Searching for a Rationale for Search Design Policy[†]

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I. Introduction

In the last ten years, Google has repeatedly come under the spotlights of antitrust authorities in the U.S., in Europe and in other countries.[1]

The recurring allegation concerns the display of search results in favor of Google's own vertical search services at the expense of a number of competitors. The charge addressed is technically for discrimination. While Google's ranking and display of certain types of search results are organized in a way that is specifically oriented to satisfy consumer attention and interests, the allegation is whether such search design policy risks diverting traffic from competition services, thereby foreclosing competition.

Of course, under the EU antitrust framework, an antitrust concern may arise if and to the extent that competition online is feeble and market power is persistent, if not stable. In such context, the debate is fueled by sharply divided opinions, from those who argue Google dominates the online world to others who see many competitive constraints on Google's conduct from companies like Bing, Amazon, eBay, DuckDuckGo, Yelp and Allegro, and who also argues that any search engine shall be free to make choices about the information and recommendations it provides to users for that information to be of any help in responding to their questions. Some have even been suggested that Google should be treated as an essential facility, however several academics, such as Mark Jamison, Eric Goldman and Marina Lao, believe that treating Google as an essential facility would be inappropriate.[2]

The way the whole debate unfolds today strongly echoes what happened over the last decades. Some ten years ago Microsoft (at that time the dominant player in the market for operating systems on PCs) ended up defending itself before antitrust authorities in its own country and in Europe. Before Microsoft, IBM faced antitrust challenges on the

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[1] Investigations against Google are open, or have been open, in USA (including Texas, Massachusetts and Delaware), Italy, Belgium, France, Brazil, Germany, Austria, Korea, UK, Switzerland and India. The EU, US (FTC), India, Taiwan, Brazil, and Canada are the main jurisdictions that have looked at search. An account of the antitrust issues that involve Google is provided by M.A. Carrier, *Google and Antitrust: Five Approaches to an Evolving Issue*, Harvard Journal of Law & Technology Occasional Paper Series, 2013.

[2] One of the first arguments against Google was indeed about the nature of its service as an essential facility, which would have compelled a duty to share. The arguments, and its inconveniences, are dealt with in details by M. Lao, *Search, Essential Facilities, and the Antitrust Duty to Deal*, 11 *Northwestern Journal of Technology and Intellectual Property* 275 (2013).

market for computers.[3] As the years go by, the digital disruption has dramatically revolutionized the online ecosystem: technology becomes more complex, digital markets more interconnected, and antitrust actions more problematic. Many arguments now raised in the Google saga (*e.g.,* the opportunity of an antitrust enforcement in high-tech and fast-changing markets driven by pioneer innovations) do not sound new at all. But there are marked differences between the Microsoft and IBM cases on the one hand, and the Google case on the other hand. For example, the Microsoft and IBM cases involved conduct that excluded rivals, while in this case the identification of rivals is questionable because of the very mobile boundaries of the relevant market[4]. Moreover, market dynamics – such as network effects and then still limited distribution channels for technology given the absence of the Internet – made it difficult for rivals of IBM and Microsoft to gain access to consumers, something that may not be present in search. What is more, while Microsoft effectively eliminated its rival Netscape Navigator, most of the rival shopping and local search sites that Google is allegedly wrongfully diverting traffic from in its search results have grown and been very successful. Thus, it is not always easy to port over antitrust principles from the past.

The question that should be immediately asked is whether, faced with the radical changes that the internet has brought to markets and social life, antitrust principles and paradigm of analysis can still be applied as if we were dealing in a world of brick-and-mortar assets. We provide arguments to support a different view, proposing a consistent framework of analysis that considers all the relevant dimensions of Google's search strategies and their evaluation in light of current European policies on market regulation, particularly antitrust.

This paper is organized as follows. In order to correctly frame the problem under the EU relevant framework, in paragraph II.A we briefly summarize the terms of the European allegation, having as object the search design policy followed by Google and not its algorithms, nor its application. In paragraph II.B we review platform structure and dynamics with the intent to verify whether and to which Google is subject to significant antitrust constraints and faces a relevant competitive pressure. Paragraph II.C is devoted to market definition, having in mind that Google have revolutionized the way as search space are allocated in order to meet consumer expectations and merchants' interests. In paragraph III we question whether European competition rules, sub specie abuse of dominant position, provide for appropriate instruments and remedies to deal with search design policy. Paragraph IV focuses on a peculiar dimension of European antitrust enforcement, that is to say the trend to pursue antitrust violations by limiting the analysis to behaviors that are deemed to restrict competition by object, while an effect-based analysis is inevitable in cases such as Google's. Part V briefly reviews the arguments regarding the institutional dimension of antitrust enforcement at the European level in non-traditional, high-tech, fast-changing markets. Part VI sketches a preliminary conclusion. We support the view that an antitrust case in internet search services, as outlined by the European Commission, is hardly sustainable since many constituents are missing and do not necessarily fit the current European antitrust setting.

[3] M.A. Carrier, *Google and Antitrust: Five Approaches to an Evolving Issue*, in Harv. J.L. & Tech., 2013, 1, recalls the timeframe of antitrust actions against the technological giants: IBM in the 1970s, Microsoft in the 1990s, and Google from 2013.

[4] Indeed, it seems that the Commission alleges the favoring of Google's own results above those of competitors, not the demotion of competitors per se.

II. The European perspective

A great deal of academic work in the U.S. has been carried out around the debate on search design and the accusations against Google, but most authors have been cautious in limiting their analyses to the U.S. legal system, while acknowledging the still fluid situation in Europe. [5]

This paper aims to contribute to the current debate at the European level.

The topic is relevant and timely, since the European Commission has issued a Statement of Objections against Google, alleging a possible abuse of dominant position «in breach of EU antitrust rules, by systematically favoring its own comparison shopping product in its general search results pages in the European Economic Area». As to the fact sheet of the European Commission, the concern is that «users do not necessarily see the most relevant results in response to queries to the detriment of consumers and rival comparison shopping services, as well as stifling innovation»[6].

This statement by the Commission seems to underlie a prohibition of discrimination, under European antitrust rules, that altering the vertical search services (shopping sites) dynamics. But all the underlying assumptions must be proven and not just stated.

A. Framing the problem: search design policy

In order to correctly frame the problem, there is a preliminary issue to address.

The charge against Google search options is one of "search design policy": in fact, what is questioned, is "how" Google allocates its space on its general search results pages. On the other hand, the algorithms used by Google to produce and display its results - including those ones that may have the effect of lowering a number of comparison shopping services in the Google search ranking – are unquestioned and even confirmed.

As known, charges against Google originate from complaints made by a number of companies (not only direct competitors of Google, but also publishers, specialized ecommerce websites and others). They insist on the fact that Google distorts results, so that after the user launches a query, the results include not just blue links that direct users to other websites, but also informational content that, in some instances (or even "systematically", as the Commission claims), comes from Google services[7]. In this way, so the argument goes (but it proves too much), users are unnaturally guided to Google's services and sites at the expense of competitors, which will lose traffic, attention and

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[5] And rightly so. Indeed, the case might yield (and so far it has) different results on either side of the Ocean. First of all, because Google's market share – a crucial and prejudicial element to defining market dominance or monopolization – can possibly be different in the U.S. market vis-à-vis the European market (or even other geographical markets, as the case may be). Secondly, because antitrust authorities in the U.S. and in Europe have shown different institutional approaches to antitrust enforcement in high-technology markets. Thirdly, because the very antitrust goals – and, consequently, the paradigm of analysis – can be different, with European antitrust still wanting its own identity in terms of aims and purposes. A peculiar position is held by B. Edelman, *Does Google Leverage Market Power through Tying and Bundling?*, _ Journal of Competition Law & Economics 1, 2 (2015) (no particular set of legal rules are applied since practices occur worldwide).

[6] European Commission, Fact Sheet, *Antitrust: Commission sends Statement of Objections to Google on comparison shopping service*, April 15, 2015.

[7] About the evolution of Google's results page since 2006 (when results pages showed just organic results and keywords ads), see E. Goldman, *Revisiting Search Engine Bias*, 38 *William and Mitchell Law Review* 96, 102 (2011).

money, and will eventually exit the market. In other words, the accusation is that Google is using its alleged dominance in Internet search to improve its position in related services that Google offers, such as shopping results, local results, or maps etc.
To put it simpler, the allegation is not about "whether" the results provided by a search engine shall be the plain and automatic results of a given search algorithm. It is about the fact that Google shall make available space on its general search results pages to its competing comparison shopping service (among which Kelko, LeGuide, Shopping.com, Nextag and Twenga, 7pixel, Axel Springer, Ceneo, Beslist) under the same conditions, and so notwithstanding the limited amount of space available on the general search results pages.
One can seriously wonder whether shopping results, local results or maps are really distinct services (for antitrust purposes) from other search outcomes. Each type of result, after all, is meant to answer a user's query. Indeed, all general search engines have evolved to include their own content like maps, shopping and local information (in addition to links to third party websites) for the very purpose of answering users' queries more directly rather than only sending users off to other websites to try to find those answers there[8].
In this respect, there is an issue that has not come to the surface, and is yet a crucial one, is what internet users and consumers think about Google search services and their experience when retrieving information. This topic has gone unaddressed but at some point of the analysis (and of the investigation) it needs to be seriously taken into account. So far, all that can be said about consumers is that they have decreed Google's success over other companies; as a matter of fact, when Google entered the market, other search engines were available and Google's current position is the result of technological innovation. The accusation seems to be premised on the fact that this innovation progressively became somehow market dominance and it is now being used for exclusionary purposes.
Before the European Commission issued the Statement of Objections, Google had offered a commitment to close a possible case and proposed changes to its search results pages, following a potential alternative path that proved very effective before the Federal Trade Commission when the case was initiated in the United States and quickly settled. The proposal was a possible alternative way a search page can be reframed and organized in order to reinforce transparency and reduce information asymmetry on one hand and in order to show competitors' results
Of course, evidence is required at all possible interfaces of this legal discourse, about the relevant market and market dominance, about abuses and about the possible economic justifications.
In order to fully understand what search manipulation is supposed to be and if it really exists, an explanation of the market for search services is needed at this point.[9] Later on, the following analysis we will apply the principles of European competition law to Internet search to eventually determine whether Google's technological design of its search engine could plausibly give rise to an antitrust violation and if so whether European competition law would intuitionally equipped to adequately remedy.

[8] For a different view, Edelman, *supra* note 4, at 9, 33.

[9] The complexity of search engines and their regulation from a legal perspective comes from the fact that they are technically the interface of many strands. A note of caution, as well as a comprehensive description of how search engines work is provided by J. Grimmelmann, *The Structure of Search Engine Law*, 93 Iowa L. Rev. 1 (2007).

B. Search engine dynamics and competitive pressure

Google, as a search engine, offers free search services to users, who actually do not pay for what they get. The search engine is powered by the PageRank algorithm. Google's business model is based on selling the attention of the search engine's users to companies willing to advertise their product through Google's results page.[10] Google as a result monetizes the search service by selling advertisements that are displayed on Google's general search results pages. Paid advertisement is the service agreed upon by Google and its business customers[11].

There is debate around the correct definition of Google's market as two-sided; as a matter of fact, acting as matchmaker between queries and potential answers, and charging only advertisers and not users for the use of its platform is a multi-sided service that works to balance supply and demand. Sure enough, the ability of Google to charge advertisers and their willingness to pay both depend on how much attention they receive and eventually on the number of users that turn to Google for free searches. The antitrust implications of the two-sided market theory, although fascinating in industrial organization, are still unclear and its use has been inconclusive before the European antitrust authorities (and by the European Court of Justice) in recent cases[12]. Yet, the two-sided markets dynamic is important and should be part of the framework.

First, it means that Google's search business not only competes with other general and specialized search engines (e.g., Bing, Yahoo!, Amazon, Ebay, Twenga, Foundem, Yelp, TripAdvisor), but also with many other platforms attracting user attention with content in order to sell advertising (or, for example, hardware, in the case of Apple), including social media (e.g., Facebook, Instagram, Twitter, SnapChat, Vine, Pinterest, Linkedin, Tumblr),[13] popular websites (e.g., Yahoo!, MSN, BBC, ESPN), music discovery and streaming applications (e.g., Spotify, Pandora, iTunes Radio), offline and online video and television, offline and online newspapers and many other content providers.

Second, it means that if Google does not continue to offer users the most relevant and useful information as promptly as possible in response to their queries, users will start turning to alternative sources of information. This is especially so as consumers increasingly spend most of their online time on mobile devices, finding information through their virtual personal assistants (e.g., Siri for Apple users, Facebook's M and Cortana for Microsoft) and mobile apps (e.g., shopping and price checking apps like Amazon's and eBay's Shopping and Price Check Apps; local business search and review

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[10] This position is advocated by M.S. Gal, D.L. Rubinfeld, *The Hidden Costs of Free Goods: Implications for Antitrust Enforcement*, available on www.ssrn.com

[11] Google sells advertising space on its web properties (as well as third party web properties), including sponsored search results at the top and right hand side of its search engine results pages. When a user enters a query, the search engine returns so-called organic, unpaid search results, as well as sponsored (i.e. paid) search results. Google always clearly identifies which search results are paid by placing them at the top and left of the search engine results page and indicating that they are sponsored. Google's organic and paid search results are governed by different algorithms and policies.

[12] European Court of Justice, September 11, 2014, C-382/12, *MasterCard Inc. v. Commission*. Recently, L. Filistrucchi, D. Gerardin, E. van Damme, P. Affeldt, *Market Definition in Two-Sided Markets: Theory and Practice*, 10 Journal of Competition Law & Economics 293 (2014), have tried to explain the reason courts failed to correctly understand the dynamics of two-sided markets.

[13] Goldman, *supra* note 7, at 100, has pointed out how Facebook and Twitter do not compete directly with Google for keyword searches and yet they compete with Google for «user mindshare».

apps like Yelp's and TripAdvisor's apps; social media apps like Facebook, Instagram, Twitter etc.), rather than web browsing and searching. As TechCrunch recently observed, «[t]he future of search looks a lot like Facebook's M» and «Facebook's M is just one of the contenders for the future of search».[14] Advertisers, who follow the users, in turn will spend less of their advertising budget on Google's search results pages. Google's revenues and profits will thus decline to the extent the quality of its search engine and results declines.

To provide users the most relevant and useful information in response to their queries, search providers need to design their search engines to interpret what a user's intent behind a query is and, based on that interpretation, deliver to the user the most directly responsive information available. Google has to do that for billions of queries every day,[15] from different users, in different parts of the world, in different cultures and languages. That inherently requires the search provider to determine what it deems relevant and useful information in light of any particular user query, which is an extraordinarily complex process. To illustrate, Google's search algorithms are based on more than 200 factors.[16] And, because search engines can never know the user's intent with certainty, search engines always deal with probabilities, not absolute truths.[17] Part of differentiation between more and less relevant online content also has required search engines to take measures to counter so called "link farms" and "spam logs", which are web pages designed to manipulate high search engine ranking without any relevant content of their own.[18]

Evidently, the way the service is organized and works is good for users. Being otherwise, consumers would have the freedom to switch easily to other search engines or services that can provide answers, exactly as they did when Google first appeared on the market

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[14] See Facebook's Messenger And The Challenge To Google's Search Dominance http://techcrunch.com/2015/09/07/facebooks-messenger-and-the-challenge-to-googles-search-dominance/

[15] http://www.internetlivestats.com/google-search-statistics/.

[16] *See, e.g.*, J. Grimmelmann, *Some Skepticism About Search Neutrality*, THE NEXT DIGITAL DECADE 435, 455 (2010), http://james.grimmelmann.net/files/articles/search-neutrality.pdf; *see also* http://www.google.com/insidesearch/howsearchworks/algorithms.html.

[17] While truth tends to be the same, almost by definition, probabilities change and the algorithm that provides results needs adjustments to constantly reflect modification in the magmatic informational base of the search engine and to meet users' expectations. There is evidence of the functioning of search services also in the Stanford patents that cover the search algorithm; see, for instance, US patent 8,131,715, *Page*. Absence of a normative standard for truth in searches prevent a judgement of true or false with respect to results. On the absence of such normative standard see M. Lao, *"Neutral" Search As a Basis for Antitrust Action?* In *Harvard Journal of Law & Technology Occasional Papers Series*, 2013, 3. If search results are 'credence' good, as some authors have suggested, then there is also an inherent difficulty for the provider (and not only for the user) to measure ex post the utility of the information retrieved. The argument of credence good (although against Google) was firstly used by M.R. Patterson, *Google and Search-Engine Market Power*, Harv. J.L & Tech, July 19, 2013.

[18] See, e.g., http://searchengineland.com/google-forecloses-on-content-farms-with-farmer-algorithm-update-66071 . The need to change the results come also from the liability of Google as service provider, that requires to intervene, for instance, when a website posts content in violation of third parties' copyright or when illegal content is displayed. Google itself recognized that such activities are carried out and that websites that systematically infringe copyright are downgraded in the rankings; see the blogpost of Google at the following URL: http://googlepolicyeurope.blogspot.co.uk/2014/09/dear-rupert_25.html (last visit, August 28, 2015).

and displaced incumbents. In this respect, competition is really still one click away and even more so: switching costs for users are negligible.[19]

Even after Google's entry, online search has been characterized by significant changes and innovations. One improvement in online search has been the evolution towards providing users direct answers to their queries, in addition to the more traditional links to other websites. It is largely this integration and evolution in the design of search engines that has prompted the antitrust complaints against Google by some of its competitors. Yet, such vertical integration and product design is typically procompetitive, for example, because it reduces clicks and search time for users, and is more directly responsive to their questions. What's more, it is not just Google that has adopted this design. All search engines follow that model, including Yahoo! and Bing. This confirms that the design is perceived as a user-friendly one that makes the service more attractive. For example, as the head of Yahoo!'s search strategy already observed in this regard in 2009: "[p]eople don't really want to search ... Their objective is to quickly uncover the information they are looking for, not to scroll through a list of links to Web pages."[20] Without such constant improvement and evolution, a search engine will quickly fall out of favor with users.

The internet is an expanding universe, with content that changes continuously and is continuously enriched and modified. Moreover, website administrators are constantly active to improve visibility of their sites, through search engine optimization (SEO) techniques.[21] In a sense, all internet users are responsible for its continuous modifications and Google is responsive to changes[22] and constantly offers new features to its search engine to improve it.[23] In this perspective, any strategy of attraction and retention is based absolutely on the quality of the service provided (valuable not per se, but for the ability to then sell advertising opportunities), which in the case of internet services is relevance. If results are not relevant, users move away with just a click of their mouse, traffic slows down and the ability to sell their attention and traffic decreases.

C. Search design and market boundaries

These preliminary issues about the services provided by Google require a little side discussion regarding market definition as a necessary step in antitrust analysis. Although this specific topic will also be discussed later, it is necessary to touch upon it here to complement the explanation of search bias and in interpreting some of Google's behaviors.

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[19] Lao, *supra* note 17, at 7 («Unhappy Google users can instantly switch to another search engine, such as Bing or Yahoo!, without incurring any penalties or costs»). In this respect, the accusation to Google to preset its search engines as default system on browsers sold by OEM in computers and other devices seem exaggerated; changing the default engine is easy and inexpensive even for the least experienced internet user. On low switching costs in digital environment as opportunity for new entrants to solve informational needs, Goldman, *supra* note 7, at 101.

[20] James Niccolai, Yahoo! Vows Death to the "10 Blue Links", PCWorld (May 19, 2009), http://www.pcworld.com/article/165214/yahoo_vows_death_to_blue_links.html.

[21] Being otherwise, the internet would be dominated by companies with powerful and smart IT departments, displacing smaller companies with superior products or services, but reduced IT resources to gain visibility on the web.

[22] Google, for example, makes more than 500 changes to its algorithms every year (see Grimmelman, *supra* note __, at 455).

[23] See http://www.google.com/insidesearch/howsearchworks/algorithms.html.

Complainants have argued that Google holds a dominant position in the market for general search. A position that appears to indicate the complainants believe search engines are the only viable solution to the information retrieval problem[24]. This same argument leads to the conclusion that Google is the gateway to the internet. This position ignores important facets of online markets.

Online searches today are possible in different ways. First of all, users typically spend more time using their smartphone than their PCs or tablets. This is important because smartphone users have access to information through their virtual personal assistants, such as Siri for Apple users and Cortana for Microsoft, Similarly, Apps are now bringing vigorous competition to search services in a more specialized and pervasive way; providers of vertical services (such as price-matching, online ticketing, hotel reservation, etc.) all have their apps available on a number of platforms. Third, social media platforms, such as Facebook or Twitter, are becoming active in facilitating access to information for their users.[25] If it is true that Google is complementing its services with direct content, it is no less true that social networks are also becoming a source of information.

Increasing inter-platform competition seems to characterize retrieval of information over the internet. These dynamics compel us to ask a number of questions. First, of all, what is the correct current perimeter of the market? Second, and most importantly to our purposes, what are the legitimate strategies of any firm (and, particularly, a dominant firm) if the competitive scenario is changing rapidly? Third, even if Google has to interact with results to ensure relevance, is this something that can qualify as bias or is it just part of the inevitable way each search engine works? Providing a final answer to these questions goes beyond the purpose of this paper, but contributing to the correct reading and qualification of the framework in which to answer them is precisely its aim.

As to the first question, the search results Google offers are not stand-alone free goods; no one could afford to provide such free results without some form of monetization. At a minimum, the market definition should include the market for ads as the one that is generating revenues and not be limited to the search service as such. Some authors have shown that companies allocate their budget for advertising differently today, moving resources from online to offline services. This circumstance would add a further level of complexity in the definition of the market, as it somehow requires taking into account the substitutability of services. Off line advertising is putting pressure on online advertising services, not so much as to conclude that there is only one relevant market for advertising, but enough to admit that competitive forces are unexpectedly at work and can become an external constraint to the behavior of firms in online services.

If actual and potential competition is stronger than expected, due to off line services and to an expanded list of online services, any firm in the market for searches would need to reconsider its strategies, by rationally improving quality as a primary goal. Excluding competitors would be a naïve objective when the whole set of competitors proves to be quite big and diverse (ranging from alternative search engines, to online travel agencies,

[24] Authors have expressed extremely different views about Google's dominance. According to Edelmam, *supra* note 4, 16, Google has significant market power in the search market. More dubitative is Lao, *supra* note 17, at 6. As a matter of fact, a clear showing of Google dominance is missing.

[25] Goldman, *supra* note 7, at 100, has pointed out how Facebook and Twitter do not compete directly with Google for keyword searches and yet they compete with Google for «user mindshare».

just to name a few). But adjusting product design in some instances can qualify as a legitimate reaction to increasing competitive pressure and not necessarily as abuse.[26]
Indeed, as also explained in a post by Google's Senior Vice President for Google Search Amit Singhal[27], Google evolved its model not just by providing a set of links on a flat web page, but bringing to the results the information users would likely need when Google was confident it could display a good answer to the user's question. In the older format, reaching this information would have required navigating to one or more links. From an antitrust standpoint, this evolution in product design, and new models within this industry, should challenge the traditional view regarding dominance, since market definition cannot overlook the variety of search opportunities and the competitive pressure put on Google by alternative service.[28]
Overall, what Google does is improve the user experience, by shortening the distance between the query and the answer, when there is a strong likelihood that Google can provide directly, in the search results, what the user is looking for (*e.g.*, the price of a plane ticket). In doing so, Google does not change the nature of the service, which is based on the predictive power of the algorithm *and* on the quality of results. Because of the nature of the internet and the extreme variance of users' expectations, Google has to interact with results through its algorithm and organize answers in a way that always tentatively matches users' preferences. If the algorithm learns relationally by users' choices, this is part of Google competing on the merits, not its fault or its liability.
Moreover, the shift from the "ten blue links" model to an integrated web service entails more editorial responsibility; quality (which means, relevance) matters more now than in the past. Again, the fact that Google is also active in some vertical services does not alter the substance of the analysis.[29] Failure to provide relevant results would doom Google, just like any other provider of search services. If this holds true, systematic preference of Google's vertical services on Google's page of results is economically irrational.[30]
Google and all other search engines only implicitly promised (as a condition of survival and as a value proposition to users) to do their best to identify, rank and display what they believe is the most relevant information in response to a user query.[31] And, since there is no single truth or single best or neutral way to rank or display search results, search engines in fact compete with each other exactly by differentiating themselves with respect

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[26] See D.A. Crane, *Search Neutrality as an Antitrust Principle*, Public Law and Legal Theory Working Paper Series No. 256, 2011, 6 («Unless the search engine is to remain stuck in the ten blue links paradigm, search engine companies must have the freedom to make strategic choices about the design of their services, including the decision to embed proprietary functions traditionally performed by websites in the engine's search properties»). See also Lao, *supra* note 17, at 11 («Preventing general search engines from organically transforming themselves would only artificially interfere with the natural process of competition that is occurring»).

[27] See http://googleblog.blogspot.it/2015/04/the-search-for-harm.html (last visit, August 28, 2015).

[28] Crane, *supra* note 26, at 5, questions the opportunity to now distinguish search and content, if eventually also a results page is a webpage that carries vertical information to users.

[29] This does not mean that Google does not become a competitor for providers of vertical searches; the shift from a mere search engine to a website (something referred to as "portalization") changes the nature of the relationships between Google and third party web sites (see Goldman, *supra* note 7 , at 103).

[30] This argument was obviously advanced by two Chicago scholars like R.H. Bork, J.G. Sidak, *What Does the Chicago School Teach about Internet Search and the Antitrust Treatment of Google*, in *Journal of Competition Law and Economics,* 2012, 663 (page 10 of the original manuscript), 10.

[31] As Crane, *supra* note 26, at 10, pointed out, there is no need to invoke neutrality to admit that a search engine should, under given circumstances, be liable for «intentionally interfering with their rivals' hits in search results».

to those aspects.[32] Incorporating content in search results is a form of differentiation that search engines use to compete and provide more relevant answers to users[33]. In other words, ranking is the most significant way in which search engines can compete with each other. Thus, restricting the manner an engine ranks results, would risk eliminating that search engine's most significant way to innovate and compete by differentiating itself from rival search engines.

Of course, as the search results market is two-sided, there are two sets of customers, that are consumers as users and merchants as advertisers. In the merchants' perspective, there are many options to attract customers other than advertising on the comparison shopping services that as such do allow direct purchasing. Merchants can attract traffic by appearing on merchant platforms (like as Amazon, Ebay, AliExpress, Etsy and Rakuten). Besides they can attract traffic by purchasing advertisements on merchants' platforms (such as Amazon Sponsored Products and Amazon Product Ads). Online search advertising platforms also are considered by merchants seeking to attract traffic. Merchants are increasingly advertising on social networks, banners and sidebars, mobile apps video ads and internet radio ads.

What will be interesting to verify is the how the relevant market results from the application of the hypothetical monopolist test on both sides of the market.

III. Does search design fit the framework for abuse of a dominant position?

There might be still room to argue that a legitimate market reaction amounts to abuse when coming from a dominant firm and that such abuse is the result of a voluntary and aforethought strategy. Thus, search design could reveal an exclusionary practice carried out by Google.

The charge that Google's search policies are discriminatory and exclusionary, and aimed at systematically and willfully favoring Google's own services, requires an investigation about facts. But in order for such conduct to be an antitrust violation evidence that such search policies are against antitrust principles and, as to the results, significantly distort the competitive process is also required. If this evidence is not carefully provided, there is the serious risk that an antitrust enforcement action ends up being a claim of strict liability against Google, not for its alleged actions (abuses), but for its very position on the market, which was not obtained (nor maintained) through exclusionary practices, but is the consequence of technological innovations[34]. One aspect that should be given prominent weight is the fact that search services are free and although there might be

[32] This point is made also by T. Köber, *Common errors regarding search engine regulation-and how to avoid them*, 36 European Competition Law Review 239, 243 (2015).

[33] Additionally, it has to be considered that not all OneBoxes of Google contain Google's own content. In some instances, the information comes from other websites, such as Wikipedia.

[34] It should be recalled that when Google first appeared on the market there were already search engines and were dominant. Other search engines (and other solutions to retrieve information) are also available today and this should be sufficient evidence that there are not significant barriers to entry, that Google proved superior with respect to competitors and that the market is evolving faster than any perspective of antitrust enforcement.

instances in which free goods have negative welfare effects, shortcuts to antitrust liability should be avoided[35].

As far as European Union law is concerned, the relevant provisions are those of art. 102 TFEU, concerning the abuse of a dominant position[36]. The institutional framework of adjudication (or enforcement) should be built on that specific provision, on the practice of the European Commission and, importantly, on its interpretation by the European Court of Justice.

There is no need to discuss in detail the rationale behind art. 102 or its logic. Suffices it to say that, under European antitrust principles, the dominant firm on the market has a special liability and some behaviors, that might be perfectly acceptable and tolerable in any other market condition, become forbidden when acted upon by a player with significant market power. Scholars and judges have been carefully repeating that it is not the dominant position per se that is unlawful, but its abuse (and some practices used to gain a dominant position). The implications of this statement are crucial in terms of the standard for evaluating the behavior of a dominant firm.

Times seems ripe to advance an effect based approach and a more economic oriented analysis of market conducts to be evaluated under art. 102 in analogy of the recent trends toward the 101 case assessments. Under European antitrust rules, art. 101 concerns restrictions by two or more firms that engage in agreements, associations, decisions of associations or concerted practices in restraint of competition. Art. 101 states that behaviors by two or more companies shall be suspect either because by their very nature foreclose competition (by object) or because they can have as a consequence that of hampering the competitive process (by effect).

Unlike art. 101, there are no redeeming conditions for the abuse of dominant position and, apparently, there is no room to distinguish restrictions which are harmful for competition according to their actual effects on the market and those which can be considered unlawful by object (no further evidence being requested). Yet, there is general agreement about the fact that conduct under art. 102 can also be subject to different evaluations depending on their restrictive potential or their actual restrictive effects on the relevant market.

In fact, at least one author has recently recalled that the application of art. 101 by the European Commission has been progressively in the sense of a massive use of the notion of restriction by object, an interpretive option with serious (but questionable) practical implications[37]. First, it allows speed and savings in terms of administrative costs, for the authorities (and the Commission) do not need to invest in intensive investigations and the collection of quantitative and qualitative evidence regarding the impact of conduct in the relevant market. Second, it fosters predictability and, related to that, it increases deterrence.

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[35] Gal, Rubinfeld, *supra* note 13 (page 3 of the original manuscript), propose a more sophisticate reading of the welfare effect of free goods and one of the fields where such effects are investigated is that of free internet search.

[36] Alike Lao, *supra* note 6, at 4, we do not contend that there is no antitrust theory of liability for search bias and in this respect we reinforce our position about differences between U.S. and European competition policies. We rather assume that search bias could be analyzed under the paradigm of abuse of dominant position and advocate an orthodox application of its elements.

[37] G. Bruzzone, *Le restrizioni per oggetto nella giurisprudenza della Corte di giustizia: alla ricerca di un approccio sistemico*, Paper presented at the V Antitrust Symposium, Trento, April 17, 2015 (unpublished manuscript on file with the author).

However, this attitude of the Commission has been criticized and the European Court of Justice has shown dissatisfaction in recent cases (*Cartes Bancaires*), suggesting a limiting approach to the notion of restriction by object, for the antitrust enforcement to be consistent with the European antitrust framework. Being otherwise the case, the enforcement strategy of the Commission could turn into a surreptitious way to release the Commission itself from the burden of proving actual effects on the market even in those cases (and the Google case is certainly among those) where it is all but apparent that such effects are harmful. It might well be that indulgence to an antitrust enforcement reliant on the "by object", rather than effect-based tests would risk Type I errors (false positives), deterring procompetitive, innovative behavior.

Eventually, there are at least two additional arguments that would recommend an effect-based analysis, in a charge of abuse of dominant position by Google. First, the free nature of the service for one class of internet users (those using Google services). Second, the complex nature of the market at stake, which displays significant differences with respect to traditional situations in which standard antitrust analysis applies smoothly.

As to art. 102 TFEU, since *Hoffman La Roche*, the enforcement of the abuse of a dominant position has been made dependent on a positive showing that the abuse refers to conduct that has the effect of harming the maintenance or the increase in competitiveness in the market[38]. More recently, advocate general Colomer in his opinion on *Glaxo* supported the view that there should not be *per se* violations under art. 102[39] and, following the Court in *Post Danmark*, an evaluation of actual or potential effects on competition is always in order[40]. Thus, an antitrust based only on heavy reliance on the nature of the conduct itself, and not on its effects, is not consistent with European principles of antitrust, both in art. 101 *and* in art. 102 cases[41].

As far as search design is specifically concerned, to the extent that it is interpreted and construed as an exclusionary and/or discriminatory practice, in the abstract it may fall under art. 102, particularly if the charged firm has market power[42]. But this is not enough to conclude that there is abuse and, consequently, to affirm antitrust liability. It only means that art. 102, if ever, is the correct normative framework for the analysis. A further step is necessarily required. Namely, a serious and comprehensive consideration of the effects of Google's practices, in order to show that its choices, regardless of Google's intent, harm competition (and not just competitors, or some of them) and reduce consumer welfare, that seems to a be a compelling ingredient of the analysis[43].

When discussing the effects of Google's search practices, users' experiences and perceptions must be reinserted in the investigation, not just for the sake of complexity or

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[38] ECJ C-86/76, *Hoffman La Roche*, § 91.

[39] Opinion of the advocate general Colomer in *Glaxo* C-468/06 and 478/06.

[40] ECJ C-209/10 §§ 24 and 39.

[41] In reviewing the Commission's decision in *Intel*, the General Court T-286/09, *Intel Corp. v. Commission*, recalls the chance that restrictions by object are not considered unlawful if the entail efficiencies or are objectively justified. The principle is crystal clear in the U.S.; see Crane, *supra* note 26, at 9 («liability should only attach to those acts that have anticompetitive effects—those acts that create, enhance, or preserve market power»).

[42] This allegation is vigorously contested by Google. We provide here arguments that might lead to a different reading of search design.

[43] We find support to our position in the recent opinion of the European Court of Justice in *Post Denmark A/S* (C-23/14 of October 6, 20159, where the judges state that «it is nevertheless open to a dominant undertaking to provide justification for behaviour liable to be caught by the prohibition set out in Article 82 EC [now 102]» (para. 47).

to indulge econometric fascinations[44], but to make sure antitrust policy is not diluted into a quicker, but blunter mechanism to protect complainants even when, conduct is beneficial to users[45].
We argue that in dynamic, high-tech industries, enforcement of antitrust rules that does not focus on effects cannot possibly be reconciled with any statement about incentives to innovation that competition should preserve and reinforce. Any firm with commercial success would be frozen in its attempt to be more innovative and to respond to greater competition, even when its reaction would result in superior products or services for consumers. This is particularly so in a market whose boundaries are hard to define.
In complex markets, such as internet-based, multisided services, there are no easy conclusions about conduct and no shortcuts to a cheaper antitrust approach. Needless to say, a line of reasoning based on the effects of a behavior is more difficult and laborious: the more complex the factual situation (such as in dynamic industries), the more rigorous and uncompromising the analysis should be.

A. Effect-based analysis of search biases

If art. 102 is the correct framework to assess the potential anticompetitive effects of search bias, a number of questions are in order and, among those, whether search strategies as described in paragraph III, *retro*, can be considered discriminatory at all and, if that is the case, which interests should be taken into account in order to decide the harmful nature of such strategies and their anticompetitive effects.
The description in paragraph III provided arguments to conclude that the allegedly exclusionary conduct is the industry standard and is used by all the major competitors in this space as it offers significant user benefits. Condemning *a* firm for *that* behavior would automatically translate into a decision that that firm cannot stay in the market; but any decision that reduces competitors, rather than increasing their numbers, would turn antitrust policy on its head.
As should be clear by now, search design is not the name of an antitrust misconduct, but the very way information is processed and organized to provide users with an acceptable search experience. Moreover, a claim of neutrality can only be stated in the abstract and never become an objective milestone to define competitive behaviors, since paradoxically neutrality – in its purest form – would require that the information is left as it is found, with no added value for users (and, in a two-sided perspective, for advertisers). One might even say that users do need bias in the search[46], which is just a more impressive way to say that relevance and neutrality are at odds and since users need relevant results (not just

[44] C. Osti, *Ma a che serve l'antitrust?*, in *Il Foro italiano*, 2015, V, 121, has recently remarked that a vigorous antitrust enforcement is not just about quantitative marginal analysis, but also a tool for protecting democracy and increasing social cohesion.
[45] In the United States, the option of regulating search engines (and Google in particular) was advocated by O. Bracha, F. Pasquale, *Federal Search Commission? Access, Fairness, and Accountability in the Law of Search*, 93 Cornell L. Rev. 1149 (2008). See also F. Pasquale, *Internet Nondiscrimination Principles: Commercial Ethics for Carriers and Search Engines*, The University of Chicago Legal Forum, 2008, 1. The solution has been strongly criticized both on legal and technical ground. When referred to Europe, the perspective of regulating search engines will have to find its legal basis.
[46] Renda, *supra* note 7, at 14 («there are reasons to believe that a neutral search engine would be hated by consumers»).

results) neutrality cannot be part of the analysis if not resulting in clear and flagrant discrimination of all competitors[47].

Some may argue that even if a behavior is a common industry practice, not just the competitive strategy of a dominant firm, it becomes anticompetitive once adopted by a firm that is dominant or as a firm becomes dominant. But this line of argument misses the point. The fact that a product design is an industry practice, and has been adopted by firms that do not have a dominant position, is strong if not presumptive evidence that the product design is procompetitive rather than anticompetitive, especially in a dynamic high-tech industry where firms can adapt quickly. And a dominant firm, too, has the right and should be permitted to pursue procompetitive product designs and business practices, even if the product designs and practices are so competitive that they might harm rivals while benefitting consumers. This reinforces the case for effect-based analysis[48], since only behaviors that in actual terms harm the competitive process can be considered unlawful. The qualification of the conduct (as lawful or unlawful) follows the analysis; it should not be its starting point.

As to the assessment of the effects, any antitrust analysis must be supported by evidence especially where the enforcement action is directed at product design (rather than, for example, contractual arrangements). So far, despite the European Commission's five years investigation and a Statement of Objections, there seems to be a dearth of evidence of such anticompetitive effects.

To the contrary, unlike for example in the Microsoft case where Netscape experienced a dramatic decline in browser share (from 80% to 20% between 1997 and 2000) at the same time Microsoft's browser share skyrocketed (from 20% to 70% in same time period),[49] here many of the websites that supposedly would suffer from Google's search engine design (and have been the leading complainants to the European Commission, in addition to Microsoft) actually have been growing substantially and command a much greater share than Google. For example, local search engine Yelp has grown its revenue by 350% in the last four years, travel search site TripAdvisor claims it has the Web's largest travel brand and nearly doubled its revenues in the last four years, travel search site Expedia has grown its revenues by 67% in the same time frame and claims that it is seeing increased traffic from Google, shopping sites like Amazon, eBay and Idealo lead that segment and have seen tremendous traffic growth in a number of EU member states over the last several years.[50] Google has a very small share of both travel and shopping searches (*e.g.*, about ten times less than each of Amazon and eBay[51]) compared to these search sites in European member states, including France, Germany and the UK (indeed, Google is among the smallest search sites for travel and shopping in those member states)[52]. And

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[47] As FTC Chairman Leibowitz has declared, «[a]lthough some evidence suggested that Google was trying to eliminate competition, Google's primary reason for changing the look and feel of its search results to highlight its own products was to improve the user experience».

[48] As Crane, *supra* note 26, at 8, posits it, «[d]ominant firms may sometimes have special antitrust obligations not shared by weaker rivals, but those obligations should never stand in the way of the firms's ability to innovate». The argument, needless to say, cannot be valid only on one side of the Ocean.

[49] See, e.g., http://www.justice.gov/atr/declaration-rebecca-m-henderson-us-v-microsoft-corporation-state-new-york-ex-rel-v-microsoft.

[50] See also http://googleblog.blogspot.com/2015/04/the-search-for-harm.html . Data from Amazon, for instance, confirm growing revenue figures; see amazon.com, *Annual Report*, at 69.

[51] *See, e.g.*, http://www.techtimes.com/articles/48976/20150428/unlikely-ally-ebay-backs-googles-arguments-over-eu-antitrust-case.htm.

[52] http://googleblog.blogspot.com/2015/04/the-search-for-harm.html.

vocal complainant Axel Springer (owner of the French search engine Qwant) reported recently that «there is a lot of innovation on the search market»[53]. Scholars and policy makers will no doubt go about trying to collect data to prove their case, but these facts certainly beg the question whether there is even harm to competitors, let alone harm to consumers and competition as a whole.

Apart from quantitative effects, there is a major issue that still needs to be considered in preparation for future quantitative analysis and to bring evidence to the correct institutional framework. To what extent do Google search strategies really disfavor competition, rather than fostering it? Coming to one of the points raised in the introduction of this paper, one of the questions is to decide what the real aims of European antitrust are and which values are competition rules aimed at protecting in Europe[54].

If results are not adjusted by Google to ensure relevance (which means, users' preferences) is given prominent value, how could new entrants on the internet gain visibility? If neutrality means aseptic editorial policy or purely unbiased provision of data, what is the guaranty that incumbents are not preferred vis-à-vis newcomers?

There are competitors that are happy with current Google search strategies and there might be potential competitors that would benefit from the fact that relevance – and not subjective and idiosyncratic requests by incumbents – is the main driver of search engines[55]. If that is the case, then any assertion about Google's conduct being systematically discriminatory, exclusionary and comprehensively harmful for competition should be carefully checked and proven.

Running an effect-based analysis demands a granular approach. Eventually, once a market has been correctly defined and the dominance of Google clearly ascertained, in order for search design to be considered abuse, there needs to be a showing of its impact on the competitive process as a whole and not just on some players. Unless antitrust authority openly explains that the ultimate goal of European antitrust policy is not just control of market power and pursuit of consumer welfare, but also general prophylaxis of conduct that might appear as unfair[56].

Nothing in the Google Search saga demands an exemption from antitrust scrutiny (probably not even the free nature of the service), but a blunt use of antitrust as a proxy for market regulation is outside the reach of art. 102 TFEU. Forcing the limits of Article 102 to turn an industry wide practice into an abuse without assessing its effects would cause more harm than any planned benefit eventually provided.

IV. Diversities that matter: The European institutional approach and the antitrust of the digital economy

As the case of the decade, the Google investigation cannot avoid raising the arguments that are common to the enforcement of antitrust rules in high-technology markets. Every

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53 http://www.axelspringer.de/en/presse/Axel-Springer-Digital-Ventures-is-participating-in-French-startup-Qwant.com_21308881.html.

54 The question of the final goal of European antitrust has been recently raised by Osti, *supra* note 52, at 114, comparing U.S. and EU antitrust policies.

55 The issue of desirability for newcomers has been raised by Renda, *supra* note 7, at 15.

56 However, any explanation of this kind would run counter the recent position of the European Court of Justice expressed in *Post Denmark* (the dominant firm ««may demonstrate that the exclusionary effect arising from its conduct may be counterbalanced, or outweighed, by advantages in terms of efficiency which also benefit the consumer» (para. 48).

substantive argument about Google needs to be dealt with under the proper institutional framework; as argued at the beginning of this paper, while analyses have been provided for the U.S. economic and legal system, a European perspective is still missing and a comparison is compelling.

One such argument is about the timeframe of regulatory intervention. Google was investigated in the United States by the FTC for nineteen months[57]. The FTC closed the case in 2013[58]. The European Commission issued a Statement of Objections in Spring 2015, after years of investigation, when a proposal for commitments by Google had been on the table for a while[59]. The case will last months if not years, and in the end, whatever the conclusion, we will ask whether it refers to the market as it was five years ago, as it is now or as it will be in the future. In any event, things will be extremely different and the final decision will affect a situation that will be dramatically modified[60].

This by no means implies that an antitrust initiative is per se useless. The argument *ab inconvenienti* does not help to clear up the situation, no matter how difficult the case and how complex its implications. But the institutional approach – that is to say, the way antitrust rules are enforced – should be part of the solution, and not the main source of problems. If we accept the idea that the internet and related industries have caused a radical change in the market, insisting on a traditional approach (where time is but one of the variables) sounds contradictory.

European markets are different from U.S., but some features of digital markets are the same and they relate more to the technological dimension of the problem, than to the economic aspect involved. The way and the speed with which technology evolves yields unexpected changes and these happen everywhere, with the same intensity and at about the same time. One question we cannot postpone is whether the perspective of a long investigation by the Commission (possibly delving into an effect-based analysis) makes sense at all when things change radically in a timeframe that is shorter than an administrative enforcement initiative and the main drive for change is technology, not regulation.

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[57] As concluded by the Federal Trade Commission, in a press release on January 3, 2013, «Undoubtedly, Google took aggressive actions to gain advantage over rival search providers. However, the FTC's mission is to protect competition, and not individual competitors. The evidence did not demonstrate that Google's actions in this area stifled competition in violation of U.S. law»; available at https://www.ftc.gov/news-events/press-releases/2013/01/google-agrees-change-its-business-practices-resolve-ftc (last visit, August 19, 2015). Criticism on the FTC's decision has been expressed by F. Pasquale, *Paradoxes of Digital Antitrust: Why the FTC Failed to Explain Its Inaction of Search Bias*, Harvard Journal of Law & Technology Occasional Paper, 2013.

[58] Details of the investigations leaked out of the FTC's files in a Freedom of Information Act request. The news comes from *New Details In U.S. Probe Of Google*, Wall St. Journal, March 20, 2015.

[59] Against the prediction of A.A. Foer, S. Vaheesan, Google: *The Unique Case of the Monopolistic Search Engine*, 4 Journal of European Competition Law & Practice 199 (2013) («Given the high level of cooperation between these authorities in the Google matter, it seems unlikely that the pending investigations will reach significantly different results»), it seems that the European Commission will go its own way with regard to the case.

[60] The negative predictions of J.G. Hazan, Note, *Stop Being Evil: A Proposal for Unbiased Google Search*, 789 Mich. L. Rev. 111 (2013), that Google search practices would get rid of competitors in the market for vertical searches if an action is not quickly taken, does not seem to be consistent with the current market situation.

Each complex antitrust case shows some peculiarities that require a cautious approach in generalizing problems and solutions[61]. At the same time, antitrust authorities, policy makers and scholars have a duty to re-think the institutional framework whenever they are given an occasion to do so.

The case for search design should prompt a reflection about consistency of actions and foundations of antitrust. The Chicago School has brought more economics and quantitative analysis to antitrust and its teachings have enriched the understanding of some market behaviors and conduct[62]. Scholars now advocate a more technological approach in antitrust analysis, that would demand reinforced attention to the effects of behaviors and decisions, from a technological standpoint, and to dynamic efficiencies[63].

The European Commission adopted on May 6, 2015 a Communication titled *A Digital Single Market Strategy for Europe*, where it highlights the pillar for a strategy of growth based on digital technologies. The Commission recalls the principles of Better Regulation to advance its mandate with respect to the Digital Agenda.

In such perspective, search design policy shall be left to the competitive arena until the principle of freedom to compete and win the selection "for" the market will prevail. In the light of such principle: a) no market player shall be limited in its capability to design its products in order to win the competition game, meaning that also Google shall be free to provide for tailored results in order to catch both consumers' and advertisers' attention in the market for search results; b) no market player shall be limited in its ability to offer its advertising space on its platform at its own conditions; c) no market player shall be protected in itself or subsidized.

Apart from the traditional regulatory perspective, if the initiation of an antitrust action is considered absolutely necessary in light of the potential effects of Google's conduct, because of the institutional peculiarities of European competition laws and the fast changing features of high technology markets the conclusion can be different from that of a traditional action. In this respect, an alternative and more effective path – one that would certainly spare the European Commission the hurdles of a complex effect-based analysis – could be that of commitments by Google. Such alternative – which was about to be followed also in Europe – would have at least two virtues. First, it opens to a rapid solution, consistent with the potential harmful effects of Google's behaviors and with the speed of market dynamics. Second, it allows Google to be part of the process to come up with a viable solution, thus bringing information and data which would be otherwise precluded to antitrust authorities and regulators or, alternatively, very expensive to acquire.

V. Conclusions

[61] Foer & Vaheesan, *supra* note 67, at 200, incline to believe that Google is a unique case, that might require measures going beyond the simple option antitrust/regulation and could require «to consider all alternatives, including the deliberate use of public resources to maintain effective choice in information sources on the Internet».

[62] Bork & Sidak, *supra* note 37, at _ try to apply the Chicago School antitrust teachings to the Google search case.

[63] R. Podszun, *The More Technological Approach: Competition Law in the Digital Economy*, in G. Surblyte (ed), *Competition on the Internet*, Berlin/Heidelberg, 2015, 101; the original idea was already mentioned in Id., *Kartellrecht in der Internet-Wirtschaft: Zeit für den more technological approach*, in *WuW* 2014, 249.

This paper has shown how under a more consistent framework of interpretation search design should be hardly considered an abuse of dominant position under EU competition rules. Search design appears as rather a lawful commercial strategy of any search engine that strives to remain attractive for users in the online environment, where increasingly new technologies and new services exert competitive pressure over incumbents. Google's choices to reframe its pages with relevant results have been even pro-competitive, as many companies gained prominence and visibility. Consumers seems constantly satisfied with Google's search design strategies. Switching costs for alternative services are negligible and, nonetheless, users seem to remain loyal to Google' services.

As the EU antitrust action against Google moves towards a more mature stage, the European Commission will have to consider to what extent all the elements of art. 102 TFEU are present in search design cases. We have provided arguments that recommend a note of caution in plainly extending to digital markets simplistic views about markets dynamics and traditional antitrust views. Furthermore, we posted a note of caution when considering the institutional framework of the European antitrust action, since also timing and complexities of antitrust adjudication in high technology markets require careful consideration.