Public Cyberspace(s), Private Business(es): The paradox between the narratives of public service and private control on the Facebook and Google corporate blogs

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Abstract: Google and Facebook have arguably become synonymous with social media and the participatory web (Vaidhyanathan, 2011; Yakolev, 2007; Levy, 2009). Selling the attention spans of internet users to advertisers using content almost entirely created by the labour of others, makes these organizations leaders in a media environment that is beginning to redefine the relationship between consumers (or prosumers), technology, and the modern digital organization (Drache, 2007; Lessig, 2008; Rainie & Wellman, 2012; Castells, 2010; Shirky, 2010). As such, these organizations often get caught in between public action and other forms of online protest, such as the Arab Spring (Castells, 2012) and their practical needs to maintain discursive and institutional control. This paper seeks to explore this issue by examining the relationship between organizations and public participation in the discourses on the Google and Facebook blogs. As such, it employs critical discourse analysis (Fairclough, Critical discourse analysis, 1995) supported by corpus linguistics techniques (Stubbs, 1996) to analyze each entry from the Google and Facebook blogs between 2006 and 2011. When taken together, the discourses from the Google and Facebook blogs illustrate a paradox which may be characteristic of many online participatory organizations, that is, there are indeed more opportunities for public participation as a result of these organizations, but the private corporate concerns of online media companies mean that the large degree of citizen participation has not necessarily created the level plaving field (Lessard & Baldwin, 2003; Ross, 2001; Ross, 2003) some scholars once hoped for (Benkler, 2007; Drache, 2007; Castells, 2012).

Introduction

If any two companies can be thought of as synonymous with web 2.0 participation and the new digital media environment they would be Mark Zuckerberg's cocky start-up, Facebook, and the now dominant search-engine-now-media-company Google. Since their inception dates, these companies' online assets have both beat their competitors and outlasted dot-com bubbles (Cukier, Ryan, & Fornssler, 2009; Cukier, Ryan, & Hodson, 2009)to become the go-to sites for most people's daily desktop and mobile internet browsing (Zamaria & Fletcher, 2008). In addition, both Facebook and Google also serve as intermediaries between those who create online content and those who consume it, and they thus are in a tremendous position of power with respect to information flows and filtering (Pariser, 2011). As such, an understanding of these two organizations and their messaging is important for understanding the current media landscape of the web itself.

While the web, and in particular social technologies have been positioned as a revolution in communication that could facilitate unprecedented citizen activism and even an online public sphere (Benkler, 2006; Drache, 2007), some scholars suggest that the picture is not as rosy as it appears on the surface, and that the always on surveillance capacity of the world wide web, combined with the closing of the online commons has resulted in more distraction than action (Deibert, Palfrey, & Zittrain, 2008). These two points of view may actually both be somewhat accurate, which sets up a paradox of online participation that is that while indeed more people are using online tools to communicate with each other in ways that undermine the traditional broadcast model of information distribution, this adoption and use of participatory technologies, has not led to a Habermasian vision of wide spread public reason (Morozov, 2013). Through a combination of quantitative corpus linguistic analysis and qualitative critical discourse analysis, this paper will examine one aspect of this paradox, through an analysis of the Facebook and Google corporate blogs. It will show that discursive efforts to position the Facebook and Google technologies in relation to the users sets up a preferred subjectivity that discourages resistance, commoditizes information and interaction, and minimizes Facebook and Google's roles in shaping the online information landscape.

Background

Google

Google can easily be considered one of the most successful technology companies in the world, along with such giants as Microsoft and Apple. Unlike it's colleagues, however, Google gives its primary product, search, away for free, and rather than selling hardware or software, operates more like a traditional media company, making the majority of its profits by selling eyeballs to advertisers (Winseck, 2012; Vaidhyanathan, 2011). To maintain profitability while still encouraging people to add content to the internet (and thus add value to the medium on which Google is trying to sell advertising), Google sells space on both their search results page and also as a third party on some websites to anyone who can afford to pay. And pay they do, since Google owns a prime piece of cyberreal estate.

Google is still the search engine people are most likely to use when they are looking for online information. ComScore reports that Google leads all other current search engine options available, with 66.4% of internet traffic using Google to find what they are looking for as of February 2012. This is a giant lead over the next largest search engine, Microsoft's Bing, which directed 15.3% of the Internet population as of Feb, 2012, and Yahoo, who directed 13.8% (the remaining 4.5 percent was handled by two small players, AOL and Ask.com, both of which used to be much larger players in the market less than a decade ago) (Whittaker, 2012).

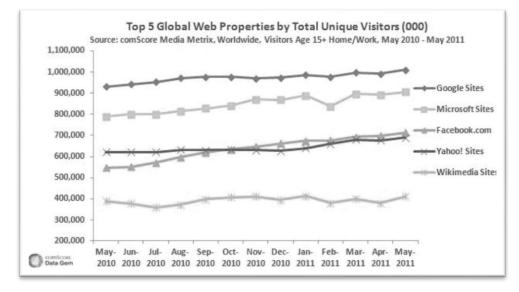


Figure 1: Top 5 Global Web Properties by Total Unique Visitors

SOURCE: ComScore, 2011

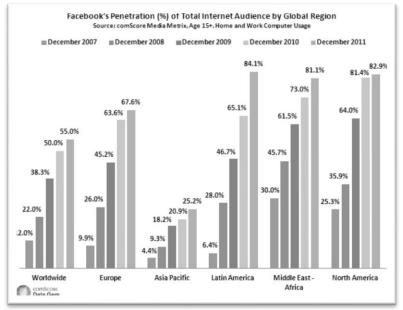
Search, of which Google is the dominant provider, has consistently remained one of the most popular activities for people who use the Internet (Figure 1). However, though search is an extremely popular online activity, search engines also experience an understandably high bounce rate on their sites. In other words, people visit the search site, find what they are looking for, and then just as quickly move on to another site, rather than spending their online time on the search sites themselves. If the search revolution, fueled in large part by the growth of Google is what cemented the internet in peoples' minds as a place they could go to find information on a variety of topics, other online business models strive to keep people online for longer periods of time. Of particular note here is the technology company that some consider to be Google's stiffest competition. The eponymous online social network, Facebook.

Facebook

As of February 2012, Facebook boasted more than 845 million active users (Wikipedia, 2012). The Canadian Internet project shows that in 2007, 39% of Canadian Internet users accessed social networking sites daily with 53% of all Internet users indicating that Facebook was their preferred social network (Zamaria & Fletcher, 2008). In the US, the Pew Internet and American Life Project shows that 65% of adults report using social

networking sites (Madden & Zickhur, 2011), with 55% of the worldwide Internet audience reporting that they used Facebook in 2011 (Figure 2) (comScore, 2012).

Figure 2: Facebook's Penetration (%) of Total Internet Audience by Global Region



SOURCE: comScore, 2012

Over the years, Facebook has rolled out many different updates and offered its users many different services. Some have been successful and have thus stuck around, while others have died out due to user controversy or just plain lack of use., Facebook released its IPO on May 18, 2012, and despite price fluctuations in Facebook stock, it seems to be more popular than ever, easily leaving the second most popular social network in its dust (comScore 2012; Zamaria and Fletcher, 2008). Because of network effects Facebook is in a unique market position where it would probably have to make a really big mistake in order to upset users enough to leave (Silverman, 2012). It has thus far maintained a captive and loyal audience despite competition from MySpace, Friendster, LinkedIn, Twitter and most recently, Google+.

Literature Review

Social Media: Hype vs. Reality

While few would argue that participatory digital technologies have radically disrupted traditional forms of information sharing, the precise nature of this disruption and whether or not it has resulted in the democratization of communication remains the subject of considerable debate. Some scholars suggest that new digital communication technologies have enabled something of a level playing field for those people who want to get their message out to others (Rheingold, 2003). They suggest that new information technologies allow people to get together – or organize – without organizations, in order to address issues or ideas which matter to them (Shirky, 2010), rather than being influenced by large

media companies' agenda setting strategies (Benkler, 2006; Castells M., 2012) and they highlight the ways that recent political or social action was dependent on web-based communication networks, and thus able to escape corporate or government control (Castells, 2010; Rheingold, 2003; Shirky, 2010). Because of the ability for new digital media to connect people who formerly would have been divided by geographic or temporal boundaries, proponents of new digital technologies suggest that the diversity of voices able to connect online could inspire new levels of innovation and creativity (Leadbeater, 2008) or even result in an online or networked public sphere (Benkler, 2006; Drache, 2007). They suggest that the nature of human engagement with media has changed, and for the better since the "people formerly known as the audience" (Rosen, 2006) are now 'prosumers' – no longer passively watching, but creating and sharing content, and in doing so producing a cognitive surplus (Shirky, 2010).

While the web 2.0 techno-optimists are certainly not wrong in their description of the conceivable leveling affordances of the technology, or its potential to create positive change, critics point out that in a practical sense, the use of new participatory technologies has created a host of unintended consequences or undesirable changes, including the creation of a 24/7 always on culture leading to health problems such as obesity and burn-out, panoptic surveillance and the death of privacy, information overload and group think, and finally, the concurrent increase in both precarious labour and overwork or digital exploitation (Ross, 2001; Ross, 2003; Lessard & Baldwin, 2003). These are all valid concerns, and just as the example of the arab spring revolution points to the potential of participatory technologies for activism (Castells M. , 2012), critics point to cyberwarfare, Facebook's abysmal privacy record, or horror stories from exploited technology workers both in North America and around the world as evidence for their side of the argument (Deibert, Palfrey, & Zittrain, 2008).

In actual fact, the reality of web 2.0 is more nuanced than either the hyper optimistic or the hyper-critical pictures reveal. It's fair to say that over the last ten years, social movements have made good use of the multi-point-to-multi-point affordances of web based communication technologies, and that these technologies have drastically changed, in some cases, the picture of who controls global information flows (Lessig, 2008; Rainie & Wellman, 2012). On the other hand, however, rather than a powerful elite group being replaced by a democratic collective of citizen communicators, if anything, the rise of new digital technologies seem to have created a new group of people who exert comparable control over information flows, just using new and different methods to do so (Winseck, 2012; Vaidhyanathan, 2011). Indeed, surveillance and the decline of privacy have both become major issues connected to technology use, and at the centre of both the online information flows and the privacy/intellectual property debate lie some very big organizational interests (Morozov, 2013). Of these, Facebook and Google could be considered two of the most dominant right now. Within the last ten years, they have risen to become household names, and they have changed the ways we access information and each other.

The Business of Social Media

The business models of web 2.0 companies like Google and Facebook are compelling for two reasons. First of all, they both rely in a large part on network effects to ensure their dominance in the marketplace (Palfrey & Gasser, 2012). In fact, successful network effects have created something of an effective monopoly for both these organizations, and allowed them to swallow up smaller competing organizations like instagram in the case of Facebook, or Blogger in the case of Google. Network effects have value as well, insofar as the more users a site has, the greater its ability to attract advertisers. The greater number of advertisers, the more money it has to put towards ensuring its dominance in the marketplace, and so on (Rowland, 2006). Secondly, the software and hardware infrastructure that facilitates a Google search or allows a person to maintain a Facebook account functions as a loss leader, insofar as it is given away for free, in order that more money can be made selling something else (O'Reilly, 2013; Bharadwaj, , Sawy, Pavlou, & Venkatraman, 2013). While each of these companies do offer value-added services, particularly to business users, the primary product offered by Facebook and Google is free to consumers. However, the real cost to the person who uses Facebook or Google products is delivered in two ways. First in the form of their labour, particularly with respect to content creation, and secondly in the form of the intellectual property, and more importantly privacy, or rights to personal information that are traded to these organizations whenever people use the online tools associated with them (Vaidhyanathan, 2011; Niedzvicki, 2010; Turkle, 2011)

While social media companies make their money primarily off of the contributions of their audience, it is important to remember that they still exist within a framework that requires them to make money for their shareholders (Auletta, 2009). This puts them in some ways in between a rock and a hard place, insofar as they must keep their users coming back, not just as attention spans for advertisers, but also as active content creators. At the same time however, they have all the traditional media pressure of not wanting to upset stakeholders and the advertisers on which their business model depends. This results in a rather complicated dance which requires the managing of multiple and diverse expectations, something that we might expect to see manifest within the blog discourses of companies like Facebook and Google.

The New Filters

Some researchers suggest that companies like Google and Facebook are filling a role once filled by traditional media companies (Pariser, 2011; Winseck, 2012). In other words, they offer users access to both information about the world, and entertainment, and in return, they expect to make money by selling advertisement space on their sites. Effectively, what this means in a practical sense is that as people increasingly choose to engage with media content like music, television programming or video online rather than on conventional media sources, companies like Google and Facebook will be able to have an increasing amount of power over what content and information people are able to access. The internet contains vast amount of information (along with misinformation) and the content available via online sources continues to grow daily (Shirky, 2010). As a result of this however, information overload (Weinberger, 2012) is an always present danger of online interaction, and people need to make use of filters to find what they are looking for. One of the roles played by Google and Facebook in many peoples lives then is the role of information filtering (Pariser, 2011). While Google and Facebook maintain that any filtering they do is based on algorithms (and algorithms are neutral), the fact is that they often favour certain interests over others when delivering information to users – a fact that has taken them to the Supreme court in both the US and overseas, with different results (Smith, 2013). This alone means that one cannot assume any algorithmic filtering conducted by Facebook and Google is purely neutral. Instead it is likely informed by the business demands of these companies, and also the values held within these organizations (Morozov, 2013). In that sense, the filtering performed by Facebook and Google is not unlike the filtering performed by traditional media sources, except that it occurs at a much larger scale than ever before.

Increasingly, Facebook and Google are companies that provide a sort of gatekeeping media function. Rather than just offering up pure software, or even service, they offer up content from around the web, and whether the filtering function is performed by computer or human, providing content in a web 2.0 information sea means necessarily including some information and excluding others. As such, and because these sites are so popular, it is imperative that scholars understand the underlying values that the thought leaders for each organization subscribe to. For this, we can turn to the Facebook and Google blog, both because the blogs are well read texts in their own right, and also because the blogs can offer insight into the expressed values of each organization.

Methods and Sampling

Sources

For this research, the main corporate blogs for each organization were analyzed: googleblog.blogspot.com and blog.facebook.com Each organization hosts more than one blog aimed at different audiences. For example, Google hosts a 'developers blog', multiple 'adsense' blogs in different languages, multiple 'adwords' blogs in different languages, 'apps' blogs and blogs specific to different countries around the world, to name a few and Facebook hosts a 'developers blog' 'engineering blog' and 'security blog', among others. For the purposes of this study, however, the aim was to target the blogs that had three characteristics: 1) they represented the public face of each company, 2) they were targeted at regular users, rather than specific developers or marketers, and 3) they had the potential to reach the largest possible audience of readers. In order to achieve this, the sample focused on only the official blog of each organization and not the other smaller niche blogs aimed at targeted audiences. In addition, many of the niche blogs for each organization would often cross-post to the main blog, when they had a post of interest to the broader audience as well as the specific audience they regularly targeted. Nearly 20 million people read Google's blog in 2011 (Rao, 2011) and the most popular Facebook blog post ever has had over 55 thousand likes. Thus, even just understood as stand-alone texts, the Google and Facebook blogs could be considered to have considerable reach. Furthermore, when considered as texts that represent corporate values and reflect the opinions of thought leaders within the company (Lee, Hwang, & Lee, 2007), these texts become even more worthy of inquiry.

Corpus Assisted Critical Discourse Analysis

From each official blog, every entry from 2006-2011 was compiled and then analyzed using Critical Discourse Analysis (CDA) (Fairclough, 1995 and Wodak) supplemented with corpus linguistics techniques such as key word in context (KWIC) analysis, word frequencies and collocations (Stubbs, 1996). The Facebook blog did not exist before 2006, and was discontinued after January 2012 which is why the sample was not extended beyond 2006 or the end of 2011. After each blog entry was converted into a .txt format and any tags or key words or categories inputted by the bloggers were removed from the sample, the sample was processed using an open-source concordancer, AntConc (http://www.antlab.sci.waseda.ac.jp/antconc_index.html) to determine both simple word frequencies and the relative frequencies of keywords compared to a sample of written and spoken American English taken from the Open American National Corpus (OANC). Starting with a concordance and corpus linguistics techniques thus allowed for the use of CDA based on the data itself, rather than "educated hunches" about the data (Stubbs, 2010).

Corpus Linguistics is "the study of linguistic phenomena through large collections of machine-readable texts [also known as corpora]" (W3-Corpora project, 1998, p. n.p.). To date, corpus analysis has been a tremendously useful tool in both linguistics and digital humanities. It allows researchers to accurately process large volumes of text in order to reveal patterns in sentence structure, language use relative to a sample corpus of plain English, and linguistic patterns (Stubbs, 1996, pp. 21-49). So far, however, these powerful tools have been underutilized in CDA, furthermore, though corpus linguistics techniques are used fairly frequently in the digital humanities in conjunction with the digitization of important (and often voluminous) corpora, it has been used relatively infrequently for corpora which have originated online (Baker, Gabrielatos, KhosraviNik, Krzyzanowski, McEnery, & Wodak, 2008, p. 295; Orpin, 2005; Mautner, 2009; Sotillo & Wang-Gemp, 2004; Mautner, 2005). Therefore, this methodological approach is somewhat unique insofar as it uses corpus linguistics in two relatively new ways: firstly as a tool for critical discourse analysis, and secondly in an analysis of specific digital corpora.

Following the recommendations proposed by Stubbs and others, this research employs techniques from corpus linguistics to include word frequency, key word in context (KWIC), and collocated terms for the full Google and Facebook blog corpora from 2006-2011. Corpus linguistics techniques have been chosen for quantitative analysis here because they offer tools with which comparisons can be made between word usage on the Google blog and word usage in a corpus of collected written and spoken English from a wide variety of common sources, the Open American National Corpus, or OANC. This comparative analysis reveals which discursive constructions on the Google blog are different or significant from regular constructions present in American English, and thus highlights words or phrases that are truly notable with respect to everyday language use. The OANC contains 14 million words gathered from transcribed speeches, technical reports, written books, and conversations, and thus provides a representative sample of regular English usage that can serve as a useful point of comparison from which to understand key terms on the Google and Facebook blogs.

Once keywords in context (KWIC), collocated terms and word frequencies were analyzed, a grounded theory approach was used to collect the qualitative data via CDA. In other words, the keywords informed the formation of questions, which were explored (by way of collocated terms and key terms in context) with a series of questions, which in turn could lead to more questions, and the exploration of other collocated terms, until asking questions of the data yielded no more useful information. For example, the key terms revealed through the corpus analysis software were first analyzed by looking for collocated terms and the frequencies of use over time, but then a more thorough CDA was applied to consider both the word use in the context of existing ideologies with respect to the internet and technology use, and also the specific use of the word itself. Questions that informed the CDA included, for example, is the sentence that contained the keyword constructed with the active or passive voice, who or what is the object of the sentence, and who or what is the subject of the sentence? What metaphors are used? What is the order of words in the sentence, and so on. A more full description of the questions used to guide the CDA can be seen in Appendix 1.

Results

Key Terms: Google

When the Google blog was analyzed relative to the Open American National Corpus (OANC), some terms that seemed significant in terms of simple frequency, ended up being confirmed significant via a keyword analysis. The word "Google", of course, remains significant when compared against a corpus of written and spoken American English, but this in itself is not notable. Notable key words in the Google blog between 2006 and 2011 include "information", "search" and "help" when the corpus of the Google blog is analyzed against the Open American National Corpus¹. In what follows, each key word will be discussed in turn to show the ways that Google values information, and in doing so, discursively turns it into a commodity.

Information

Google is in the business of search, and thus they have a stake in providing people in general, and more specifically potential advertisers or business partners, with ever-greater access to information. But how does this simple fact influence the way Google perceives information? An analysis of words commonly collocated within five terms to the left or right of the key term "information" reveals a link between the word "information" and other words relating to commodification, including market, transaction, exchange, value, and product, among others (see Table 1).

¹ Keyness is the word used in linguistics to describe whether a word or phrase is significant in terms of its context. You determine keyness values by comparing your corpora to a reference corpus of common written or spoken language. Keyness values then indicate what words are used more frequently in your corpus than in common written/spoken English. For this research project I used the Open American National Corpus

^{(&}lt;u>www.americannationalcorpus.com</u>) for a reference corpus since the Google, Facebook and Twitter blogs are all written in common American English. The OANC consists of over 14 million words compiled from both spoken and written American English.

Table 1: common collocates to "information" on the Google blog 2006-2011 SOURCE: Hodson, 2012

Collocates	# of times in sample
market	5
transaction	5
exchange	6
enterprise	7
value	10
consumer	11
company(ies)	13
ads	14
business	22
product	24
Total	117

Search

Like the term 'information' the term 'search' is also commodified within the discourses of the Google blog. Three of the top key terms collocated with the word 'search' on the Google Blog are 'product', 'people', and 'information', respectively (see table 2).

Table 2 Top Three 'Search' Collocates on the Google Blog 2006-201

Collocates	# of times
product	237
people	133
information	109

In this sample, 'search' is collocated with the word 'product' almost twice as often as the next most common term, 'people'. This linkage represents a commodification of search, which is reinforced through two main uses of the term search. The first, and most common is one in which the people writing in the Google Blog use search as a noun to refer to their specific search engine, also called a search product as in the phrase, "we look forward to having a product that showcases how tweets can make search better" (2009).

The second way Google blog writers commodify the act of searching is by portraying it as something associated with buying products. For example, in the April 23, 2009 Google blog entry:"as of today, when you type a product query on Google.com in your iPhone or Android browser, you'll get Google Product Search results nicely formatted for your phone" As the above entries reveal, there is some cross-over evident between the two categories. For example, 'Google Product Search' is itself a product designed to connect people with the products they may or may not be looking for. And a more detailed analysis of the first selection above reveals that Google wants to make a connection between using its product to shop and connecting with friends and family. Thus shopping, and by extension marketing, is portrayed not as a money-making venture, or a way to ensure profit for Google shareholders, but rather as a customer service, and even as a public service. In

doing so, Google writes itself not as a content or technology provider, but as a public service provider.

Help

In what appears to be an extension of the commodification of information and search as described above, Google positions itself as a provider of information to people by linking the word 'help' or the idea of service to its products, and also to advertisements. To achieve this end, Google couches its business model in the language of 'helping' the user/consumer find the products they are looking for. For example, a cursory glance at Google's 'about' pages reveals statements such as: "Google's products that make money strive to do so in a way that is helpful to users" or "we try to anticipate needs not yet articulated by our global audience, and meet them with products and services" (2012) This confusion of sales and service, or the conflation of marketing with 'helping' people is also clear through the corpus analysis of Google's blog, where the word 'help' is mentioned 1708 times in 6 years, making it the 18th most frequent key word in the entire sample. A deeper analysis reveals the words 'help' and 'products' collocated 32 times, 'help' and 'busines(ses)' collocated 60 times, 'help' and 'google' collocated 213 times, 'help' and 'organization(s)' collocated 50 times 'service' and 'google' collocated 74 times, and 'service' and 'business' collocated 12 times (see tables 3 and 4).

Help and:	# of times in sample
Google	213
Business(es)	60
Organization(s)	50
Products	32
Total	355

 Table 3: Top Terms collocated with 'Help' on the Google Blog 2006- 2011

Table 4: Top Terms collocated with 'Service' on the Google Blog 2006- 2011

Service and:	# of times in sample
Google	74
business	12
Total	86

Part of this construction of 'help' or 'service' can be connected to the way Google portrays the people who use their product. Google often discusses people in the passive voice in sentences where people and technology are interacting with one another. In these situations, the technology *helps* the person find information (and also products). For example, an analysis of collocates for the term 'help' reveals that when words referring to people are collocated with the term 'help', it is most often the word 'you' that is being helped. In total, out of a 2985 word sample of collocations, 'help' is collocated with the word 'you' 592 times. More importantly, when these two terms occur together, help most often is located on the left side of 'you' (ie., "...help you") meaning that someone or something is most often discursively helping you. Who is helping you? Well, the same analysis of help reveals 'Google' collocated with 'help' 255 times in the 2985 word sample

of collocations. In contrast, help is most often found on the right side of Google (ie. "Google help/s/ing..."), meaning that Google is usually the one doing the helping.

Key Terms: Facebook

A keyword analysis of the Facebook blog shows that "Facebook" is the most frequent word used between 2006 and 2011 when the words on the blog are compared to the corpus of Open American English (OANC). Other important key words used on the blog include, 'you' 'friends', and 'share' respectively, hinting at the key role that social interaction plays in the Facebook discourse. In what follows each of these words will be discussed in turn, to highlight the importance of the social frame within Facebook's blog discourses.

The Social Network

Throughout Facebook's ongoing narrative about themselves on their blog, one idea is made very clear. Facebook feels the web is a space for people to connect with one another. For example, a content analysis of their blog entries from 2006 to 2011 reveals the word 'friends' used 1246 times, the word 'people' used 1347 times, the word 'share' used 601 times and the word 'connect' used 203 times in 492 blog posts, making these terms the third, fourth, ninth and eighteenth ranked words in terms of keyness in a keywords search (see Table 5).

Word	Number of Times Used	Ranking by Keyness
People	1347	9
Friends	1246	3
Share	601	4
Connect	203	18

Table 5: Social Keywords in Facebook Blog 2006-2011

Looking in more detail at each of the social keywords used in the Facebook blog from 2006-2011 reveals certain patterns in collocated terms. What is particularly striking here is that two of the most common collocations (within 5 words to the left or right of the above social keywords) are the terms 'you' or 'your' and 'facebook'. By using the wildcard character in order to combine results from both 'you' and 'your' into the more inclusive 'you*' we can see that each one of the social keywords is collocated more frequently with 'you*' than they are with 'facebook' (Figure 5.3). In other words, Facebook promotes sharing, but this sharing is not portrayed in a symmetrical way.

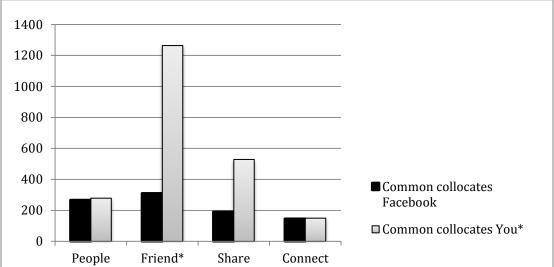


Figure 3: Facebook Blog 2006-2011 Common Collocates to Social Keywords

You

In the keywords list, 'you*' occurs twice as often as the word 'facebook' (7191 times vs. 3543). In this sense, Facebook is backgrounding their technology to the user. Discursively, they are putting people front and center, which is different from the way Google positioned the technology in their discourses. Much like the World Wide Web itself then, in the discourses on the Facebook blog, Facebook is positioned a medium for people to communicate with one another. Or in other words, the discourse on the Facebook blog suggests that, to Facebook, everything is all about "you".

Share

The word 'share' is more likely to be collocated to the right of the word 'you' (ie. "you share") than it is to be collocated to the left (ie. "share ... you"). This suggests that most of the times 'you' is linked to 'share' it is in the context of 'you sharing' your information with others (or with Facebook). While 'share' is almost equally collocated to the right and to the left of the term 'facebook', further discourse analysis reveals that it is more likely to refer to people sharing their information on Facebook, than it is to refer to Facebook sharing anything with people. For example, the October 31st 2006 blog entry states "Gone are the days of gawking at celebrities on people.com without being able to *share* the link with Facebook friends in two clicks" (emphasis mine) and an entry from January 23, 2009 states, "She turned to Facebook, where she was able to *share* her story, find a support network, and ask for help" (emphasis mine). In these two entries we see two examples of use of the word 'share'. In one, 'share' is located to the left of the term 'facebook' and in the other, 'share' is located to the right of the term Facebook. Both however refer to people sharing using Facebook, rather than Facebook sharing anything with people, and these results are quite common for this term. In other words, the sharing that occurs with respect to Facebook is generally one sided. Facebook doesn't share anything with you, but you share much with Facebook.

Friend

'Friend*2' is collocated within 5 terms left and right of 'facebook' 310 times in 492 blog entries, and it is collocated within 5 words to the left or right of 'you*' a whopping 1363 times in 492 blog entries. Of these collocations, a cluster analysis reveals the following top three constructions: 'with your friends,' 'of your friends,' 'and your friends' used 93, 69, and 46 times, respectively. Even when 'friend' is clustered with 'facebook,' it is most often as 'facebook friends' (48 times), 'friends on facebook' (44 times), and the specific 'your facebook friends' or 'your friends on facebook' 22 and 21 times respectively. In itself, this finding is unsurprising. Facebook wants to position itself as a tool for connecting people socially to their network of friends. Over the last 5 years, it has been able to do so quite successfully, with the term 'facebook friends' becoming part of the common lexicon.

Also notable is the deliberate personalization of the term 'friends' as it relates to Facebook. This term is not just used generically as in the phrase 'facebook friends' (which could be considered analogous to the term 'Googlers' or even 'users' in the Google blog). In fact, it is more often paired with 'your' as in 'your friends'. In making this construction, the implication is that *your* friends are on Facebook, and so you should be too. In making this construction, Facebook is specifically linking personal friendships to the site, Facebook writes itself as the place you share things with your friends, and thus the act of sharing, and even the act of friendship becomes synonymous with the site. Like Google with the term 'information', what Facebook is effectively doing here is taking an abstract idea (in this case friendship) and making it into something that can be gained through the products they offer.

Discussion

Help From Your Friends? People and Technology on the Facebook and Google Blogs Unsurprisingly, the discourses reveal that Google and Facebook are very aware of their main product, and even take pains to commodify it. However, in both cases the product that they are offering is an intangible idea, so the blog discourses do work to associate these ideas, in one case information, and in the other case, social interaction, with other words that actively commodify them, like 'product', 'advertising' or 'business' (as in "Google is in the business of search"). In creating these constructions, Google and Facebook are position their main products as valuable for potential advertisers, but this discourse also could be aimed at achieving additional ends. For example, in the case of Facebook, the commodification of social relationships could actually put a potential customer in a psychological headspace that makes them more likely to buy products (Boyd & Helms, 2005). This action would stand to create added value for those businesses that advertise on the site by increasing potential business traffic from the site. In Google's case, the discourse positions advertisements as valuable information. This construction conflates advertising with the other types of information needed to function as a member of society, and as such it positions consumer behavior as a potential replacement for other types of citizen participation.

² '*' here is used as a wildcard, so the lemma, or word form 'friend*' encompasses the terms 'friend'and 'friends'. Similarly 'you*' encompasses 'you', 'your' and 'you're'.

There are also important differences between the discourses on the Facebook and Google blog. For example, the Google blog tends to position the technology, and by extension Google itself, in the dominant and active position in the sentence. In contrast, the Facebook blog almost seems to take pains to background the technology and put "you" front and center in the discourse. What might these two very different constructions achieve? The Google blog portrays technology as a nearly human social actor, or in other words, in the blog technology is given agency and acts upon humans who are portrayed as 'users', or 'Googlers'. This occurs in tandem with the use of the passive voice to describe human social actors but the passive voice is not the only way that Google's discourses give agency to technology (here most often represented by Google products, of course).

In contrast to the Google blog, the Facebook blog seems to take pains to background the technology and foreground the user, who is portrayed as "you" in the discourse. Why does the Facebook blog speak directly to readers? This discursive construction achieves two aims: Firstly, it takes the emphasis off of the social network and the people who program or develop it, which allows Facebook to shift blame for any anti-social or unpopular usage of the site onto the users themselves, and secondly, it offers the users the opportunity to feel important or special (Niedzvicki, 2010; 2006). This gives the reader of the Facebook blog (who is likely also a user of Facebook) a chance to feel like the star of their own life, but also offers users the (often unfulfilled) promise of connection to others while concurrently minimizing the risks of that connection (Turkle, 2011).

Indeed, a foregrounding of the user allows Facebook to support a worldview where the user matters and everyone is watching for updates and new posts. This makes the user feel valued, even in the face of what amounts to a corporate announcement on the Facebook blog. With the reader thus discursively placed at the center of their universe, real life connections, which are messy and complicated, matter less, and connections made via the social network with the reader at the center begin to seem much more desirable (Turkle, 2011; Niedzvicki, 2006). With the Facebook user at the center surrounded by friends and loved ones, it is much more easy to encourage people to share information with others. By not explicitly commodifying information the way Google does, Facebook minimizes the fact that the information given freely by the non-organizational actors who use the social network provides immense advertising value for Facebook and their shareholders (Smythe, 1981; Jenkins, 2007).

In both the Google and Facebook discourses, the true role of each technology is obscured somewhat. Though both are technically in the business of selling eyeballs to advertisers, in the discourse, Google is portrayed as a public service – "helping" people, and Facebook is portrayed as a tool for "connection". In both of these constructions, the paradox between the need for customer interaction/participation, and the concurrent need to act more like a traditional media company is thus mediated through a discursive positioning of each site in such as way as to encourage participation and minimize any perceived conflict of interest. This phenomenon is even more apparent when the construction of "share" and "help" are examined in the discourse.

Discourses of "Share" and "Help" on Facebook and Google

Google mentions the word 'help' in relation to technology or their products 2985 times in their blog, and in the sample studied, 592 posts linked the words 'help' and 'you'. This construction of technology as a helper represents both an extension and an exaggeration of the Western cultural assumption that links technology and progress. As such, this discourse is not uncommon in the technology community or in Western culture, but Google has adapted it here to fit the goal of attracting more users to their products. Google portrays their search tools as the answer to a confusing and overloaded technological landscape. They suggest that technology triumphs over nature, that technological progress is inevitable for humankind, and that technology is a sort of universal solution. In this way, Google is creating a need to drive the uptake of their products.

Whereas the Google blog positions technology in general and their products specifically as a sort of servant or personal assistant, Facebook positions technology in general and their products specifically as a tool for connection, like a telephone, and sharing. Both discourses may seem on the surface to be empowering: in one technology is helping people to achieve varied goals and objectives, and in the other technology is facilitating sharing (and if we remember anything from grade school it is that sharing is good). Reading a little bit more closely however, reveals the subtle ways that the reader of the blog (and the users of Facebook and Google) are actually disempowered within the discourse. For example, the analysis of "share" on the Facebook blog revealed that it is always the Facebook users who are sharing, and they are most often sharing their information with Facebook. On the Google blog, users are always being helped by the technology. They never help themselves, and they never help Google improve or develop the technology. Furthermore, the business model of Facebook and Google is dependent on both these actions. Whenever Google "helps" a user find "what they are looking for" Google and Facebook both gain valuable "information" on the user's likes, dislikes, preferences and habits when the user is "helped" by the technology, or uses it to "share with others". This is likely the reason why each organization is trying, with mixed results, to tap into the other's key successes: Google with its new social network Google+, and Facebook with the recently developed graph search.

Considered together, and in light of the broader digital social and economic environment, the Facebook and Google blog discourses are illustrative of a paradox of new digital participatory technologies. Put simply, participatory media organizations rely on the contributions of a variety of users in order for their business models to function. On the other hand however, like any other business located within a profit-driven market structure, Facebook and Google want to appeal to as broad an audience as possible, and as a result, sell advertising to as many other organizations as possible. To do the second effectively, they must first create a need for their products and services among potential consumers, and they must also negotiate a complicated role somewhere between enough online freedom that their main content producers (the users) continue to be motivated to contribute content, while also maintaining control over potentially inflammatory, damaging, or libelous content that may be produced.

While the blogs themselves do not manage user-generated content, an attempt to manage the tension between freedom and control: the paradox, is evident within the blog

discourses. The blog discourses define certain preferred modes of interaction with the sites: certain sanctioned types of behaviors, such as sharing, searching, or shopping. In addition, the blogs attempt to manage reader perceptions through a variety of discursive strategies. For example, when Google disempowers the user of the technologies, it constructs technological development as an inevitability, which in turn constructs Google's economic success as an inevitability. This discourse reveals an attempt to discursively construct both a preferred user and a favorable economic position for the company. At first glance, the Facebook blog discourses that foreground the user seem to represent a favorable alternative to the Google blog discourses. However, when Facebook positions "you" in the center of the discourse. They are still seeking to discursively manage the discourse, but they are going about it in a different way. In this case, the attempt to background the technology is an effort to make it invisible. And when Facebook positions the user as constantly sharing, it is, like Google, describing a preferred mode of behavior for its users.

While a Critical Discourse analysis, even one supported by quantitative methods such as corpus linguistic techniques is limited insofar as it cannot reveal how readers are interpreting the texts under examination, what this research reveals is the nuanced ways that these particular digital organizations are attempting to manage a new type of interaction with their main consumer base. Analysis shows that both Google and Facebook use a series of discursive strategies in an attempt to manage and influence the attitudes and behaviors of, at the very least, the readers of their blogs, but also perhaps, a wider audience as well. These strategies include, in the case of Google, the use of the words help or service to describe their products, the frequent association between information and products, and the frequent portrayal of the human user in the passive voice. In the case of Facebook, these strategies include the backgrounding of the technology, the construction of user sharing, and the commodification of social relationships. Though the strategies used in each blog are somewhat different, all adopt particular views of technology (instrumental, progress), humans (users, consumers), and the sites themselves (public service). These views support each sites continued market dominance, and also represent an attempt to manage the volatile and often conflicting needs and wants of Facebook and Google users with the business requirements of these companies to make money through the sale of advertisements.

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