I. INTRODUCTION

Search engines have become the crucial intermediary between Internet users and the onslaught of information that is available on-

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line.¹ Search engines function simultaneously as phone books, directory assistance, encyclopedia indexes, card catalogs, and librarians. The Internet has been dubbed the Library of Babel, and search engines cast as its omniscient librarian.² Today, navigating the Internet without a search engine is almost unimaginable.³

Given the centrality of search engines in making the digital world accessible and useful, it is not surprising that a variety of disputes have arisen concerning their operation. The law relating to these disputes has developed in a fragmented manner. Disputes have been adjudicated with reference to property law, contract law, trademark law, copyright law, patent law, consumer protection law, and other bodies of law.⁴ Not surprisingly, much of the scholarly commentary reflects this doctrinal development: commentators have suggested a copyright solution for copyright problems,⁵ a trademark fix for trademark problems,⁶ and so on.⁷

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³ See Jennifer A. Chandler, A Right to Reach an Audience: An Approach to Intermediary Bias on the Internet, 35 HOFSTRA L. REV. 1095, 1097 (2007) (“Selection intermediaries are necessary because, under conditions of overwhelmingly abundant information of varying quality, listeners must discriminate amongst speakers. We simply cannot pay attention to it all, and the task of finding or avoiding information increases in difficulty in proportion to the amount of information available.”).
⁵ See, e.g., Pasquale, supra note 1, at 142 (proposing “a way of adjusting copyright doctrine” in order “to empower the categorizers who can help us make sense of the ‘blooming, buzzing confusion’ of the information society”).
⁷ See, e.g., Michael A. Carrier & Greg Lastowka, Against Cyberproperty, 22 BERKELEY TECH. L.J. 1485, 1486 (2007) (arguing that property is not the proper analogy for online disputes); Frank Pasquale, Asterisk Revisited: Debating a Right of Reply on Search Results, 3 J. BUS. & TECH. L. 61, 62–63 (2008) [hereinafter Pasquale, Asterisk] (arguing in favor of “some minor, non-intrusive legal remedies for those who claim that they are harmed by search engine results”); Frank Pasquale, Rankings, Reductionism, and Responsibility, 54 CLEV. ST. L. REV. 115, 117 (2006) [hereinafter Pasquale, Rankings] (same); Sajjad Matin, Note, Clicks Ahoy! Navigating Online Advertising in a Sea of Fraudulent Clicks, 22
Search engine disputes, however, raise competing policy concerns that cut across doctrinal boundaries. Trade-offs must be made between privacy and access, transparency and efficiency, and being found and remaining hidden. A coherent and comprehensive approach to resolving these disputes and to search engine regulation in general requires the recognition of these trade-offs rather than the application of any particular doctrinal framework. It requires an understanding that the issues are interrelated and overlapping. Courts, Congress, the states, and administrative agencies have neither recognized nor understood the interrelatedness or policy implications of the various issues raised in search engine disputes. Instead, they have reacted to individual problems as they have arisen, and they have failed to acknowledge the relationship between the various legal claims.

A number of scholars, on the other hand, have begun a lively debate on these issues and on the general question of how search engines ought to be regulated. That debate has become polarized, with some scholars offering arguments for agency regulation and others urging a free market approach. The former have suggested that centralized regulation of search engines is both appropriate and necessary, while the latter have argued that legal intervention is unnecessary and that the market can best regulate search. While many commentators have suggested a variety of legal reforms, none has offered an alternative that breaks out of the bipolar debate.


8. James Grimmelmann, The Structure of Search Engine Law, 93 IOWA L. REV. 1, 4–5 (2007) (explaining that concerns relating to search engine disputes “must be balanced with one another because each relates to the same few information flows” and arguing that “taking a broad view of search yields otherwise-unavailable insights into pressing controversies . . . . [F]ailing to consider the larger forces at work in search is antithetical to sensible policymaking”).

9. See generally id. (discussing the various claims and theories raised in search engine disputes and drawing the connections between them that scholars and courts have not drawn).


11. Most of this literature does not, however, discuss the larger structural and institutional issues concerning search engine regulation. See sources cited supra notes 7–10.
This Article traces the contours of this debate, discusses why both positions at the extremes are unsatisfactory, and sketches the outline of a possible alternative. Agency regulation is unwarranted, at least at this point, and probably unwise: the traditional justifications for agency regulation simply are not present, and such regulation, in addition to being quite unlikely, will raise as many problems as it solves. The free market approach is theoretically appealing but impractical: we are already regulating search engines through a patchwork of federal and state common law, statutes, and administrative oversight. This patchwork approach results in no coherent policymaking. If we are in fact regulating search — and we are — we should do it thoughtfully.

Thoughtful regulation can occur only if search engine disputes are viewed as raising an interrelated set of problems that flow from the position of search engines at the nexus of some of the most significant online activity. This Article suggests that, although agency regulation is inappropriate, a more coherent and centralized approach is still needed. One way to achieve this is for the federal courts to take on, or be given, the task of regulating search engines. In doing so, they should apply common law in the interstices of the already-applicable federal statutes. At the same time, state courts and legislatures should not intervene in search engine disputes. This common law approach, however achieved, would help centralize the consideration of search engine disputes, allowing courts to see the common nucleus of many search engine claims. This would permit, and perhaps even encourage, consideration of the many policy trade-offs involved. A common law approach might also serve as a stepping stone to an eventual administrative structure, but one informed by more experience and technological development.

In proposing this approach, this Article looks to some of the early scholarship on the regulation of cyberspace and technology generally. That literature grappled with many of the issues raised by today’s search engine disputes. Taking the rapidly changing and unpredictable nature of technology as a starting point, a number of commentators suggested the common law as the best regulatory approach to cyberspace and other technologies. Although the calls for a federal common law approach were not heeded, that literature is instructive here. A common law approach may allow for effective and comprehensive resolution of search engine disputes, and it provides a feasible alternative to both the weak and uncoordinated regulation that currently ex-


13. This Article refers to this approach as a common law approach because it proposes no new substantive legislation and because any new rules would develop through the common law process rather than through a statutory structure or through an administrative rulemaking process. The move to an exclusive federal forum might be accomplished by litigants’ forum selection, a jurisdiction-conferring statute, or preemption by Congress.
ists and the unlikely and intrusive agency regulation that has been proposed.

This Article proceeds as follows: Part II briefly provides some background on search engines’ crucial role as intermediaries and the resulting variety of disputes. Part III discusses the legal literature on search engine regulation and points to some concerns about the proposals that have been put forth so far. Finally, Part IV proposes an alternative approach. It explains why a federal forum for the resolution of search engine disputes is more likely to encourage a comprehensive assessment of both search engine disputes and the accompanying policy issues while avoiding the drawbacks of more centralized regulation. Part V concludes.

II. SEARCH ENGINES AND SEARCH ENGINE DISPUTES

Search engines are ubiquitous. Because Google is the largest and best-known search engine, this Article uses Google throughout as an example. However, while Google is the iconic search engine, other search engines exist and a number of start-ups have recently entered the market. Search engines serve one primary purpose: to mediate between users and digital information. The amount of material on the Web presents an enormous opportunity, but its potential can only be realized if the material can be found, categorized, and used. Navigating the Internet without a search engine is nearly unimaginable.

Because of their centrality, search engines present opportunities and risks across nearly all segments of the economy and culture. Search engines sit at the nexus of a variety of information flows — and therefore a variety of disputes — between users, content providers, and advertisers. Search engines help users find information, but it is impossible for users to know what information is available and difficult for them to understand what criteria the search engine might be using to return results. Very often, users, content providers, and search engines themselves want more information and transparency, but openness and transparency can present fundamental privacy and

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15. See Chandler, supra note 3; Grimmelmann, supra note 2, at 30 (“Access to knowledge always depends on access to knowledge infrastructure.”); see also Pasquale, supra note 1, at 141 (discussing the externalities created by the existence of vast amounts of digital information).
manipulation concerns. Website owners and content providers might want search engines entering their sites to copy and index the content for later searching; at the same time, they might object to their sites’ placement in search results. Search engines themselves must have a viable business model; the current advertising model presents issues regarding, among other things, the use of trademarks in triggering ads and the ability of advertisers to affect search results. Search engines are at the center of the overlapping and sometimes conflicting interests that give rise to a unique set of disputes.

In the early days of the Web, search engines ranged from nonexistent to simplistic. Even with the advent of the original, rudimentary searching technology, many users continued to simply enter their guess as to a URL into their browser’s address bar. There was less information available to search, but that information was more difficult to find. As technology evolved and search engines became more sophisticated, users’ interactions with search engines and the information on the Web changed as well. These days, users may find websites by entering a URL if they are fairly certain of the address, but in many cases users use search engines to narrow down the possibilities. Users navigate through links, returning often to the search results page or formulating a new search query. The ways search engines operate and the ways that users interact with search engines are likely to continue to evolve rapidly. For example, Google has recently released Google Chrome, an application that combines browsing and search capabilities, and it is also developing “personalized search,” which allows users to modify their own search results for later use. The pace of technological change in this area will likely continue.

16. This was demonstrated powerfully in 2006 when AOL accidentally released a vast number of search queries, with no names attached, which it had collected for research purposes. Despite the efforts at maintaining anonymity, it was remarkably easy to determine the identities of the searchers. See Michael Barbaro & Tom Zeller, Jr., A Face Is Exposed for AOL Searcher No. 4417749, N.Y. TIMES, Aug. 9, 2006, at A1; see also Aaron J. Burstein, Amending the ECPA to Enable a Culture of Cybersecurity Research, 22 HARV. J.L. & TECH. 167, 205–06 (2008).

17. For an overview of the various kinds of search engine disputes that have arisen, see Gasser, supra note 4.

18. Lucas D. Introna & Hellen Nissenbaum, Shaping the Web: Why the Politics of Search Engines Matters, 16 INFO. SOC’y 169, 173 (2000) (citing a 1999 study stating that the Web contains approximately 800 million pages and concluding that “search engines only very partially meet the desperate need for an effective way of finding things.”). Google and Yahoo apparently do not publicize the number of pages or sites they index, but there is no doubt that the number of webpages is now substantially more than 800 million. See, e.g., WWW FAQs: How many websites are there?, http://www.boutell.com/newfaq/misc/sizeofweb.html (last visited May 15, 2009) (asserting that in 2005 Yahoo had indexed 19.2 billion web documents, 1.6 billion images, and over 50 million audio and video files).

19. See Goldman, Deregulating Relevancy, supra note 10, at 513–21 (describing the process users go through in formulating and conducting an Internet search).

20. See Google Chrome, http://www.google.com/chrome (last visited May 15, 2009); Posting of Cedric Dupont and Corin Anderson to Official Google Blog, Google SearchWi...
As Google’s technology illustrates, search engines have become quite sophisticated. Google currently operates by storing (“caching”) the vast majority of web content on its servers and creating an index for that content. Google updates the content and its index regularly, acquiring information by sending automated “spiders” or “crawlers” onto the Web that search, index, and often copy the content. When a user enters a search query into the Google search box, Google searches the cached content and its own index, rather than the Web itself, and returns ranked results based upon a proprietary algorithm. The ranked results contain links both to the stored content on Google’s servers and to the websites themselves.

A number of scholars have described both how search engines operate and how they have become a crucial intermediary between the user and digital information. That Google’s homepage, which contains virtually no content, is the most visited site in the United States indicates the extent to which people use search engines to access the online world. Advertisers were estimated to spend eleven billion dollars on advertising with search engines in 2008, reflecting the sheer economic power of the industry. Indeed, an entirely new industry, search engine optimization (“SEO”), has arisen to assist website owners in improving their rankings in search engine results, a fact that

23. See id. (“We use more than 200 signals, including our patented PageRank™ algorithm, to examine the entire link structure of the web and determine which pages are most important. We then conduct hypertext-matching analysis to determine which pages are relevant to the specific search being conducted. By combining overall importance and query-specific relevance, we’re able to put the most relevant and reliable results first.”).
24. See Gasser, supra note 4, at 203–08 (describing the development of search engine technology and providing a “brief (and casual) history of search engines”); Goldman, Deregulating Relevancy, supra note 10, at 513–21 (describing how users interact with search engines and stating that “search processes are complex and defy simplistic analysis,” but developing “a methodology that applies to many such searches”); id. at 532–51 (describing searching the Web and returning ranked results); Grimmelmünn, supra note 2, at 38 (describing the vastness of the information available online); Introna & Nissenbaum, supra note 18 (giving an overview of how search engines work and how they have come to wield so much power).
emphasizes search engines’ role as a gatekeeper and driver of the online economy.27

Because of their central role, search engines have become the focal point of a variety of legal disputes. In general, those disputes revolve around the way search engines: (1) gather and store website content, (2) display that content, and (3) make money through advertising.

A. The Way Search Engines Search and Store Content

A common complaint by website owners involves the method by which search engines “crawl” the content of websites in order to search, cache, and index those sites. This crawling by search engines imposes costs on those sites in terms of server time and bandwidth.28 Although websites may use the Robot Exclusion Protocol29 — code indicating that the site is not to be searched or indexed by indexing robots — there have been legal skirmishes about the costs resulting from this “intrusion” by search engines. In Intel v. Hamidi, the California Supreme Court held that this kind of intrusion was not cognizable as a trespass to chattels tort in the absence of proof of harm.30 State and federal computer-intrusion statutes,31 however, have provided greater leverage for website owners, as have arguments revolving around the terms of browsewrap contracts.32

In addition to complaints about the way web content is searched, website owners also take issue with the copying of that content. Search engines store vast amounts of the Internet’s content in order to more efficiently conduct searches and provide users with cached versions of websites. Caching involves making copies of Internet content that may be protected by copyright. While some content owners have argued that such copying constitutes copyright infringement, the fair use defense has generally protected search engines.33

27. Google itself provides a description of search engine optimization and its opinion of the practice. Google, Search Engine Optimization (SEO), http://www.google.com/support/webmasters/bin/answer.py?hl=en&answer=35291 (last visited May 15, 2009) (“While SEOs can provide clients with valuable services, some unethical SEOs have given the industry a black eye through their overly aggressive marketing efforts and their attempts to manipulate search engine results in unfair ways. Practices that violate our guidelines may result in a negative adjustment of your site’s presence in Google, or even the removal of your site from our index.”).
28. See Grimmelmann, supra note 8, at 24.
33. Perfect 10, Inc. v. Amazon.com, Inc., 487 F.3d 701, 725 (9th Cir. 2007) (holding that Google’s use of thumbnail images was a fair use).
B. The Way Search Engines Display Content

For the most part, searching is a black box process: the user inputs search terms and receives the results that Google’s PageRank system deems most responsive and relevant. The user does not know what information Google caches and indexes, what the ranking criteria are, or whether the “best” results have been returned. Google does provide fairly extensive information to webmasters. The specifics are intentionally excluded, however, and Google’s algorithm remains a closely guarded secret. Websites may opt out of Google’s searching, caching, and indexing process via the Robots Exclusion Protocol, but search engine users are generally unaware of what is included and what is excluded from their searches. Accordingly, users have very little basis for evaluating whether better results might have been returned. This opaque ranking system — because of the power it allows Google to wield — has been the subject of a variety of disputes alleging bias and manipulation of results.

A number of entities and individuals have sued Google, claiming that Google improperly dropped their websites from ranked results. For example, Mark Roberts brought a breach of contract action in California state court, alleging that Google’s “inexplicably” downgrading of his websites’ search rankings breached its agreement to, among other things, list the most reliable and relevant results. Search King, Inc. sued on a similar set of facts, alleging tortious interference with contractual relations. Google prevailed, arguing that search results are protected speech. The Northern District of California reached a similar result in a class action lawsuit filed by KinderStart that included claims for violations of the First Amendment.

34. See Goldman, Deregulating Relevancy, supra note 10, at 534–42 (describing the process by which search engines sort, rank, and return results).
36. See James Grimmelmann, The Google Dilemma, 53 N.Y.L.S. L. REV 939, 940 (2009) (“Web search is critical to our ability to use the Internet. Whoever controls search engines has enormous influence on all of us. They can shape what we read, who we listen to, and who gets heard. Whoever controls the search engines, perhaps, controls the Internet itself. Today, no one comes closer to controlling search than Google does.”); Introna & Nissenbaum, supra note 18, at 174 (discussing the importance to content providers of being ranked on the first page of results).
38. See Posting of Eric Goldman to Technology & Marketing Law Blog, Google Avoids Another Lawsuit Over Rankings (For Now) — Roberts v. Google, http://blog.ericgoldman.org/archives/2006/06/google_avoids_a.htm (June 5, 2006); see also Grimmelman, supra note 8, at 33 n.135.
40. Id. at *4.
antitrust law, California unfair competition law, breach of the implied covenant of good faith and fair dealing, defamation, libel, and interference with prospective economic advantage.41

Website owners have also complained about the way in which their sites are displayed in search results. In particular, website owners have alleged that the use of “thumbnails” — the small versions of images that search engines use to indicate the content of websites or display in response to image searches — constitutes copyright infringement.42 In one instance, the court found that the copyright holder would be unable to overcome Google’s affirmative fair use defense and refused to enjoin the use of the thumbnails.43

C. The Way Search Engines Make Money

Google currently operates on an advertising-based revenue model. Users do not pay to conduct searches; instead, advertisers pay to have their ads appear generally or in connection with particular search terms or results. Given the number of advertising dollars spent, the number of searches conducted each day, and the importance of advertising generally, it is not surprising that disputes have arisen over how advertisements appear on Google’s results pages. These disputes have presented some of the most persistent problems for search engines.44

Trademark owners have claimed that a search engine’s use of a trademarked term to trigger ads violates state and federal trademark law; they have brought other state law claims as well. The court in GEICO v. Google, Inc.45 described the way in which Google and other search engines operate their advertising models: “The search engines work by comparing search terms entered by the Internet user with databases of Websites maintained by the search engine, generating a results page that lists the Websites matching the search term.”46 Generally, the search engine will retrieve a list of sponsored links, a list of relevant websites, and a set of ads that correspond to the search term. Sometimes search engines permit one entity to purchase a competitor’s trademarked term as a “keyword” such that the entity’s ad appears alongside search results. For example, American Blind and Wallpaper Factory owns the registered trademark “American Blinds.” American Blind’s competitors purchased ad-placement through Google’s AdWords program that is triggered by the term “American blind.” Therefore, when a user searches for “American blind,” the

42. See, e.g., Perfect 10, Inc. v. Amazon.com, Inc., 487 F.3d 701, 716 (9th Cir. 2007).
43. See id. at 725.
44. See sources cited supra note 6.
46. Id. at 701.
competitors’ ads, along with those purchased by American Blind, may appear alongside the search results as sponsored links.47

The lawsuits brought in federal court by trademark holders have been resolved almost exclusively by reference to federal law, with mixed results.48 Google and other search engines have continued to permit competitors to purchase trademarked terms as keywords, and trademark owners have continued to complain. Though trademark owners have brought state law claims in federal court, searches of state court dockets reveal that few, if any, search keyword lawsuits have been litigated in state courts.49 However, some state legislatures have reacted by passing legislation targeting the practice.50 Though these efforts ultimately failed,51 they demonstrate some of the possible variations of regulatory intervention.

There have also been some federal regulatory responses. For example, the Federal Trade Commission (“FTC”) issued a letter responding to a complaint about the inclusion of paid placement ads in search engine results.52 The FTC recommended against taking formal action at that time, but it did “send[] letters to search engine companies outlining the need for clear and conspicuous disclosure of paid placement, and in some instances, paid inclusion, so that businesses may avoid possible future Commission action.”53

The significance of the issues raised in these various disputes is amplified by Google’s dominant position in the search market.54 By


48. See, e.g., Am. Blind, 2007 WL 1159950, at *6–11 (discussing federal trademark claims in deciding Google’s summary judgment motion); GEICO, 330 F.Supp.2d at 705–706 (discussing the federal trademark issues in depth and dismissing the state law claims with little discussion); see also Rescucem Corp. v. Google, Inc., 562 F.3d 123 (2d Cir. 2009) (holding that use of trademarked term in keyword advertising constitutes trademark use).

49. For example, a search of California state court opinions revealed no published opinions on the issue and a search of California state court filings revealed no lawsuits filed by or against Google. Both searches were conducted in 2008.


53. Id. (“As a general matter, clear and conspicuous disclosures would put consumers in a better position to determine the importance of these practices in their choice to search engines to use.”).

54. For example, the FTC investigated, but later approved, Google’s acquisition of DoubleClick. See Miguel Helft, Congress to Examine Google-DoubleClick Deal, N.Y. TIMES, July 19, 2007, at C2 (discussing concerns in Congress); FTC, Statement of Federal Trade Commission Concerning Google/DoubleClick FTC File No. 071-0170 (Dec. 20, 2007),
one estimate, 61.9% of Internet searches were conducted with Google in July 2008. There were 9.9 billion searches on Google sites in July 2008. After Google’s acquisition of DoubleClick in early 2008, there were estimates that Google’s share of the online advertising market would approach 70%. In the wake of the announcement of a possible joint advertising agreement between Google and Yahoo, both the House and the Senate scheduled hearings because of concerns over the anticompetitive consequences of the deal, and the agreement eventually fell apart. Antitrust law thus may play a significant regulatory role in terms of Google’s business model.

As should be clear from the examples cited above, the number and variety of legal disputes that have arisen, along with the importance of the search function, present regulatory challenges. The dynamic nature of the market exacerbates these challenges. The future of search engines, search engine technology, and the related business models and consumer behavior remains fluid. Even as Google has become a cultural force whose every move makes the front page, Google’s technology and business model are continuously evolving. Search engines continue to provide different search functions, return different results, and operate in different ways. Search companies provide a variety of services in addition to search. New companies are entering the market, existing entities are attempting to adapt, and the future of search is uncertain. Will Google continue to grow? Will personalized search fundamentally change how people interact with the Internet? Will we use the term “search engine” in five years or ten years? In thinking about regulating search engines, the uncertainty of the technological future — as well as potential changes in business methods and consumer behavior — is of profound importance.


56. Burns, supra note 55.


59. In fact, the Department of Justice was just hours from filing antitrust charges to block the agreement when the deal’s abandonment was announced. Nate Raymond, Hogan’s Litvack Discusses Google/Yahoo, AM L. DAILY, Dec. 2, 2008, http://amlawdaily.typepad.com/amlawdaily/2008/12/hogans-litvack.html.

III. TRACING THE SCHOLARLY DEBATE ON SEARCH ENGINE REGULATION

An academic debate about the appropriate legal response to search engine disputes has given. The literature is still in its early stages, but an examination of the work done so far yields an interesting observation: the scholarly responses have clustered at the ends of the spectrum of possible regulatory options. On the one side is a strong free market approach; on the other, there is an argument for not just a more aggressive or intrusive legal response but structural changes in the form of agency regulation of search engines. Of course, the free market advocates have taken aim at the regulatory proposals just as the proponents of centralized regulation have sharply criticized the free marketers.

This Article argues that agency regulation is unjustified at this point and, in any event, unlikely to occur. Yet, the argument for limited legal intervention ignores the reality that we are already regulating search in a variety of ways. This Article advocates a pragmatic approach: we should address the possibility that the legal system can and should better resolve the issues presented by search engines. This Part describes both extremes of this debate and points out some of the problems with each approach. Part IV then seeks an alternative approach aimed at improving the regulatory response without incurring the substantial costs of centralized regulation.

A. The Case for Agency Regulation

Search engines have some of the characteristics of traditionally regulated industries. They have been likened to utilities, essential

61. A number of commentators have argued that the time is ripe for a conversation on search engine regulation. See, e.g., Bracha & Pasquale, supra note 10 (stating that they hope to “make[] a case for an ongoing conversation on search engine regulation”); Gasser, supra note 4, at 203 (describing the “need for a systematic evaluation of alternative (or competing) approaches to search regulation”); Grimmelmann, supra note 8, at 63 (stating that “fuller discussion of these themes [in search engine law] must await other days and other articles. The need for such further study should by now be apparent”).

62. For a discussion of the proposal for agency regulation, see infra Part III.A. For a summary of the free market view, see infra Part III.B. Others have addressed the variety of specific doctrinal issues that have been raised in connection with these cases and statutory approaches. See, e.g., Dinwoodie & Janis, supra note 6; Dogan & Lemley, supra note 6; Lastowka, supra note 6. These commentators, however, do not address the structural or institutional questions that are the focus of this Article and those by Pasquale, Bracha, and Goldman. Therefore, it would be inappropriate to attempt to characterize those scholars as “market fundamentalists,” proponents of agency regulation, or something in between solely on the basis of articles analyzing specific doctrinal issues.

63. Traditionally, regulated industries — such as telecommunications — were regulated because they exhibited “network effects, economies of scale and density, [or] monopoly leveraging,” or because they were common carriers. JONATHAN E. NUECHTERLEIN & PHILIP J. WEISER, DIGITAL CROSSROADS: AMERICAN TELECOMMUNICATIONS POLICY IN THE
facilities, and common carriers, and some have argued that they should be regulated accordingly. Professor Frank Pasquale has led the charge in arguing for greater centralization and more intensive regulation of search engines. Along with Professor Oren Bracha, he has suggested the need for a regulatory framework and perhaps the creation of a “Federal Search Commission.”

As Pasquale describes, search engines, and Google in particular, wield enormous power in a networked digital world. There would be no way to harness the power of the Internet without the ability to search, sort, and categorize information. Having some kind of intermediary between the user and the vast amount of information available online is essential. Search engines serve this intermediary function with both positive and negative effects. Bracha and Pasquale, pointing to some of these negative effects, have suggested agency regulation as the best means of redress.

It is undisputed that there are negative consequences of search engines’ operation. For example, search engines can — indeed they must — manipulate search results. Some have asserted that this manipulation should, under some circumstances, be considered unlawful or improper bias or discrimination. This manipulation or bias affects the ability of Internet users to exploit their business models, reach customers, and exercise their free speech rights consistent with legal and societal norms. Another set of claims against search engines addresses the concern that a variety of advertising methods are “stealth marketing” and thus should be prohibited.

INTERNET AGE 1–22 (2007) (providing a history and examination of regulation in the telecommunications industry).

64. Bracha & Pasquale, supra note 10, at 1178–88. Pasquale has, perhaps, written more extensively about search engines than any other legal scholar. See, e.g., Pasquale, supra note 10, at 267–69 (analogizing the issues raised in some search engine disputes to those in the net neutrality debate); Pasquale, supra note 1, at 142 (proposing an adjustment to the copyright fair use doctrine to provide a privilege, of sorts, for search engines); Pasquale, Rankings, supra note 7 (arguing that “[s]ome accountability for search engine results is increasingly necessary as they become the primary portal for net users”).

65. Pasquale, supra note 1, at 136–37. See generally supra Part II.

66. See Grimmelmann, supra note 2, at 30 (“Access to knowledge always depends on access to knowledge infrastructure.”).


69. Bracha & Pasquale, supra note 10, at 1151 (stating their concern “with one aspect of this growing power: search engines’ power to manipulate their results, thereby affecting the ability of Internet speakers to reach potential audiences”).

70. Stealth marketing has been broadly defined as “pass[ing] off promotional messages as editorial content.” Ellen P. Goodman, Stealth Marketing and Editorial Integrity, 85 Tex. L. Rev. 83, 88 (2006) (discussing stealth marketing in digital media and arguing for the
Concerns over these issues have prompted the call for centralized regulation. The argument in favor of a strong form of regulation is bolstered by Google’s dominance in the U.S. search engine market, which magnifies the threats posed by stealth marketing or search engine bias or manipulation. Additionally, while Google may not be a monopoly, it certainly has a great deal of market power and network effects also exist in the search world. These factors, together with the arguably substantial barriers to entry in the search engine market, permit the analogy to common carriers. As such, the argument goes, search engines should be regulated similarly to telecommunications firms or airlines, and their services should be available on a nondiscriminatory basis. Such regulation may or may not be accomplished by an administrative agency, but these concerns provide an argument for substantially more intrusive and centralized intervention.

These general concerns do not dictate a particular form of regulation, but Bracha and Pasquale have indeed suggested the need for a “Federal Search Commission” on the grounds that search engines are the utilities of the twenty-first century and ought to be regulated as such. Bracha and Pasquale compare search engines today to rail-

“evolution of sponsorship disclosure law in the new media context”). Examples of stealth marketing include payola, product placement, and sponsored journalism. See also Bracha & Pasquale, supra note 10, at 1176–77 (describing search engine bias as a form of stealth marketing).

71. See Pasquale & Bracha, supra note 10, at 1178 (explaining how the domination of the search market by a few entities makes the problem of search engine manipulation more significant and more difficult to resolve).


73. See Steve Lohr, Google, Zen Master of the Market, N.Y. TIMES, July 7, 2008, at C1 (“Economists and analysts point out that Google does indeed have network advantages that present formidable obstacles to rivals. The ‘experience effects,’ they say, of users and advertisers familiar with Google’s services make them less likely to switch.”).


75. See Pasquale, supra note 10, at 299 (arguing that dominant search engines “should be required to provide access to their archives and indices in a nondiscriminatory manner”); cf. Frischmann & Lemley, supra note 74, at 280–81 (“Access to infrastructural resources is not necessarily managed well in a private property rights regime . . . . [I]t is not surprising that society regularly manages infrastructural resources . . . in an openly accessible manner to support a wide range of productive activities that generate spillovers. Sometimes, as with the oceans, the government owns the resources and opens access to them. In some cases, such as the telephone network, private ownership of infrastructural resources can help to internalize some externalities (e.g., congestion). Even there, the government intervenes with a common carriage requirement to ensure common access to and use of such resources.”).

76. Bracha & Pasquale, supra note 10, at 1180–82 (arguing that “the search engine market has features that make robust and dynamic competition unlikely” and that search engines exhibit characteristics of a natural monopoly, such as high-cost infrastructure, network effects, exclusion power, and high switching costs).
roads in the nineteenth century. In the case of the railroads, concerns over discriminatory and unfair practices, combined with the network effects present in the interstate transportation system, led to centralized regulation. Bracha and Pasquale do not develop this analogy fully as a justification for federal-level agency regulation of search engines, but they do conclude that a substantially more centralized approach to search engine regulation is both justified and likely to be effective.

B. The Case for Market Regulation

In direct counterpoint to arguments in favor of increased regulation, proponents of the free market approach posit that regulatory intervention in general is more likely to create inefficiencies, warp markets, and inhibit innovation than it is to solve any perceived consumer welfare problem. This familiar argument has been advanced in the context of search engine bias and proceeds as follows: “search engines naturally will continue to evolve their ranking algorithms and improve search result relevancy — a process that, organically, will cause the most problematic aspects of search engine bias to largely disappear. To avoid undercutting search engines’ quest for relevance, this effort should proceed without regulatory distortion.”

Professor Eric Goldman has been the most outspoken proponent of the free market approach in the search engine context. Goldman rejects not just Bracha and Pasquale’s proposal, but other suggestions for regulatory intervention, including calls for the public funding of search engines and for mandating changes to ranking and sorting practices. According to Goldman, search engine bias is “both necessary and desirable,” and market forces, in the form of personalized search, for example, will provide sufficient discipline for search engines. Goldman describes search engine bias as “editorial judg-

77. Id. at 1175–76.
78. Id.
79. Id. Instead, they suggest that “[d]irect regulation would limit search engines’ ability to manipulate their results and to offer some relief to the victims of illegitimate manipulation.” Id. at 1206–07; see also Lastowka, supra note 6, at 1358.
80. Bracha & Pasquale, supra note 10, at 1209.
82. Goldman, Search Engine Bias, supra note 10, at 200.
83. Id. at 194–98.
84. Id. at 189. Bracha and Pasquale reject the argument that technological developments, such as personalized search, will restrain search engine manipulation. Bracha & Pasquale, supra note 10, at 1187. Ultimately, Bracha and Pasquale conclude that “[i]t is hard to see how the technological fix is any more likely to remedy the problem than market discipline.” Id. at 1188.
ment,” which means that search engine results are not simply automated or objective. The results thus tend to be skewed toward majority preferences. Under the free market approach, this is not a bad thing; search engine bias is necessary because search engines must exercise some editorial control. Editorial control is not a problem because market forces will limit the scope of the bias. In other words, people will not use search engines that do not return useful results, and advertisers will not pay for placement on search engines that people do not use.

Moreover, according to the free market argument, the problems created by regulatory solutions are worse than the problems they seek to address. Simply put, regulation is not likely to be less biased than the status quo, and government-mandated search results are likely to be less relevant than those produced by market forces. “Whatever the adverse consequences of search engine bias, the consequences of regulatory correction are probably worse.” Goldman makes this argument more broadly, contending that market responses to spam, spyware, and adware will ultimately be more effective and better for consumer welfare than any regulatory response.

C. Some Problems with the Solutions at Either End of the Spectrum

The regulatory and free market approaches each have theoretical and practical advantages, but both raise substantial concerns as well.

85. Goldman, Search Engine Bias, supra note 10, at 191 (“[T]he choice of which factors to include in the ranking algorithm, and how to weight them, reflects the search engine operator’s editorial judgments about what makes content valuable.”).
86. Id. at 193 (“For search engines, results placement determines how the searcher perceives the search experience. If the top few search results do not satisfy the searcher’s objectives, the searcher may deem the search a failure. Therefore, to maximize searcher perceptions of search success, search engines generally tune their ranking algorithms to support majority interests. In turn, minority interests (and the websites catering to them) often receive marginal exposure in search results.”).
87. Id. at 196 (“To prevent anarchy and preserve credibility, search engines unavoidably must exercise some editorial control over their systems. In turn, this editorial control will create some bias.”).
88. Id. at 196–97 (“Search engines that disappoint . . . are accountable to fickle searchers. There are multiple search engines available to searchers, and few barriers to switching between them.”).
89. See id. at 197–98.
90. Id. at 198.
91. Goldman, Coasean Analysis, supra note 10, at 1220–21 (“As a result, if it were solely up to market forces, Coasean filters would become integral to our information economy. However, regulators are not allowing this technology to evolve. Instead, in an overreaction to adware and spyware technology, regulators are building an anti-Coasean-filter regulatory thicket. This thicket — not the marketing that it putatively tries to abate — represents one of the biggest threats to long-term improvements in social welfare.”).
1. Concerns About Agency Regulation

Even without discounting either the problems presented by search engine operation or the benefits of centralized regulation, a regulatory approach is problematic. As a general matter, federal agency regulation has substantial and well-documented drawbacks. Federal agencies are subject to capture, and federal agency regulation can be a particularly slow-moving process. Additionally, agency standard setting may “lock-in” sub-optimal standards or technologies benefiting particular industries or entities, and efforts to promote competition may result in inefficiencies instead. There is no reason to believe that a Federal Search Commission would be immune to these risks. Agency regulation of search in particular is unlikely to be effective; it is currently unwarranted under the traditional justifications for such regulation and is quite unlikely to occur.

Because search technology, the related business models, and consumer behavior are all changing so rapidly, it is improbable that a federal agency could effectively regulate the industry or the technology.
For example, it is difficult to imagine that a federal agency would be capable of effectively responding to claims of improper bias in the ranking of search results. Search results are generally dynamic: the information to be searched changes constantly, and the tools and criteria used to search the web change regularly as well. If an aggrieved user or content provider were to bring a complaint to the agency, it is possible that the particular problem complained of would be obsolete within weeks or days, and an agency would be unlikely to respond in such a short period.

Just as a federal agency is unlikely to be able to address problems of search engine bias in a timely and useful manner, it is unlikely that an agency would do a substantially better job of controlling bias than search engines themselves. As Goldman has described, a federal agency examining a complaint of search engine bias may mandate a different set of results than the search engine found, but that agency result would also be biased. Just as a federal agency is unlikely to be able to address problems of search engine bias in a timely and useful manner, it is unlikely that an agency would do a substantially better job of controlling bias than search engines themselves. As Goldman has described, a federal agency examining a complaint of search engine bias may mandate a different set of results than the search engine found, but that agency result would also be biased. That is, it would simply reflect the agency’s value judgment as to what results should be returned based upon a particular search query.

It is difficult to imagine that a federal agency, or anyone else, would be able to come up with an objective set of criteria for evaluating the propriety of search engine results. One problem in trying to come up with a set of objective criteria is the tendency to analogize search engines to services provided in the pre-Internet world. The pre-Internet world contained much less information, making it possible to have some arguably “objective” search criteria and results. A phone book, for example, might list all the phone customers in the city of Denver in alphabetical order. In that case, anyone using the phone book would know the criteria for inclusion and could evaluate, at least to some extent, the effectiveness of the results. In the online world, this is not so simple.

In one highly publicized instance, a database for reproductive health run by Johns Hopkins University and funded by the United States Agency for International Development blocked the word “abortion” as a search term, such that it returned no results when that term was used. Unlike the phone book example, a user has much more difficulty interpreting these search results. A user inputting the term “abortion” and getting zero results would not know if the database contained no articles about abortion or if, on the other hand, the word had been blocked (or if the search had failed for some other reason). In that instance, a quasi-government agency sought to influence

96. Goldman, Search Engine Bias, supra note 10, at 197 (“[R]egulatory solutions become a vehicle for normative views about what searchers should see — or should want to see.”).
97. Id.
search results without notice or explanation and in a completely non-transparent way. Though just an anecdote, the episode does not inspire much confidence in the superiority of government-mandated search results. Simply put, a government agency is just as likely to create biased search results as a private entity and is almost certainly less efficient.99

In addition to being ineffective, agency regulation is unwarranted at this point. Notwithstanding the railroad analogy, the traditional justifications for agency regulation simply are not present.100 Search engines are similar to common carriers in some ways, but the analogy is not a perfect one. The search industry exhibits network effects, which can lead to market power.101 However, the barriers to entry, even if high, are not insurmountable, and the switching costs for consumers are quite low because there are no technological or financial impediments to switching.102 Switching search engines is less costly than switching rail lines. Indeed, Google has a number of competitors, and several search engine start-ups have entered the market in the last few years.103 Having more than one search “carrier” yields no great inefficiency; indeed, having more than one would probably be efficient.104

Finally, even if agency regulation would be effective or justified at this point, it is unlikely to occur. As Professor Greg Lastowka explained, “[w]hatever one thinks of the merits of calls for greater state involvement with search results, the notion of an FCC-equivalent organization that oversees results generally seems like a distant pros-

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99. See Goldman, Search Engine Bias, supra note 10, at 197 (“[R]egulatory intervention that promotes some search results over others does not ensure that searchers will find the promoted search results useful. Instead, government regulation rarely can do better than market forces at delivering search results that searchers find relevant . . . .”).

100. See supra notes 95–97 and accompanying text. See generally NUECHTERLEIN & WEISER, supra note 63 (explaining the phenomena that regulators have long cited to justify government intervention in telecommunications markets).

101. See, e.g., Kristine Laudadio Devine, Preserving Competition in Multi-Sided Innovative Markets: How Do You Solve a Problem Like Google?, 10 N.C. J. LAW & TECH. 59, 59 (2008) (explaining that network effects lead to market power in the search advertising market because “[a]n increase in the number of customers on one side of the market attracts increased numbers of customers on the other side, enabling dominant firms to entrench their market power”); Maurice E. Stucke, Should the Government Prosecute Monopolies?, 2009 U. I.L.L. L. REV. 497, 547 (“Given the acceleration of a firm’s market power through network effects, the monopolist may no longer require the exclusionary behavior to maintain its market power.”); Lohr, supra note 73.


103. See supra note 14 and accompanying text.

104. See generally NUECHTERLEIN & WEISER, supra note 63. There may be benefits, however, to having a significant portion of the searches run on a single search engine. See, e.g., Miguel Helft, Ache, a Sneeze, a Google Search, N.Y. TIMES, Nov. 12, 2008, at A1 (reporting that, by tracking particular search queries, Google could predict flu outbreaks seven to ten days before the Centers for Disease Control and Prevention).
At this point there seems little legal footing or focused political will that might support regulating Google’s results generally.\textsuperscript{105}

2. Concerns About the Free Market Approach

The case for agency regulation is ultimately unpersuasive, yet the free-market, minimal intervention arguments are equally unsatisfying. Although the argument in favor of centralized regulation relies heavily on the contention that market forces are likely to be ineffective at disciplining search engine misbehavior,\textsuperscript{106} the free market view relies just as heavily on the contrary contention. The notion that the market can best regulate search, while theoretically compelling, is unrealistic as a policy prescription. Pure market regulation is just as unlikely as the establishment of an administrative agency. We are already regulating search. A variety of legal rules have developed, and legal policymaking institutions — for example, state courts, federal courts, state legislatures, Congress, the FTC, and the FCC — have weighed in on search engine disputes. Congress has enacted statutes regulating, and protecting, search engine behavior.\textsuperscript{107} Courts have resolved search engine disputes by reference to a wide variety of doctrines.\textsuperscript{108} The result is not a free market but an uncoordinated patchwork of regulation that has not accounted for the crosscutting policy issues and difficult trade-offs involved in establishing search engine policy and resolving those disputes.

One example of this patchwork approach is the various responses to search engine advertising disputes. These disputes have arisen regularly, likely because of the scope of the financial interests at stake. Different decision-makers at various levels have weighed in on these disputes. State legislatures have attempted to regulate keyword advertising and click fraud.\textsuperscript{109} Federal courts have resolved keyword advertising disputes by reference to federal trademark law.\textsuperscript{110}

\textsuperscript{105} Lastowka, supra note 6, at 1359.

\textsuperscript{106} See, e.g., id. at 1179 (“Skeptics are confident that either the market, new technology, or some combination of the two will deter search engine manipulation by ‘punishing’ the ‘misbehaving’ search engines. There are, however, good reasons to doubt that either the market or technology will provide a satisfactory solution in the near future.”).

\textsuperscript{107} See, e.g., 17 U.S.C. § 512(d) (2006) (providing some immunity for service providers who refer or link users to an online location containing infringing material); 47 U.S.C. § 230(c)(1) (2006) (providing that “[n]o provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider”).

\textsuperscript{108} See supra notes 5–7.


courts have heard similar complaints grounded in state tort law and consumer protection statutes. The Federal Trade Commission has responded to complaints, though it has not taken any formal action.

This patchwork approach has significant drawbacks. The doctrines and responses are uncoordinated, so one doctrine may be used to subvert the intent or effect of another. Regulation by multiple authorities may lead to inconsistent results and a lack of predictability for search engine companies and their users. The values that society may want to advance with respect to search engines are less likely to emerge unadulterated. Many of the entities addressing search engine disputes have not viewed them as “search engine disputes.” Rather, the disputes have been viewed through a particular doctrinal lens. This doctrinal pigeonholing results in inconsistent, contradictory, and thoughtless regulation. In other words, this approach has not and cannot lead to sensible policymaking: it can barely be described as policymaking at all.

Sensible policymaking would involve a comprehensive assessment of the various interrelated and often conflicting issues that arise. For example, the question of how to address the concern of website owners about the intrusion by search engines onto their sites is not a simple one, and it may be resolved by reference to a variety of areas of the law. A website owner may seek to exclude search engines and their crawlers or spiders from entering the site, cataloging the site’s information, or copying the contents of the site for later searching. This website owner may turn to state property law — trespass to chattels — in an effort to prevent the intrusion; the owner may also raise federal copyright claims asserting infringement in the copying of

111. See, e.g., Intel Corp. v. Hamidi, 71 P.3d 296 (Cal. 2003).
113. Grimmelmann, supra note 8, at 52–53 (“Those concerned with one particular form of harm are not limited to legal theories directly addressing that harm. If they can gain relief against a search engine on another theory, it may be just as good. Wherever in law this multiplicity appears, it raises a concern that parties not be allowed to subvert one doctrine by appealing to another.”).
114. See Gasser, supra note 4, at 227 (suggesting that three core values ought to guide decisionmaking in search engine disputes: information autonomy, diversity, and information quality).
115. See Grimmelmann, supra note 8, at 51 (“Some of the hardest-fought issues in search policy are all but moot in light of doctrines from other areas. In general, such doctrinal distinctions are unstable; the broad view of search forces us to recognize that the technical centrality of search engines puts strains on many different areas of law.”).
116. See Gasser, supra note 4, at 203 (stating that there is a “need for a systematic evaluation of alternative (or competing) approaches to search regulation”); see also id. at 230–31 (“Unleashed diversity in the digitally networked environment, for instance, might have negative feedback effects on user autonomy because it increases an individual’s risk to be exposed to undesired information. A regulatory approach aimed at ensuring high-quality information, by contrast, might be in tension with informational autonomy . . . .”); Grimmelmann, supra note 8, at 63 (describing some of the overlapping and conflicting issues that arise in search engine disputes).
material to the search engine’s index. The resolution of either claim individually may not require an analysis of the broader policy questions of under what circumstances search engines ought to be able to access websites and under what circumstances they ought to be excluded. To address these larger policy issues, the decision-maker must balance concerns regarding efficiency and openness in search engine results against the costs to site owners of providing content. Decision-makers must understand how search engines function, why they are significant, and the larger policy concerns at issue.

This is unlikely to occur under the current patchwork approach. Different policy and dispute resolution approaches at a variety of levels create unpredictability and a lack of uniformity. With state courts, state legislatures, federal courts, Congress, and the FTC weighing in at various times, none of the entities involved can rely on clear legal rules as the basis for future action.

There is, of course, something to be said for variability in the development of legal doctrine to new problems. The notion of states as “laboratories” for legal experiments has a long pedigree. There is reason to believe, however, that the “states as legal laboratories” theory works well only in some circumstances. Professor Peter Menell has argued that the states-as-legal-laboratories approach is problematic in the regulation of Internet-entities. In particular, in the context of spyware regulation, he asserts that “state-by-state regulation creates an environment in which prudent Internet-related businesses must conform to every state unfair competition law, producing in effect a national policy based on the standards of the most restrictive state.” Because Internet entities often cannot behave differently in different states, it is impossible to compare the effectiveness of the various state regulations. Thus state-based experimentation, as traditionally understood, is not possible. Based on his study concerning unfair competition laws applied to spyware disputes, Menell argues

117. See Grimmelmann, supra note 8, at 24; cf. Perfect 10, Inc. v. Amazon.com, Inc., 487 F.3d 701 (9th Cir. 2007). In Perfect 10, it was not the website owner that was bringing the claim but rather the copyright owner. 487 F.3d at 713. The images culled by Google were actually obtained from websites that were infringing on Perfect 10’s copyright. Id. However, a similar claim could exist where the website owner and copyright owner were the same party.

118. See New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting) (“It is one of the happy incidents of the federal system that a single courageous state may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.”).


120. Menell, supra note 119, at 1372.
for federal preemption of state unfair competition law. 121 Menell’s general argument that the “inherent technological limitations on the ability of states to experiment” in regulating Internet activities should give us pause about the effectiveness of state regulation in certain contexts. 122

As with other Internet entities, search engines are ubiquitous: they operate internationally, and the disputes that have arisen with respect to search engines are not confined to any particular location or jurisdiction. Search engine entities will not operate most efficiently if they must take into account state, federal, and international regulatory regimes. 123 Such multiplicity of regulation will likely inhibit innovation and increase legal costs, and it is unlikely to result in good or effective legal rules. 124 For many of the reasons applicable to Internet governance generally, state regulation of search engines is problematic and federal intervention is appealing. 125 What form this intervention ought to take, however, is a much more difficult question.

IV. AN ALTERNATIVE IN THE BIPOLAR DEBATE: A FEDERAL FORUM FOR SEARCH ENGINE DISPUTES

The search engine regulatory choice is not a binary one. We are, in fact, already regulating search, and the question is where along the spectrum of policy options we ought to be. The current approach — a patchwork of federal and state law (both statutory and common law), with courts, legislatures, and agencies all weighing in on the issues —

121. Id. at 1376 (“[T]he characteristics of the Internet favor federal preemption of state regulation as the most appropriate default regime.”); see also Steven R. Salbu, Who Should Govern the Internet?: Monitoring and Supporting a New Frontier, 11 HARV. J.L. & TECH. 429, 462–78 (1998) (arguing for preemption in order to promote uniformity of Internet regulation).

122. Menell, supra note 119, at 1416 (“The ubiquity of the Internet makes state borders largely irrelevant. Therefore, there should be a strong presumption in favor of at least national regulatory governance of most Internet-related activities.”).

123. See Jack L. Goldsmith, Against Cyberanarchy, 65 U. CHI. L. REV. 1199, 1202–05 (1998) (describing the debate about whether cyberspace can be regulated at all and about how to resolve inter-state and trans-national conflicts of law).

124. See id. at 1410 (concluding, after reviewing state unfair competition laws in regulating Internet activity, that “the most restrictive state law regimes have nationwide effect on Internet-related activities” and that “the process by which the first and arguably most restrictive state spyware laws came into existence demonstrates that state legislation can result from the lobbying efforts of even one persistent company”).

125. This Article does not argue that federal regulation or the application of federal common law to search engine disputes is required by the dormant Commerce Clause or some other aspect of federal statutory or constitutional law, but only that it may result in more effective and efficient policymaking. For a summary of the debate over whether the dormant Commerce Clause requires invalidation of state regulation of Internet-related activities, see Jack L. Goldsmith & Alan O. Sykes, The Internet and the Dormant Commerce Clause, 110 YALE L.J. 785, 787 (2001) (arguing that “the dormant Commerce Clause, properly understood, leaves states with much more flexibility to regulate Internet transactions than is commonly thought”).
does not allow for comprehensive analysis of the policy trade-offs involved in search engine regulation. On the other hand, federal agency regulation is most likely both unwarranted and unwise at this point, in addition to being quite unlikely. This Part argues that there is an alternative: a federal forum for search engine disputes.

There are already numerous federal statutes that apply to certain aspects of search engine disputes. For example, copyright law dictates what uses of website information — such as caching for search engine use — are fair. 126 Section 512 of the Digital Millennium Copyright Act provides a statutory safe harbor, in some circumstances, for websites that serve as conduits for others’ information. 127 Copyright and patent law may govern the proprietary nature of search engine algorithms and software in some instances. 128 Federal trademark law speaks to the question of whether certain words or names can be used to trigger pop-up and other advertising. 129 Section 230 of the Communications Decency Act provides immunity for providers of “interactive computer services” who publish information furnished by others. 130 Antitrust law also plays a role in the regulation of search engines. 131 Accordingly, the federal courts already have fairly extensive experience with these statutes and with some search engine disputes.

This Article suggests that federal courts are the appropriate forum for all search engine disputes, recognizing the good work that the federal courts have already done in this area. The federal courts would apply either state law or develop federal common law where appropriate in the interstices of already existing statutes. 132 Under this proposal, there would be no substantive statutory changes and no state (court, administrative, or legislative) regulation. Instead, legal change would occur only in the federal courts. This Article makes the case that an exclusive federal forum for search engine disputes is a more

128. See Computer Assoc. Int’l v. Altai, Inc., 982 F.2d 693, 702 (2d Cir. 1992) (“It is now well settled that the literal elements of computer programs, i.e., their source and object codes, are the subject of copyright protection.”); see also U.S. Patent No. 6,285,999 (filed Jan. 9, 1998) (patent for Google’s PageRank process).
130. 47 U.S.C. § 230 (2006). There have been other responses on the federal level. The FTC, in response to complaints, issued recommendations concerning the disclosure of paid placement in search results. See Letter from Heather Hippsley, Acting Assoc. Dir., Div. of Adver. Practices, FTC to Gary Ruskin, Executive Dir., Commercial Alert, supra note 52. The FTC did not take any formal action but reserved its right to do so in the future. Id.
131. For example, the Justice Department launched an investigation of the Google/Yahoo advertising agreement; that investigation led to the parties backing away from the agreement. See Raymond, supra note 59.
132. This Article leaves open the precise definition of “search engine disputes” that ought to be subject to federal jurisdiction.
realistic and more flexible approach than either federal agency regulation or the current scheme. This conclusion is a relative one: no regulatory approach is perfect, but this approach has some advantages over the proposed alternatives.

A. A Federal Forum Compared to More Centralized Regulation

1. Flexibility Allows the Common Law to Accommodate Changing Technology

   The rapidly changing nature of search technology may well be the single most important factor in considering the appropriate form of regulation. While there are periods of rapid change in the law, or at least significant bursts of development, as a general matter legal change occurs at a glacial pace compared with the pace of changes in technology, business methods, and consumer behavior. In finding the right regulatory fit, this basic fact must be taken into account. Related to the pace of technological change is the manner of that change: technology is likely to change in ways that are unforeseeable, and controlling technology is difficult, if not impossible. So while observing the ways in which a given technology has presented legal disputes is significant, that observation will not remain static. Thus, an ideal form of regulation would be adaptable to unpredictable changes in technology, as well as changes in business methods, consumer behavior, and so on.

   The notion that the common law might be the appropriate form of regulation for technology, Internet entities, or the Internet itself, is not a new one, but it has not yet appeared in the debate on search engine regulation. Relatively early in the Internet’s development, there was

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133. In thinking about the appropriate regulatory framework, a theoretical back-drop would be helpful. Legal scholars have only just begun developing a theory of law and technology. See, e.g., Gaia Bernstein, Toward a General Theory of Law and Technology: Introduction, 8 MINN. J.L. SCI. & TECH. 441, 442 (2007) (“The goal of this symposium was to inquire whether the assessment and reaction to each new technology in isolation is the best mode for technology regulation or whether a broader outlook would better serve the social accommodation of new technologies.”). Such a theory would be quite helpful in approaching the question of whether and how to regulate search engines. See id. (“A generalized approach could provide guidelines based on prior instances in which technologies disrupted social values or on cases in which the value of privacy was threatened by new technologies.”).

134. See generally Gregory Mandel, Nanotechnology Governance, 59 ALA. L. REV. 1323, 1326 (2008) (contending, in the context of regulating nanotechnology, that scientific uncertainty is one of the greatest regulatory challenges and arguing that a regulatory framework that accepts this fact is most likely to be effective).

much discussion about the proper legal regime for cyberspace, and quite a number of commentators called for a common law solution in some form. For many of those commentators, the rapidly changing and unpredictable nature of technology was precisely what led them to embrace a common law approach. A common law approach has the advantages of being both adaptable and relatively non-intrusive.

The suggestion that the common law might prove adaptable to changing technology may be counterintuitive, but the iterative, fact-intensive nature of common law development may well be more adaptable in the face of rapid change than a strict statutory structure or a set of agency guidelines formulated in response to an earlier issue or previous-generation technology. There are advantages to an incremental approach. First, common law development takes account of the truly contested facts. That is, parties to a lawsuit are not as likely to fight over obsolete technology or business methods. Second, arriving at the wrong result may be less likely because big changes occur less often. Common law evolves as a dialogue between courts, in which any given court may make only a small change in approach. As each subsequent court takes account of earlier doctrinal developments, the applicable body of law grows, but in general that growth is incremental.

As compared to agency regulation, a common law approach typically involves much less drastic changes and would thus be less intrusive. In areas where the technology is evolving rapidly, and in ways that are unpredictable, establishing any kind of regulatory response is difficult. In such cases, the rule ought to be a rule of caution: do no more than necessary.

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137. See, e.g., Mandel, *supra* note 134, at 1378 (“Nanotechnology governance should include mechanisms to allow for incremental changes in governance as the need arises. Such an approach simultaneously provides flexibility in governance and limits the likelihood of quickly upsetting settled expectations for industry.”).


139. See Hardy, *supra* note 136, at 1025 (stating that the key to determining the appropriate legal response “is the recognition that the technology of computer communications is rapidly changing” and that “[i]n the face of this very dynamic situation, we ought to be reluctant to impose behavior control that is inflexible and uniform beyond the needs of the situation”).
intrusive forms of regulation, though perhaps there would be an increase in intervention over time.  

A federal common law approach to search engine regulation is obviously not the least intrusive approach; we could, conceivably, have no legal rules at all and allow individuals and entities to rely on self-help in coordinating their relationships.  

We are already beyond this in the context of search engine regulation.  

The next step toward regulation, and still in some ways a form of self-help, is contract: allow all the players involved to contract regarding their intentions with the law as an enforcement mechanism.  

In the search engine context, this has already occurred to a great extent, but parties on all sides of the disputes have also sought the application of various state and federal causes of action.  

In addition, Congress and state legislatures have also taken a variety of regulatory steps.  

The suggestion that we will employ nothing but market discipline as a regulatory tool is simply unrealistic.  

Although we are beyond the possibility of a purely private ordering regime, the notion that regulation should be as non-intrusive as possible remains.  

Common lawmaking by the federal courts is certainly less intrusive than agency or other centralized regulation because it addresses only the facts at issue and does not attempt to set forth rules that will apply to different and unforeseeable future facts.  

Under a common law system, the applicable legal principles tend to be more general, and the holding of a case applies only to a particular set of facts. Thus the next court to apply the principle is guided, but not bound, by earlier cases.  

The common law operates generally by

140. See, e.g., id. at 995 (“[A] specific statutory response is only one of many legal reactions. Case-by-case adjudication and its common law build-up of precedents can also be applied to cyberspace legal issues . . . .”).  

141. See id. at 1026.  

142. See supra Part III.  

143. See Hardy, supra note 136, at 1028.  


145. See supra Part II.  

146. See supra Part III.  

147. See, e.g., Hardy, supra note 136, at 1054 (concluding that the “most flexible, least intrusive rule-making process is best”).  

148. See, e.g., Jay Dratler, Jr., Common-Sense (Federal) Common Law Adrift in a Statutory Sea, or Why Grokster Was a Unanimous Decision, 22 SANTA CLARA COMPUTER & HIGH TECH. L.J. 413, 435 (2006) (contending that the common law approach allows the court to consider “the big picture in making analogies and distinctions”).
applying existing rules to new factual situations. Because technology, almost by definition, involves new situations — new inventions, new business models, and so on — the common law is well suited to resolving disputes in which technology plays a significant role.149

In the context of search engine regulation, an adaptable approach makes good sense, and a primarily common law approach is certainly more adaptable than agency regulation or a complex statutory structure. Under this approach, the federal courts would be more “activist” in their approach to search engine disputes, but this would be preferable to the alternatives.150 As a relative institutional competence question, the issue is whether the federal courts, Congress, or an agency (or the states, or all of the above) is more capable of “updating” the law in situations of rapid technological change.151 Precisely because of the iterative, fact-intensive nature of the common law, the federal courts are in a better position to update the law. Professor Dan Rosen made a similar argument with respect to intellectual property law in general, arguing that the courts should take a more active role in updating the intellectual property statutes and in determining how new technology fits into the existing statutory structure.152 Building on Guido Calabresi’s thesis that many statutes become outdated long before Congress acts,153 and contending that technology changes much more quickly than Congress is able to account for those changes, Rosen concluded that compared to other decisionmaking institutions, “the courts are the most capable of ongoing updating.”154

Several federal statutory provisions already govern certain aspects of search engine operation.155 Federal courts are certainly capable of engaging in the process of “ongoing updating” and of filling in the gaps between those statutes. Moreover, they are likely to be able to do it more easily than Congress or a federal agency. The political will that it would take to create either a new statutory scheme or a dedi-

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149. Professor Dan Rosen has made this argument in the context of the copyright and patent statutes. See Rosen, supra note 138, at 772 (1984) (“The continuing challenge of intellectual property law . . . is determining whether a new thing is like an old. Put another way, it is the classic problem of the common law: treating like cases alike.”); see also Dratler, supra note 148, at 443 (“The common-law process . . . does not attempt the impossible task of making accurate general predictions about the future of technology . . . . Instead, it develops on a case-by-case basis in tandem with technology and the industry.”).

150. See Rosen, supra note 138, at 770 (examining “the challenges that new technology places on the copyright and patent law systems” to determine whether these “system[s] would be better served by courts taking a more active role”).

151. See, e.g., Dratler, supra note 148, at 434 (arguing, based on the Supreme Court’s Grokster opinion, that federal common law is better than the alternative in addressing multidimensional, technology-driven cases).

152. See Rosen, supra note 138.

153. See generally GUIDO CALABRESI, A COMMON LAW FOR THE AGE OF STATUTES (1982) (arguing that courts should be granted authority to determine whether legislation is obsolete and be able to develop and enlarge common law).


155. See supra notes 126–31 and accompanying text.
cated federal agency is considerable, and thus unlikely.\textsuperscript{156} Although litigation is hardly fast, the process forces the parties to address the facts on the ground. If the original issues become moot during the course of litigation due to reasons such as changes in technology or business models, the parties, and therefore the courts, can ignore those issues.\textsuperscript{157} Agency regulation, on the other hand, tends to “fight the last battle” by addressing older technology.\textsuperscript{158} During the litigation process, new theories, approaches, and facts can be addressed at many, though not all, points. In other words, courts may encounter difficulties in updating the law to account for new technologies, but solutions crafted by Congress and agencies are likely to be even more problematic.\textsuperscript{159}

2. The Flexibility of the Common Law Renders It Less Likely to Inhibit Innovation or Lock in Standards

In the context of regulating technology, the flexibility of the common law approach allows for disputes, important issues, and technology to develop over time and percolate through the system. Because of this, the common law is less likely to inhibit innovation, lock in standards or particular technologies, or otherwise get it “wrong.”\textsuperscript{160} This is not to say that the courts will necessarily get it right, but the risks are fewer and less dramatic than with more centralized regulation.\textsuperscript{161}

\textsuperscript{156} Lastowka, supra note 6, at 1359 (“[T]he notion of an FCC-equivalent organization that oversees results generally seems like a distant prospect. At this point there seems little legal footing or focused political will that might support regulating Google’s results generally.”).

\textsuperscript{157} The common law litigation process is hardly perfect, of course. See, e.g., Dratler, supra note 148, at 435–41 (describing some of the drawbacks of a common law approach to regulating technology).

\textsuperscript{158} The antitrust investigation of Microsoft’s dominance of the operating system market is an example of this phenomenon. See United States v. Microsoft Corp., 253 F.3d 34, 49 (D.C. Cir. 2001) (“As the record in this case indicates, six years seems like an eternity in the computer industry. By the time a court can assess liability, firms, products, and the marketplace are likely to have changed dramatically . . . . [and] innovation to a large degree has already rendered the anticompetitive conduct obsolete . . . .”).

\textsuperscript{159} See Rosen, supra note 138, at 772 (noting the disadvantages of courts updating the law in areas of dramatic change such as technology, but concluding that “the argument for judicial activism is a strong one [since] courts, not legislatures are the bodies with experience in such matters”); see also Dratler, supra note 148, at 453 (arguing in favor of a common law approach to regulating copyright technology, and describing the “demise of Section 512(h) . . . as an early warning to Congress and lobbyists . . . thinking they can predict technology’s future, or imagining that technology will stay put”).

\textsuperscript{160} See Lessig, The Path of Cyberlaw, supra note 136, at 1745 (“[I]f we had to decide today, say, just what the First Amendment should mean in cyberspace, my sense is that we would get it fundamentally wrong.”).

\textsuperscript{161} But see Rai, supra note 93, at 1066–67 (summarizing the conventional wisdom that agencies tend to have superior resources and that agency expertise leads to a greater likelihood of “getting it right”). There is a substantial body of scholarship concerning the most efficient method of rulemaking. Some have concluded that case-by-case adjudication is
The common law is less likely to inhibit innovation for the same reason that it can better adapt to new technology: the “pacing” that it provides is more flexible than other regulatory approaches. Common law rules or principles rarely emerge quickly. This allows for an ongoing dialogue between affected parties and courts over the most hotly contested issues as they develop over time. Professor Lawrence Lessig has advocated a common law approach to cyberspace regulation because of the more deliberate pace of common law adjudication. He considered the arguably inefficient pacing of the common law process to be one of its advantages because the rules that emerge are less likely to be wrong.

Just as Lessig argued with respect to cyberspace in general, over time a common law approach to regulating search engines will allow for a better understanding of the issues involved and ultimately better policymaking. It may be that a statutory structure could emerge based on the knowledge and experience gained through the common law process. At present, though, centralized regulation is relatively less likely to result in sensible policymaking.

We are still in the early stages of search engine technology and the use of that technology. More information and a better understanding of the issues would be quite valuable for a variety of search engine disputes. The issue of search engine bias is a good example. Imagine that a federal agency or Congress set forth a statutory or regulatory scheme for evaluating search engine results, or mandated particular results in response to particular search queries. Even assuming that the scheme could be enacted quickly enough to address the perceived

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most likely to create efficient rules. See Bell, supra note 81, at 1767 & n.105. However, this Article is not concerned with determining the most efficient rule-making process for cyberlaw and technology issues. The common law may not be the ideal form of regulation, but for now it may be the best of a number of imperfect options. Id. at 1751 n.26 (“Note that Lessig advocates common law processes as merely a temporary expedient in the face of our current ignorance over how best to regulate the telecosm.”).

162. Lessig, The Path of Cyberlaw, supra note 136, at 1745 (“Unlike other lawmaking, what defines the process of the common law is small change, upon which much large change gets built; small understandings with which new understandings get made. What counsels it here is the way this process will function to create in an as yet uninhabited, unconstructed, world.”); see also Lawrence Lessig, Reading the Constitution in Cyberspace, 45 EMORY L.J. 869 (1996) [hereinafter Lessig, Constitution in Cyberspace] (discussing the difficulties of constitutional interpretation in the face of new technology).

163. See Lessig, The Path of Cyberlaw, supra note 136, at 1744 (“[T]hat the system of cyberspace regulation will need is a way to pace any process of regulation — a way to let the experience catch up with the technology, a way to give the ordinary language a chance to evolve, and a way to encourage new languages where the old gives out.”). Lessig has suggested that a diversity of judicial viewpoints might help develop the important questions and issues raised in the cyberspace world and has endorsed a moderate kind of judicial activism. See Lessig, Constitution in Cyberspace, supra note 162, at 908 (“The practice of rationalization that cyberspace will launch can be questioned; courts can force us to consider its consequences. Courts can, that is, act strategically to push certain questions to the fore.”).

164. Lessig, The Path of Cyberlaw, supra note 136, at 1745.

165. Id.
right, the new approach is likely to be biased as well. And even if bias were not a problem, the mandated structure might lead to a lock-in of a particular technology or business model, thus having the potential to inhibit or distort innovation in search technology. This is true because to the extent that the law creates a safe harbor of some sort, industry is more likely to stay within that safe harbor rather than to experiment with new approaches. Finally, if an agency or Congress were to establish a rule regarding “acceptable” search engine manipulation, the resulting rule is likely to be tied to a particular technology and to apply to a particular factual circumstance. Even if the result were “correct,” it may be of little practical value to the extent business models or technology have changed and may well hamstring further development to the extent that search companies are risk averse.

3. A Federal Common Law Approach Is Achievable

A final advantage to a federal common law approach, compared to more complex and centralized regulation, is that it is both practical and achievable. A substantial body of federal law applicable to search engine disputes already exists. The federal courts have already addressed a variety of search engine claims and provided a basis on which they can engage in the process of “ongoing updating,” filling in the gaps where necessary. The development of federal common law in the interstices of the already-applicable federal statutes would require a change in the legal approach, but that change would be neither drastic nor overly difficult to achieve.

In addition, the federal courts are well practiced in statutory interpretation and common law development. In applying federal statutes, federal judges regularly interpret the language of the statute in accordance with the common law approach. In addition, judges applying federal statutes also regularly create common law in the course of resolving a dispute. For example, in applying the works made for hire provision of the Copyright Act, the Supreme Court held that the federal common law definition of “employee,” rather than the law of any particular state, governed. Seen in this way, a federal common law approach that builds on existing statutes is not a particularly revolu-

166. See supra Part III.
167. See, e.g., Sean P. Gates, Standards, Innovation, and Antitrust: Integrating Innovation Concerns into the Analysis of Collaborative Standard Setting, 47 Emory L.J. 583, 601 (1998) (“[I]t is well recognized that standard-setting activities may lock in current technology and inhibit innovation.”).
168. See supra notes 132–37 and accompanying text.
169. See Rosen, supra note 138, at 828.
170. See id. at 828 (arguing that “courts will not be imposing their own value choices” when applying the language of existing statutes to new technology, but instead “they will be fitting new technology into the choices already reflected in the statutes”).
tionary idea. The federal courts are certainly capable of doing so without the creation of vast swaths of new law, thus avoiding the difficult political task of either overhauling the existing statutory structure or delegating regulatory authority to an administrative agency.

A federal forum might be achieved in a variety of ways. Congress could — but is quite unlikely to — adopt a statutory scheme, with some preemptive effect, setting forth substantive regulation of search engines. In this case, the federal courts would be forced to apply and interpret that statute and would necessarily develop a related body of federal common law over time. This approach, however, would have many of the drawbacks of more centralized regulation. Congress could also preempt state regulation of search engines without establishing a substantive structure for the resolution of those disputes. Another alternative would involve Congress passing a jurisdiction-conferring statute, tasking the federal courts with resolving these disputes. Under this approach, the federal courts would apply the relevant federal statutes and then could decide whether to apply state law or develop federal common law in the interstices. These two latter approaches are probably easier political tasks than a substantive statutory structure or a new federal agency. The federal courts could also begin to take a liberal view of supplemental jurisdiction in search engine cases and parties could begin to frame their disputes as “search engine disputes,” both of which would put the primary responsibility for resolving search engine disputes in the hands of the federal courts.

The important point, regardless of the specific way in which it is achieved, is that search engine disputes should be resolved in a way that permits the evaluation of numerous claims together with the related policy issues and trade-offs.

The solution this Article proposes relies heavily upon the development of the common law because the statutes in place often do not speak directly to the questions raised in search engine disputes. Thus,
relying on extant statutes would require both interpretation in their application to particular cases and common lawmakers in the gaps between the statutes. This might include the creation of a federal common law in certain cases. It might be necessary if, for example, the courts must interpret aspects of federal statutes \(^{176}\) or if the benefits of a uniform approach outweigh the states’ interests. \(^{177}\) If the federal courts treated these disputes categorically as search engine disputes and adjudicated them by applying existing federal statutes where relevant and filling in the interstices with federal common law, they would be much more likely to undertake a rigorous and comprehensive evaluation of the various doctrines, issues, and policy concerns implicated in search engine disputes. The common law approach would allow some of the most difficult issues to percolate over time in different circuits. It would also permit a fact-intensive approach that risks some inefficiency but is much less subject to capture, is more adaptable to changing technology, and perhaps is less likely to hinder innovation than agency regulation.

**B. A Federal Forum Compared to the Current Approach**

As noted above, the arguments here are relative ones: a federal forum has significant advantages over a highly centralized regulatory scheme, but it is far from perfect. Likewise, this approach has important advantages over the current regulatory scheme, but again it is not ideal. Vis-à-vis the current patchwork approach, some degree of centralization — without going so far as to establish an entirely new regulatory scheme — is likely to allow for more comprehensive and predictable policymaking. This approach might in fact result in less regulation than the patchwork approach in that there would be fewer decisionmaking entities and therefore fewer legal interventions.

1. Comprehensiveness

As discussed in Part II.C, the current approach does not promote comprehensive policymaking. Under a federal common law approach, the federal courts may or may not end up developing a body of search engine specific law, but the important element of this approach is the ability of the federal courts to evaluate most aspects of a search en-


177. See, e.g, Llewellyn Joseph Gibbons, *Stop Mucking Up Copyright Law: A Proposal for a Federal Common Law of Contract*, 35 Rutgers L.J. 959, 963 (2004) ("As copyright works become increasingly integral to domestic and foreign trade, the development of efficient markets will require a uniform body of contract law. The preferred solution is to have the federal courts create a common law of contract in order to create a coherent body of law to govern copyright transactions.").
ginge dispute at the same time. Ideally, the federal courts would begin to treat the disputes as "search engine disputes." In other words, the federal courts (and not just academics) should be having a conversation about search engine law and policy.

There are numerous instances in which it would be helpful for a court to consider a whole variety of claims together and to develop an understanding of the policy issues and trade-offs involved that may supersede the application of a particular doctrinal approach. Professor James Grimmelmann provides a thorough description of the many overlapping and conflicting issues raised in search engine disputes. As he makes clear, the parties in search engine disputes rely on a variety of legal claims, and these claims often serve as functional substitutes for each other. When this is the case, it is important for the decisionmaker to consider as many aspects of a particular dispute as possible. Doing so ought to result in an assessment of conflicting policy concerns and intersecting doctrinal issues. A federal common law approach, as compared to the current patchwork of unrelated interventions, will at least permit the evaluation of the various "strands of search engine law together."

If a content provider is unhappy with Google’s crawlers and spiders indexing its site and is also unhappy with its placement in the results for certain search queries, it might bring claims against Google for trespass to chattels (for the spiders’ "invasion" of the site), breach of contract (for violation of the browsewrap agreement), copyright infringement (for caching copies of the site on its servers), and trademark infringement (for the use of its trademarks in keyword advertising). Some of these claims are potentially separate legal wrongs for which there should be separate liability and recovery; some of them, however, may be functional substitutes for the others. These various claims implicate a set of larger policy issues: What role do search engines play in our economy and our politics? How do we encourage search engines to do the good that they do, while minimizing the very real risks that they present?

178. See Grimmelmann, supra note 8, at 4 (arguing that "the concerns [about search engine disputes] discussed in this Article must be balanced with one another because each relates to the same few information flows. Pushing on one affects the others.").
179. Id. at 52–53 ("Multiple legal lines of communication exist between search engines and other parties. Those concerned with one particular form of harm are not limited to legal theories directly addressing that harm. If they can gain relief against a search engine on another theory, it may be just as good. Wherever in law this multiplicity appears, it raises a concern that parties not be allowed to subvert one doctrine by appealing to another.").
180. Id. at 54 ("Lawyers in search engine suits will not respect boundaries between legal fields when framing their cases. Those who make law and policy for search engines must be alert to these overlaps and end runs. Considering the various strands of search engine law together will help make such possibilities clear.").
181. Id.
182. See generally id. at 24–27.
These broader questions are more likely to be addressed if search engine disputes are brought in a single forum. Parties will be more likely to raise a multiplicity of issues and claims, and courts will be more likely to consider them. This is certainly true as compared to the current approach in which the various decision-making bodies have little incentive, and perhaps no authority, to consider the overarching and cross-cutting issues. If search engine disputes were consistently resolved by the federal courts, the judges and the parties would be more likely to address the various cross-cutting issues involved, rather than merely applying a particular doctrinal framework. For example, if keyword trademark lawsuits or search engine manipulation claims were brought only in the federal courts, there would be varying results from different districts, but the variation would be less (assuming that state courts and state legislatures were not also involved), and the possibility for consistent and predictable results would emerge over time. As the various federal district courts resolve these questions over time, the most highly contested issues would become ripe for the Supreme Court or, perhaps ultimately, Congress to address.

Other issues that arise in search engine disputes also cut across a variety of doctrinal and policy categories and thus require a comprehensive evaluation if they are to be resolved sensibly and thoughtfully. The competing concerns of transparency in search engine results, which is of great interest to users as well as content owners, and the directly correlated issue of search engine manipulation are particularly knotty. There are very good reasons to require search engines to disclose their algorithms or other methods for arriving at search results.183 At the same time, the more transparent those methods are, the more manipulation occurs and the less useful the results become.184 In responding to claims of search engine bias, search engine companies have asserted that search engine results are protected speech. In Search King, Inc. v. Google, the plaintiff brought a claim for tortious interference with contract, and Google’s defense was that its search results were statements of opinion and therefore protected.185 In a case like this, there are overlapping authorities each with some jurisdiction: federal courts, state courts, state regulators, federal regulators, and Congress. And there are overlapping substantive issues: traditional and non-traditional trademark claims, free speech concerns, and fraud and unfair competition allegations. It would be both more efficient and more effective to consider all of these claims and corresponding issues and policy considerations to-

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183. See Bracha & Pasquale, supra note 10, at 1202–06.
184. See id. at 1203; see also Goldman, Deregulating Relevancy, supra note 10, at 536 (discussing the reasons why search engines “constantly change their relevancy algorithms”).
The federal courts are more likely to do this if their jurisdiction over these disputes is exclusive (or substantially so).

With respect to advertising disputes as well, the concerns in the search engine context cut across a variety of doctrinal and jurisdictional areas. One persistent issue is the propriety of one entity using the trademark of another entity in its metadata or as a keyword triggering its own advertising. These uses generally are invisible to consumers and have thus presented various new problems for trademark law. The state courts, the federal courts, state legislatures, and the FTC have all responded in some way to these disputes. The Utah legislature passed a statute prohibiting the use of trademarks as key words in advertising. In addition, the FTC has taken a few tentative steps toward regulating the use of key words in advertising. All of these strands of law and authority overlap in discussing the question of whether a search engine may permit advertisers to use a competitor’s trademark as a keyword that triggers the placement of an ad, and whether and how the search engine may use that trademark in considering what search results to return.

These issues, and many others, are better addressed in the context of how search engines operate and how people use search engines rather than within any existing doctrinal framework. A federal common law approach, in which search engine disputes are resolved as a matter of federal (statutory or common) law is more likely to promote and permit a comprehensive evaluation of these issues. Granted, it is probably less likely to provide a comprehensive approach than agency regulation, but, as discussed, the federal common law approach does not have some of the drawbacks of agency regulation.

2. Predictability

In addition to providing an opportunity for a comprehensive evaluation of search engine disputes, a federal forum is likely to bring a somewhat greater degree of consistency and predictability to the law than the current patchwork of legal interventions. Although there is

186. See Grimmelmann, supra note 8, at 56 (discussing the cross-cutting issues involved in resolving questions about search engine bias and concluding that “[c]onsidering one without considering the other would be reckless”).
187. See supra Part II.C.
188. For a discussion of the trademark issues raised by advertising in connection with search engine results, see Lastowka, supra note 6.
189. See supra notes 50–51 and accompanying text.
191. See, e.g., Dratler, supra note 148, at 426 (“[P]erhaps paradoxically, analogy and distinction when properly applied can create greater certainty than application of an abstract rule.”). With respect to copyright law, at least, Dratler urges that “it is preferable to have technology-independent copyright legislation based on broad, general principles with a faint hope of remaining timeless, at least in the medium term.” Id. at 429.
no guarantee that judges will resolve questions in the same way or that a uniform body of search engine law will develop, if the disputes are resolved in a single forum there is a greater chance of this occurring. The exclusive application of federal statutory and common law allows courts to avoid the thorny choice of law problems that tend to arise in search engine disputes.192

Any consistency and predictability will develop slowly, but there will be beneficial side effects to this slower pace of development. It will take time for the various search engine disputes to trickle through the system. Few of them will go to trial, and even fewer would result in appellate opinions. However, this will be better than the existing, patchwork system, as federal courts will be able to refer to the larger body of nation-wide federal court precedent. Federal courts may come to diverse results. This would create a “laboratory” of search engine law within a single federal system in which federal courts could experiment with different approaches to solving search engine disputes. In fact, a similar, expanded laboratory might be a better approach to regulating technology generally. As described above, there have been calls for such an approach, and search engine regulation would provide a test case for this theory.193

One possible criticism of this federal approach is that “search engine disputes” is not a useful legal category. More than ten years ago, Judge Frank Easterbrook famously mocked the study of the law of “cyberspace” as being as misguided as the study of the “law of the horse.”194 It would make no sense, he argued, to have a law of the horse because of the variety of legal doctrines that might arise and the substantial possibility that “horse” is not the proper lens through which to view tort or contract or real property law.195 For Easterbrook, “[o]nly by putting the law of the horse in the context of broader rules about commercial endeavors could one really understand the law about horses.”196 According to Easterbrook, cyberlaw, like the law of the horse, is not worth studying. Instead, he suggests, “[d]evelop a sound law of intellectual property, then apply it to computer networks.”197

192. Choice of law problems are not unique to Internet disputes, but the problems may be particularly acute in this area. One or more browselockwrap or clickwrap agreements, as well as the law of numerous states, may putatively control jurisdiction and choice of law issues in many search engine disputes.
193. See supra notes 17–22.
195. Id. (“Far better for most students — better, even, for those who plan to go into the horse trade — to take courses in property, torts, commercial transactions, and the like, adding to the diet of horse cases a smattering of transactions in cucumbers, cats, coal, and cribs.”).
196. Id.
197. Id.
Professor Lawrence Lessig responded to this argument.\textsuperscript{198} Lessig agrees that the law of the horse might not be a useful line of study, but he points out that there could be value in thinking “about how law and cyberspace connect.”\textsuperscript{199} With respect to cyberspace, he argues, “[w]e see something when we think about the regulation of cyberspace that other areas would not show us.”\textsuperscript{200} Like cyberspace generally, search engines, as a significant component of cyberspace, present problems that are new in kind, degree, or both. An examination of the thing (cyberspace, horses, search engines) may be very useful in telling us about the regulation of the thing. It is not that we need a separate law of search engines but that an analysis of the ways in which law may affect search engines or be applied to search engines requires a broader lens than a particular doctrinal approach. To ignore what makes search engines different is to sacrifice the possibility of effective policymaking.\textsuperscript{201}

V. CONCLUSION

Something may be gained by thinking about search engine policy in a broad sense. This notion is likely what has prompted calls for agency or other highly centralized regulation. However, such regulation is problematic in a variety of ways, and is not the only way to achieve some measure of comprehensive policymaking. The option at the other end of the spectrum — market discipline — is unsatisfactory as well. In seeking an alternative in this polarized debate, this Article has proposed a federal common law approach that allows for some of the advantages of centralization without incurring all of its costs. The approach outlined here is a pragmatic and relatively low-risk option: it is unlikely to be worse than the current patchwork approach and is likely to be a substantial improvement.

\textsuperscript{199} \textit{Id.} at 502.
\textsuperscript{200} \textit{Id.}
\textsuperscript{201} See Grimmelmann, \textit{supra} note 8, at 5 n.7 (discussing Easterbrook and Lessig’s disagreement and stating that “[s]earch engines are more important in the consideration of what law should do than in the consideration of what law is”).