functionality. Type in dates and search again. Up come a list of results—not links—but flight schedules and prices. Now—as of Bing on May 1, 2011—in order to complete the transaction you will have to select a vendor (say Orbitz or American Airlines) and here Bing finally does act as a traditional search engine and send you on your way to a website that will take ownership over the last leg of the transaction. Google's acquisition of ITA may push this sort of travel search even further into seamless (to the user) integration where the line between search engine and website may vanish altogether.

A final experiment. Go to Yahoo! Before you even type in your search query, observe that you are treated to news headlines—ultimate information—on the front page. Now type "Venice" in the search query bar. The first search results page is cluttered with

¹³ James Niccolai, *Yahoo Vows Death to the '10 Blue Links'*, PCWORLD (May 19, 2009, 7:40 pm), http://www.pcworld.com/businesscenter/article/165214/yahoo_vows_death_to_the_10_blue_links.html.

¹⁴ See Oren Etzioni, *Search needs a shake-up*, 476 NATURE, 25, 26 (2011).

¹⁵ See Niccolai, *supra* note 13.

information. Local time, current weather and forecast, maps, pictures, and, of course, sponsored and unsponsored links. From the search results screen you might find all of the information you needed to know about Venice and never click on a blue link.

This is the evolving world of search. As a senior vice president of Yahoo! explained in 2011, it is time “to re-imagine search. The new landscape for search will likely focus on getting the answers the user needs without requiring the user to interact with a page of traditional blue links. In fact, there may be cases where there are no blue links on a search results page at all.”¹⁶

What does it mean to discriminate in favor of one’s own services in world where search and services have merged, where the search engine is not merely linking to external information but serving up information interfaces and data? If Google decides to provide a map on the search results front page, must it select a “neutral” way of determining whether the map will be drawn from Google Maps or from AOL’s Mapquest service? If Microsoft embeds ticket purchasing functionality in Bing, must it make interfaces to its competitor’s services available on an equal basis? If Yahoo answers a stock price quotation query by listing current prices and suggesting a means of purchasing the stock, must it list the most popular brokerage sites in rank order rather than offering to undertake the transaction itself or through one of its partners?

Affirmative answers to these hypothetical questions would freeze the evolution of the search engine. 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. Such freedom is inconsistent with an expansive principle of search neutrality, but it is indispensable to Internet search innovation.

The evolution of Internet search is leading to the redefinition of many markets and dislocations of many media and technology companies. As Ken Auletta has observed, the evolution of search makes Google a “frenemy to most media companies.”¹⁷ Be that as it may, the search engine’s evolution evidences Schumpeter’s “gales of creative destruction”¹⁸ which are indispensable to large-scale progress in a market economy.

¹⁶ Shashi Seth, *A New World of Search is About the Answers, Not Just the Links*, http://techcrunch.com/2011/05/07/search-answers-not-just-links/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+Techcrunch+%28TechCrunch%29 (May 7, 2011).

¹⁷ KEN AULETTA, *GOOGLED: THE END OF THE WORLD AS WE KNOW IT* 254 (2009).

¹⁸

2. Special Rules for Google?

Despite the fact that all of Internet search is rapidly evolving toward a radical redefinition of the search engine and its role in disseminating information, some believe that Google—and, of course, the search neutrality discourse is directed against Google—should have a special obligation to evolve in a nondiscriminatory manner. The arguments for a Google-specific obligation are two.

First, Google might be subject to special obligations of neutrality and transparency because it has long marketed its search engine as a neutral algorithmic platform.¹⁹ Empirical work shows that users place a large degree of trust in Google's perceived neutrality in ranking relevance to queries, often substituting Google's algorithmic judgment of relevance for their own evaluation of search result abstracts.²⁰ This perhaps differentiates Google from rival search engines, which have not proclaimed their objectivity or created neutrality expectations among their users. Microsoft, for example, characterizes Bing not as a search engine but as a "decision engine" which incorporates the user's subjective preferences to render a customized search result. From the beginning, Bing's functionality has been much closer to that of a web portal than a "ten blue links" type search engine.

This argument seems a rather thin reed. It surely cannot be the case that Google is prohibited to keep pace with the evolution of Internet search just because its customers once associated it with the ten blue links model. Unless Google is practicing deception by making knowingly false neutrality claims that induce a substantial number of customers to misunderstand the nature of its offerings in a way that materially distorts competition, it is hard to see why past expectations should in any way dictate future obligations.

¹⁹ As Senator Herb Kohl recently remarked, "[t]he basic premise of Google at its founding was that it would build an unbiased search engine—that consumers would see the most relevant search result first, and that the search results would not be influenced by the web page's commercial relationship with Google." *The Power of Google: Serving Consumers or Threatening Competition?: Hearing Before the S. Subcomm. on Antitrust, Competition Policy and Consumer Rights, 112th Cong. 1* (2011) (statement of Hon. Herb Kohl, Chairman, S. Subcomm. on Antitrust, Competition Policy, and Consumer Rights). Indeed, for its 2004 IPO Google made clear: "We will do our best to provide the most relevant and useful search results possible, independent of financial incentives. Our search results will be objective and we will not accept payment for inclusion or ranking in them." Google Inc., Aug. 18, 2004 Form 424B4 (filed Aug. 19, 2004), <http://www.secinfo.com/d14D5a.14cZu.htm#1stPage>.

²⁰ Bing Pan, et al, *In Google We Trust: Users' Decisions on Rank, Position, and Relevance*, 12 J. Computer Mediated Communication 801 (2007).

This brings us to the second claim—that Google, and Google alone, should have special neutrality obligations because it is so dominant in search.²¹ Assuming that Google is sufficiently dominant to count as a monopolist under U.S. law or dominant undertaking under EU law, this is still not a compelling reason to lock Google into a neutrality obligation. Dominant firms may sometimes have special antitrust obligations not shared by weaker rivals, but those obligations should never stand in the way of the firm’s ability to innovate. Application of a broad neutrality principle—one that prohibited Google from favoring its own adjacent services in responding to customer queries—would severely handicap Google in the continuing evolution of Internet search.

II. IS ANTITRUST MADE FOR THIS PROBLEM?

A. Against a General Principle of Search Neutrality

The foregoing discussion suggests that there should be no general principle of search neutrality. At most, the available theory should be limited to a highly fact-specific claim that a dominant search engine deliberately overrode its ordinary algorithmic protocols to disadvantage a competitive service (or a non-competitive service when instigated by a rival of that service) without any reasonably believed efficiency justification in a way that created, preserved, or enlarged market power. Let us consider each of the relevant elements separately.

First, the plaintiff should bear the burden of proving that the demotion was deliberate—that the defendant specifically targeted the plaintiff’s service for a disadvantage. Accidental slights to a competitor’s search results ranking—which probably occur periodically given the sheer volume of programming parameters—should not give rise to antitrust liability.

Second, the plaintiff should be required to show that the defendant overrode its ordinary algorithmic protocols. In the *Foundem* case, for example, Google allegedly applied a penalty filter that demoted Foundem’s “natural” ranking position.²² Such “whitelisting” would meet the second element. What this requirement would exclude, however, is a claim that the search engine algorithm was designed to advantage the search engine’s adjacent services or disadvantage particular kinds of competitors. Scrutiny of such product design decisions is not a proper antitrust function.

²¹ This argument is premised on the notions that “search is the critical gateway by which users navigate the web” and that search traffic drives development on the Internet. As such, Google’s dominance gives the company not only “unprecedented power to steer users and to stifle competition,” but to raise prices and reduce innovation as well. *The Power of Google: Serving Consumers or Threatening Competition?: Hearing Before the S. Subcomm. on Antitrust, Competition Policy and Consumer Rights, 112th Cong.* 3-4 (2011) (statement of Thomas O. Barnett, Partner, Covington & Burling LLP).

²² <http://www.searchneutrality.org/foundem-google-story>

Third, antitrust liability should only attach to actions directed against competitors of the search engine or actions instigated by rivals of the disadvantaged service. This requirement would essentially track the logic of Robinson-Patman Act jurisprudence limiting scrutiny to competitive effects felt at the primary or secondary levels. It would exclude efforts to create an antitrust principle of general fairness to all vertically related companies.

Fourth, no liability would attach if the search engine company reasonably believed that its decision was necessary to advance the efficiency of its service. Two limitations on liability are embedded in this formulation of the test. First, a good faith belief that a particular business decision was necessary to advance the functioning of the service should suffice to eliminate antitrust liability. Consistent with business judgment rule principles, courts or agencies should defer to decisions the search engine firm could reasonably have reached under the circumstances, whether or not the court or agency would reach the same decision on the litigation or investigatory record. Second, courts and agencies should not seek to balance the procompetitive effects of the decision against its anticompetitive consequences, as some courts and commentators have suggested is a necessary step in monopolization analysis. Such balancing is plagued by difficulties in any context, but is particularly inappropriate in the highly dynamic world of Internet search where the value of any particular product design decision often cannot be realized until it nears obsolescence.

Finally, as in any antitrust case, liability should only attach to acts that have anticompetitive effects—those acts that create, enhance, or preserve market power. Acts of “pure malice” that do not result in distortions of the competitive market belong to the world of tort, not of antitrust.

What this proposed test would leave as potential grounds for search engine liability is acts of intentional naked exclusion—selective demotion of rivals’ services without any plausible efficiency explanation. This would be a high bar for any plaintiff to meet, but it leaves open the door to liability in the most egregious cases of exclusion.

B. The Perils of Process

As with most issues of exclusionary conduct in highly dynamic industries, one of the chief obstacles to implementation of a search neutrality principle is administrative. Given that search engine companies make thousands of complex decisions about the ordering of search results, the management of a general search neutrality principle would require an army of bureaucrats or a technical committee dwarfing the one mandated by the Microsoft consent decree. The costs of such a program and the potential for abuses seem large compared to the potential benefits for competition.

Further, such a program—if conducted by the government—would raise serious free speech concerns. If we consider the query-and-response format of Internet search a conversation between a user and a service provider, then the search engine design would

seem to enjoy some degree of constitutional protection.²³ This is not to say that any imposition of antitrust liability would be ipso facto unconstitutional.²⁴ Rather, it is to acknowledge that, at a minimum, a pervasive governmental role in refereeing the ways in which answers to questions on the Internet are dispensed would lead to various entanglements that democracies prefer to avoid.

CONCLUSION

Internet search is evolving at breakneck speed. There is an argument that this is precisely the time when antitrust intervention to ensure a competitive playing field is most warranted—that once the dust settles and dominant players have locked in their positions due to network effects, scale economies, first mover advantages and the other usual entry barriers the game will be up. The counterargument is that high market velocity is reason for antitrust regulators and courts to take a seat on the sidelines—to wait out the gales of creative destruction and only enter the game once the market settles into more sedulous activity and a more predictable path is foreseeable.

Mandating a broad search neutrality principle would unwisely favor the first argument. It would lock dominant search engines into a dated model of Internet search and freeze their evolution, even while their rivals would have a free hand to innovate. Such a rule would certainly diminish Google's dominance—but precisely because it would prohibit Google from meeting customers' needs by offering a more seamless and integrated search and transaction experience. Antitrust law should never seek to destroy dominance by prohibiting dominant firms from innovating to keep up with their customers' changing demands.

While a broad search neutrality principle is neither feasible nor desirable, this does not mean that dominant search engines should never be liable for intentionally interfering with their rivals' hits in search results. Any such liability should be narrow, carefully tailored, and predictable. Search neutrality may thus have future, not as a general principle, but as the misfitting tag line on fact-specific findings of egregious abuses by dominant search engines.

²³ See *Search King, Inc. v. Google Technology, Inc.*, 2003 WL 21464568 (W.D. Okl. May 27, 2003) (holding that Google's PageRanks are subjective opinions protected by the First Amendment).

²⁴ See Oren Bracha & Frank Pasquale, *Federal Search Commission? Access, Fairness, and Accountability in the Law of Search*, 93 Cornell L. Rev. 1149 (2008).