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IN SEARCH OF MEANING: THE WRITTEN WORD IN THE AGE OF GOOGLE

> "Every time he learned a new word […], a beautiful word like "light" – my heart curdled around the edges, because I thought, Who knows what he is losing in this moment, how many infinite kinds of glamour he felt and saw, tasted and smelled, before he pressured them into this little box, "light", with a t at the end like a switch clicking off."

> --D. Grossman, Be My Knife, 1998.

This work intends to be a brief and certainly not comprehensive appraise of the state of the written word and its meaning in the digitalized age, as a result of an ever growing utilization of online search engines, and its effects on the individual's acquaintance with and understanding of his or her world, and is to be considered as a reading of the ideas raised by Boris Groys in Google: Words beyond Grammar from a library and information science point of view. According to Groys, the questions one asks the world, the answers one is willing to receive, and the medium through which one chooses to conduct this dialog, depend on one's initial world perception.[1] Today, claims Groys, the individual conducts his or her philosophical interrogation through the World Wide Web, and more specifically through search engines. In fact, proceeds Groys, Google can be described as "the first philosophical machine that regulates our dialog with the world, by substituting metaphysical presuppositions with strictly formalized and universally applicable rules of access".[2] This vision sits well with Manovich's theory of the database—an unorganized list of the world's phenomena—as the cultural form appropriate for the computerized age, which created a new cultural algorithm: reality → media → data → database.[3] A commonly discussed quality of this great portal to the understanding of the modern world is that it is highly subjective, while the paths it leads the user on—the results it returns—are partial, pre-selected and often inaccessible. Groys

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1 B. Groys, Google: Words beyond Grammar, Ostfildern: Hatje Cantz Verlag GmbH, 2012, p. 4.
2 Ibid., p. 5.
3 L. Manovich, The Language of New Media, Cambridge: MIT Press, 2001, pp. 194-199.

puts main parts of Google's "hidden subjectivity" on the user (that fails to check the majority of the results) and third parties (which restrict access to their content).[4] Analyzing the user's interaction with Google Search, I would claim that it is Google itself that knowingly and intentionally manipulates the user's search and accessibility to results, in a way which hinders not only serendipity, but also free access to information.

I. Asking the question

The first part of an individual's dialog with the world consists of a question, or in this case, a query. Theoretically, the user can type in the search box whatever he or she pleases—from a single character to a sequence of sentences, yet Google Zeitgeist 2012 shows the most popular searches were those consisting of one, two or (less often) three words.

All web queries are formulated following a specific type of logic—namely Boolean logic. In other words, these consist of words—strings of data—sequences of characters—which may be organised using operators (e.g., "and", "or" and "not"), jolly characters and quotation marks. Each query can be further specified putting certain limitation on the possible outcomes, in the form of linguistic, geographical, typological or file format preferences. It has been shown by Groys that these rules of dialog, permitting a correctly formulated question to take the form of a single word (or a non-grammatical combination of words), do not correspond to the rules of the spoken language.[5]

Three parts constitute the Google Search software: a spider, a BigTable database (DB) and an interface. The first scans the Web for word presence, the second indexes and stores the information, and the third allows users to access the information. The indexing is done per word, so that each word has a quantity of resources (e.g., web pages, images or audio files) related to it. When a user types a certain word (or a combination of words) in the search box, Google scans its

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4 B. Groys, Google: Words beyond Grammar, Ostfildern: Hatje Cantz Verlag GmbH, 2012, pp. 14-15
5 Ibid., pp. 5-6.

DB and returns each resource connected to that word (or combination of words) in the form of a result—a link to the site where it appears. Groys views this disintegration of texts and discourses into a succession of freestanding words and word-clouds respectively, as an operation which negates content in the terms of substance, substituting it by the notion of content understood as mere presence.[6] Thus, avers Groys, the liberation of individual words from their grammatical structure eradicates the difference between an affirmative and a critical position, inducing the commutation of a linguistic operation (of affirmation/negation) for an extra-linguistic one (of inclusion/exclusion)—i.e., word curatorship.[7]

Groys is basing his elevation of Google to the role of a "philosophical machine" on the type of user-interface interaction which he identifies as both singular and exclusive. For Groys, Google's definition of a legitimate question, and hence the only possible form of question feasible for Google, is one that concerns the meaning of a certain word.[8] Professional literature on information retrieval, however, tends to put web search in a more articulated scheme. Manning, Raghavan and Schutze identify three types of web queries:

(i)   informational – a search for general information on a certain topic, in which the user has no specific interest in a predefined result, but is looking for various webpages—contexts—in which the search word appears;

(ii)   navigational – a search for a specific website, in which the user cares not for the appearance of a word, but for the webpage which can be defined as that word's webpage; and

(iii)   transactional – a prelude to a future transaction, such as an online purchase or a download of content, in which the user's interest lies not in general context or a specific website, but in performing a web action.[9]

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6 Ibid., p. 7
7 Ibid., pp.11-12.
8 Ibid., pp. 5-6.
9 C. D. Manning, P. Raghavan, and H. Schutze, Introduction to Information Retrieval, Cambridge University Press, 2008, pp. 432-433

Of the three, only the first type—the informational query—may be brought back to Groys' observation. Take navigational queries for example. An often used example of a navigational query is "Facebook". That is, when a user, or for the least, when the somewhat technologically informed user, types Facebook in the search box, it is not, or at least, it is most likely not, in order to find various webpages where the word Facebook appears. The user is not looking to find out the contexts in which the word Facebook appears, but rather to be directed toward the webpage that is Facebook. In this case, the query is not a grammatically devoid idea abridged into its gist (i.e., instead of asking "what is the meaning of the word Facebook", the user only asks "Facebook"), but a request for directions (i.e., instead of saying "point me towards the webpage that is Facebook", the user simply states "Facebook")—indeed, the navigational query is not a query at all, in the sense that it is not a question.

The transactional query, on the other hand suggests neither the user's interest in context nor his or her will to arrive at a specific webpage. Instead, it intimates the user's desire to perform a certain type of web action. Thus, when a user types in the search box the combination "black vintage dress size 10", he or she looks not for the context in which these words are included (to use Groys' terminology), nor does he or she look for a specific webpage identified with this combination of words. What the user is interested in here is a directory of web-places in which an object, which can be described with the typed-in words, can be found. In other words, the user's objective is a verification of the existence and a consequent obtaining of an actual object (this applies to content download as well, of course, the object being the file saved of a web server).

In focusing solely on the first type of web query—namely, informational—Groys' analysis bluntly disregards the other two common user-interface interplays, overlooking the undoubtedly significantly larger percentage of the user's interaction with Google Search. The first step towards a reconsideration of this so-called "philosophical machine's" anti-deconstructional act should be the reintroduction of these queries as organic co-participants in the Google Search paradigm, thus challenging the idea of it functioning exclusively as a context-based interpretive tool.

II. Receiving answers

The second part of one's dialog with the world consists of the answer he or she receives. If a Google legitimate question, as defined by Groys, is one around the meaning of an individual word, a legitimate answer, would be a set of contexts in which the search word was located by the spider.[10] Thus, the sum of contexts returned to the user by Google represent the true meaning of the word, which is, continues Groys, the only truth accessible to the contemporary individual

At this point, it may prove itself interesting to examine this theory from a linguistic perspective, observing how would Google treat deictic words. Assuming that the user's intention in searching a word such as "me" or "tomorrow" is indeed informational (and I'm inferring this by way of elimination - it is neither navigational nor transactional), can the results returned by Google be considered as legitimate answers? This, however, is not the topic of my current discourse.

Leaving the problematic basis upon which Groys constructs this argument, it would prove apposite to observe the way he then arrives at Google's negation of meaning deconstruction. Groys' observation regarding a word's meaning depends to a great extent on Wittgenstein's reflection on words and their meaning. For the Austro-British philosopher the meaning of a word is not the object for which the word stands (as St. Augustine would have wanted it),[11] even though a word has no meaning if nothing corresponds to it. Never the less, to identify the "meaning" of a word with the corresponding thing is to erroneously equate the meaning of a name with the bearer of that name[12] —the meaning of a word is determined by its use[13]—its context.

Groys recalls that for Derrida a normative meaning was impossible, for the number of contexts is theoretically infinite. In this sense, claims Groys, Google can be viewed as a twofold response to deconstruction: on the one hand it is based upon the same understanding of the language

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10 B. Groys, Google: Words beyond Grammar, Ostfildern: Hatje Cantz Verlag GmbH, 2012, pp. 5-6.
11 L. Wittgenstein, Philosophical Investigations, Oxford: Basil Blackwell, 1958, N.°1, p. 2.
12 Ibid., N.° 20, p. 40.
13 Ibid., N.° 139, p. 54.

not having fixed normative contexts for meaning; on the other, it is also based on the belief that these contexts are finite, calculable and displayable.[14] And so, according to Groys, by replacing what was thought to be infinite, with a finite search algorithm which looks for existent contexts, Google search has turned deconstruction upside down.

Approaching this grandiose observation, it should first be stated that, in cases of informative queries, Google does much more than returning a simple verbal context in which the word was located. In fact, among the results the user will also find images, maps, videos and audio files correlated to his search word(s). Thus, the answer Google is trying to provide is becoming more and more tridimensional, providing the user a dynamic multimedia Web 2.0 experience. In doing so, Google creates what seems to be a round a-posteriori understanding of the meaning of a certain word in its user's mind—in theory, this understanding should be based on the amalgamation of all contexts existing; in practice, it is highly restricted, controlled and manipulated.

In discussing the accessibility of the search results to the user, Groys acknowledges Google is unable to display all contexts, but then goes on assigning this unavailability to special access requirements (think JSTOR), and general prioritization on the user's level.[15] The mentioned prioritization takes place on two tiers: per webpage and per user. This means that in addition to the Google algorithm assigning a PageRank to each webpage—determined on the basis of approximately 200 factors, among which the number of times the search word appeared on the page, longevity of the page, and number of external sites linking to it[16]—Google also actively profiles its users based on their IP, previously completed searches and general web behavior. Thus, a search performed by a user situated in Sweden using Google.com will receive different results— both content and quantity-wise—to a search performed several seconds later by the same user using

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14 B. Groys, Google: Words beyond Grammar, Ostfildern: Hatje Cantz Verlag GmbH, 2012, pp. 8-11.

15 Ibid., p. 14

16 In regards of external links and reviews, in 2010 the New York Times has revealed that Google often does not differentiate between positive and negative reviews, high-rank sites against which numerous complaints against fraud were shared—assigning a whole new meaning to "there is no such thing as bad publicity", and see: >http://www.nytimes.com/2010/11/28/business/28borker.html?pagewanted=1&_r=0< last accessed on October 16, 2013

Google.se; similarly, a search for "Jaguar" will return some users a higher percentage of vehicles while others will see more felines—with straight correspondence to their interests and activity, as they are mapped by Google. (Of course PageRank and profiling affect only that limited percentage of Surface Web Google is actually capable of reaching—while the rest—the so-called Deep Web— remains unreachable for the Google user.)

But there is more. It is widely known and discussed that the vast majority of users does not bother checking beyond the first two or three results they receive, and only a scarce number will proceed checking beyond the first page. But what if a certain user is particularly determined on discovering the meaning of a word, and will try to read all possible contexts? Surely then will these limitations become less pivotal—well, not quite. Google's default display will show 10 results per page, over a maximum of 100 pages; users can choose to show as many as 100 results per page, but this will limit the amount of pages to 10. In other words, Google will only display the top 1000 rated URL's for the user's specific profile.[17] From this point of view the Google result count presented at the top of every page is somewhat of a deceit, since it is technically impossible for a user to access any result posted beyond the 1000 line. This potentially creates situations in which as many as nearly 100% of the word's contexts are de facto unavailable (for example, if one searches for words such as "Obama" or "football", both of which return hundreds of millions of results). In order to access them, one must narrow his or her search by adding a new search word—a constraint that presupposes the user's acquaintance with the word, and undermines the idea of presenting the user the complete meaning of it (using language/region settings, for example, would be of no use, seeing that "the top 1000 most relevant URLs are found before the filters are applied").[18] The

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17 In their Search Protocol Reference, Google specifically mention the 1000 result limitation, both under Filtering and under Sorting. And see_
>https://developers.google.com/search-appliance/documentation/50/xml_reference#request_filtering<
and
>https://developers.google.com/search-appliance/documentation/50/xml_reference#request_sort<
Both last accessed on October 16, 2013.
18 Ibid.

"betrayal of [the] utopian dream of word liberation" mentioned by Groys[19] is thus extended beyond the negation of deconstruction, to the negation of the idea of new media democratization.

Over the last few years, and especially since the rise of the so-called Arab Spring in late 2010—much of which success was assigned to the power of social media—the terms new media and democratization were used together to express a strive to change political regimes, yet, originally, new media brought along the hope for a democratization of information, mainly news.[20] While some still claim great success to this concept,[21] a CNN research from 2010 revealed that in terms of information monopoly, no great change has occurred—the main contributor to the majority of content online remains a minority of web users.[22]

Manovich considers an important feature of new media to be the fact that unlike the traditional creative work, in which the work and interface were identical and interchangeable notions, the database allows a single work to manifest throughout a plethora of interfaces.[23] For Manovich this is a crucial observation for artistic multimedia projects, which can be experienced by different users in different ways. In the Google case, this would mean that coming from the exact same set of data, every user receives his or her own custom-fit set of results. Probabilistically speaking, due to the 1000 results limitation, the likelihood of two users having access to the exact same set of results, and especially on wide-range searches with hundreds of thousands, if not millions of theoretically attainable results, is close to zero. From this point of view, however, it is difficult to assign Google the power of undermining deconstructional freedom as is attempted by Groys. Indeed, if to every user a different set of answers, or contexts, every user maturates his or her own understanding of the meaning of the word, which is inevitably slightly different to his or

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19 B. Groys, Google: Words beyond Grammar, Ostfildern: Hatje Cantz Verlag GmbH, 2012, p. 14.
20 See especially M. Raboy, "Media and Democratization in the Information Society", in B. Girard and S. Ó Siochrú, Communicating in the Information Society, UNRISD, 2003, pp. 101-120.
21 For example, in an interview from 2011, Nobel Prize winner Steve Running discussed the divulgence of science news to the masses through new media tools, such as blogs and videos. See: >http://www.pbs.org/mediashift/2011/12/nobel-prize-winner-on-how-new-media-is-democratizing-science-news340.html< last accessed October 16, 2013.
22 >http://www.cnnmediainfo.com/pdf/cnn_booklet_pownar.pdf< last accessed on October 16, 2013.
23 L. Manovich, The Language of New Media, Cambridge: MIT Press, 2001, pp. 199-201.

her fellow user's understanding of the same word. Thus, no two identical meanings can form in two different individual's minds.

Ostensibly, the Google idea of every user his or her meaning is a propagation or even an implementation of the second law of library science—every person his or her book—announced and discussed by Ranganathan in The Five Laws of Library Science; in point of fact, Google's execution is a great perfidy toward Ranganathan's idea of a personalized service. In Reference Service Ranganathan explains the implication of the second law on the service that the reference librarian should provide the reader: the reference librarian, understanding the reader's personal interest, should help him or her find the adequate micro and macro documents.[24] For Ranganathan the interaction between the reference librarian and the reader may never be unilateral—the reference librarian is an attentive companion rather than an imposing guide. As we have seen, the Google Search service, on the other hand, is basing its proposal of consultable documents on nontransparent, uncontrollable and undiscussable parameters, which allow the user no room for intervention—while for Ranganathan the personalized choice of documents is to be conducted in praesentia, the Google effectuation of this process is done in absentia.

Claims in favor of the search system can, of course, be made. Firstly, Google must commit preselection to avoid overload. Secondly, Google should commit preselection in order to facilitate its user's work by providing him or her with the content he or she was supposedly looking for. This second justification is based on Larry Page's—co-founder and CEO of Google—description of the "perfect search engine" as something that "understands exactly what you mean and gives you back exactly what you want."[25] Understanding what the other side means is a notion discussed by Wittgenstein as follows: One cannot explain to the other side what he himself understands; one can give examples—explanations, but the other side would always have to guess his or her drift. Out of the various interpretations that would seem plausible to the other side, he or she will then choose

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24 S. R. Ranganathan, Reference Service, Bombay: Asia Publishing House, 1961, pp. 54-55.
25 As quoted on the Google company products and services webpage:
>http://www.google.com/about/company/products/< last accessed on October 16, 2013.

one—in that case he or she could ask: did you mean…[26] If this phrase appears familiar to the reader, it is because up until not so long ago it has been the exact same wording Google Search was using to clarify its user's query.[27]

Let's recap. A user sits down in front of his or her computer and decides to look for a word on Google. He or she opens his or her browser, and navigates to one of Google's many interface pages. This first choice of interface will determine the number and type of results he or she will receive. The user then types his or her word in the search box, runs the search and receives a number of results—say 2,571. These results arrive in a certain order—the Google algorithm decides which ones are more or less pertinent to the user's interest—the user has no control over this part, and no way to offer his or her feedback. The user, unfamiliar with the object of search, now decides to study it carefully, going through the vast number of contexts his or her search returned, but alas, only 1000 of them are available. The user could try and change his search so that to see the other 60% of the results, yet the only way to do so is by knowing which other words could be found on those web pages—the user is unable to arrive at the full meaning of the word—of any word. This process, duplicated by millions of users, would result in each user having his or her own personal unique understanding of the meaning of the search word; some meanings may never come up in anyone's search. By showing the number of contexts to each word is finite, Google has turned deconstruction upside down, but by allowing the user to access only a limited and personalized set of results, Google has engendered a new type of deconstruction—normative meaning is stymied not by the unboundedness of possibilities, but by the impossibility of discovering the integral meaning of a word.

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26 L. Wittgenstein, Philosophical Investigations, Oxford: Basil Blackwell, 1958, N.° 83, p. 210.
27 Google is gradually replacing this clarification feature with "Showing results for… ", accompanied by a small print link to the originally searched set of characters, thus modifying its strategy from enquiring to assuming.

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