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Google Essay Rough Draft

Google is perhaps the third most ubiquitous word around the world. The first is OK, the second Coca Cola. The search giant is responsible for a multitude of things these days. They do searches, host videos and files, provide domain names and analytic services; the list goes on. Their motto used to be “don’t be evil”, but in 2016 they changed it to “you can make money without being evil.” The mutation of this saying from the imperative to the indicative perhaps suggests a loosening of ethics inside Google as a company. Like all companies, they have problems. They are no angels. They are solely focused on the bottom line. They conduct mass surveillance on their user base, and their products potentially influence the opinions of entire generations.

“Hello, Google.” These two deceptively simple words trigger a voice-recognition search on phones running newer versions of Android. To us humans, recognizing such a simple query seems like child’s play, but to a computer, the task is quite daunting. In order to process this information, phones of people who have not opted out of Google voice-search constantly send data from their microphones back to some central server somewhere for processing, and if these servers determine that the user’s intention was to learn something, they initiate a search. All of these audio recordings are then cataloged for the purpose of improving Google’s speech-to-text profile for any particular user, and they will probably never be deleted. Google’s voice-recognition is second to none, and they employ some of—if not the most—advanced systems in the world to make it happen. It’s also free. Despite all these boons, the problem with this service is that its usage is enforced. By default, all the options in the settings menu which are required for this feature to function are activated. Every single person who purchases an Android phone and does not disable such functionality has purchased a device which records their

audio twenty-four-seven. Worse still, while all benefits of using “Hello, Google” are printed right on the tin, the conditions of its use are buried in obscure settings menus which one needs to know about before he or she can find. The fact that turning speech-recognition and similar services off is so tremendously difficult is no mistake. Over ninety percent of Google’s revenue comes from advertising, a necessity considering what services they offer for free. This said, are things like Gmail and YouTube free? In Google’s business model, we are not their clients; we are their product.

Likewise, Google’s location services perform a similar function to their voice-recognition service in the way that they collect telemetry on users. In particular, anyone wishing to use WiFi to increase location accuracy must also allow his or her phone to act as a system for cataloging the location of WiFi access points. Google keeps a database of ESSIDs, the names of WiFi hotspots, mapped to specific locations, and all phones with location services enabled contribute to the expansion of this database. In addition to this form of surveillance, Google keeps a straight-up list of locations people frequent. For example, when I search for a particular restaurant, Google is able to tell me how busy it is at that exact moment. Google’s traffic monitoring is based on a similar system; phones of drivers report their speed at certain places on the road, and Google figures out the state of traffic based on the average of speeds reported by everyone in a region. These services are undoubtedly useful; I’ve personally used Google Traffic many-a-time when figuring the most efficient route home. Additionally, they exist in such a way that they cannot function without the massive amount of telemetry they receive. For systems as great as these to exist, sacrifices need to be made. This said, do the benefits we gain from systems such as these outweigh their detriments?

One. This is the number of pages of results people normally sift through when they Google for some piece of knowledge. One page does not provide many differing opinions, and considering that most things are more nuanced than they initially appear, this brevity leads to a complete misuse of Google Search. Most people are results oriented, and their time is valuable; however, the attitude of instant gratification Google cultivates is not conducive to informed decision making. Lots of different

opinions exist, and a single search generally only shows a tiny subset of them. In a way, Google's search algorithm is too good. The Internet constantly grows, but the size of a results page has not. With these two things being fact, the content of a such a page has only narrowed in focus. For any particular query, if it is too specific, the results it returns will be equally specific, and if it is too broad, the results will suffer from the tyranny of the majority. Google's search algorithm works by essentially counting the number of links to a page and weighing each one by the PageRank, Google's proprietary algorithm for ranking results, of the referring site and subtracting the weighted amount of links to other sites. The highest ranked pages are the most prevalent ones. Additionally, considering website popularity more-or-less follows Zipf's law, the tendency for relative website popularity to be the inverse of its ranking (Adamic & Huberman), popular websites have an almost insurmountable advantage over smaller ones in regards to promoting ideas.

As skewed as the distribution of ideas is, one must consider the impact if Google were to artificially influence results. In a perfect world, moderation of the results would equate to all websites being equal, and would produce all perspectives on an issue for consumption. The world is not perfect. The problems with this approach are similar to those with Communism. There is a Latin phrase from the Roman poet Juvenal, "*Quis custodiet ipsos custodes?*" which translates to, "Who will guard the guards themselves?" While this saying can be interpreted as asking who will protect the guards from dangers imposed on their being, it can also be interpreted as asking who will prevent the guards from abusing their authority. As it is, all factors contributing to PageRank are external to Google; they merely made the algorithm. In addition to this fact, PageRank is one of Google's most closely guarded secrets. For this reason, manipulating it to one's advantage is in fact quite difficult, and an entire industry called SEO (search engine optimization) has cropped up around it.

The effects of the *status quo* seem to apply to subsequent generations differently. While younger generations use technology to more effect than older generations, they generally consume much less news (Antunovic, Parsons, & Cooke). I hypothesize the origin of the dichotomy between these two

groups of people is the mode with which media is presented. Older individuals grew up watching the television, and thus had to watch what had been scheduled in a particular timeslot. Thus, when the news aired, everyone watching TV were forced to see it or stop watching. Members of younger generations do not have the restriction of a schedule which TV imposes on its viewers. Websites like Google allow anyone to search for whatever they wish, whenever they wish to do so. Thus, people tend to only consume that which they search for, and tend not to be exposed to differing ideas or opinions.

All this being said, I think it is impossible to label Google an evil company. To avoid their ever-watching eye, one might refuse their product. To avoid their overly-specific search, one might consume other media. We are not forced to utilize them. This thing being said, the quality of their products far outstrips that of their competitors in pretty much every market in which they have a presence. The question to the individual then is thus: are the benefits of participating in the machine that is Google more impressive than the sacrifices one must make to do so?