In search of Meaning:
The Written Word in the Age of Google

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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 (Groys 4). 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 dia-

log with the world, by substituting metaphysical presuppositions with strictly formalized and universally applicable rules of access" (5). 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 (Manovich 194-9). 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 puts main parts of Google's "hidden subjectivity" (Groys 15) on the user (that fails to check the majority of the results) and third parties (which restrict access to their content) (14). 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.

1   Asking the question

The first part of an individual's dialog with the world consists of a question, or in this case, a query. The user can theoretically 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.[1] Manning, Raghavan and Schutze (432-3) identify three types of web queries:

1. informational, which is a search for general information on a certain topic;

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[1] http://www.google.com/zeitgeist/2012/#the-world/searches.

2. navigational, which is a search for a specific website;

3. transactional, a prelude to a future transaction, such as an online purchase or a download of content.

Though the last two take up an undoubtedly significant percent of the user's interaction with Google Search, this work will focus mainly on the first type of web query — the informational query. All three types of queries, however, are formulated following the same specific type of logic — namely Boolean logic. In other words, web queries are words — strings of data — sequences of characters — which may be organized 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, typological or file format preferences. It has been shown by Groys that these rules of dialogue, 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 (Groys 5-6). Google's definition of a legitimate question, proceeds Groys, is one that concerns the meaning of a certain word, which is, according to him, the only possible form of question feasible for Google.

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 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 as a disintegration of texts into a succession of freestanding words, which turns dis-

courses into word clouds, no longer expressing an idea, but simply comprising or not comprising a certain word (Groys 7). 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 or negation) for an extra-linguistic one (of inclusion or exclusion of words in contexts) — i.e., word curatorship (11-12).

2   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 is one about the meaning of an individual word, a legitimate answer, as it is defined by Groys, is a set of contexts in which the search word was located by the spider (Groys 5-6). Thus, the sum of contexts returned to the user by Google, represent the true meaning of the word, and since Google is the contemporary individual's main tool of interrogation, it is also the only truth to him or her accessible.

Groys' observation regarding the word's meaning, depends to a great extent on Wittgenstein's reflection on words and their meaning. For the great Austro-British philosopher the meaning of the word is not the object for which the word stands (as St. Augustine would have wanted it) (Wittgenstein N.1, 2), 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 (N. 20, 40) — The meaning of a word is determined by its use (N. 139, 54) — its context.

Groys recalls that for Derrida a normative meaning was impossible, for the number of contexts is theoretically infinite (Groys 8-9). In this sense, Google can be viewed as a twofold response to decon-

struction: on the one hand it is based upon the same understanding of the language not having fixed normative contexts for meaning; on the other, it is also based on the believe that these contexts are finite, calculable and displayable (9-10). 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. Yet it does even more than that — Google returns not only the verbal context in which the word was located, but also images, maps, videos and audio files correlated to it. In fact, the answer Google is trying to provide for any given question 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 available; in practice, it is highly restricted, controlled and manipulated.

For Groys, Google is unable to display all contexts because some require special access, and the rest are prioritized (Groys 14). The mentioned prioritization takes place on two levels: 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[2] — Google also actively profiles its users based on their IP, previously completed searches and general web behavior (Guerrini, Bianchini, and Capaccioni 91-92). Thus, a search performed by a user situated in Sweden using Google.com

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[2]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 placing sites against which numerous complaints 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.

will receive different results — both content and quantity-wise — than a search performed several seconds later by the same user using 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 will only allow a user to view up to 100 results for a page over a maximum of 100 pages — i.e., the top 1000 rated URL's for his or her specific profile.[3] 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.[4] In order to access them, one must narrow his or her search using language/region settings, or adding a new search word — a constraint that presupposes the

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[3]In their Search Protocol Reference, Google specifically mention the 1000 result limitation, both under Filtering and under Sorting. 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.

[4] For example, if one searches for words such as "Obama" or "football", both of which return hundreds of millions of results.

user's acquaintance with the word, and undermines the idea of presenting the user the complete meaning of it — the "betrayal of [the] utopian dream of word liberation" mentioned by Groys (14), 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.[5] While some still claim great success to this concept,[6] 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.[7]

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 (Manovich 199-201). 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 means that coming from the exact same set of data, every user receives his or her own custom-fit set of results. Mathematically speaking, due to the 1000 results limitation, the likelihood of two users having access to the

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[5]Much was written on this topic, but see especially M. Raboy ("Media and Democratization in the Information Society").

[6]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.

[7]http://www.cnnmediainfo.com/pdf/cnn_booklet_pownar.pdf.

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 — if to every user a different set of answers — i.e., contexts, every user maturates his or her own understanding of the meaning of the word, which is inevitably slightly different than his or her fellow user's understanding of the same word.

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 (*The Five Laws of Library Science* 199-201); 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 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 (Ranganathan, *Reference Service* 54-55). 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. 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 (Guerrini, Bianchini, and Capaccioni 93). 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."[8] 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 one — in that case he or she could ask: did you mean. . . (Wittgenstein N. 83, 2.10). 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.[9]

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

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[8]As quoted on the Google company products and services webpage: http://www.google.com/about/company/products.

[9]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.

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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ABSTRACT: The article intends to be a short theoretical elaboration of the ideas raised by Boris Groys in *Google: Words beyond Grammar* from a LIS point of view. Through the use of critical tools such as Manovich's theory of the database and Wittgenstein's writings on meaning and context, the author delineates a double partial characteristic of the search conducted by Google in terms of quality (the Google algorithm is partial towards results claimed to appertain the user's interests) and in terms of quantity (the Google interface will only allow the user partial access to the search results). The author then re-reads Groy's claim of Google turning deconstruction upside down, suggesting the mere substitution of a classical Derridean deconstruction defined by the unboundedness of meaning possibilities, with a new deconstruction caused by the impossibility of discovering the integral meaning of a word.

KEYWORDS: Google; meaning; Groys; Manovich; Wittgenstein; deconstruction; partial; Google search