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GOOGLIST REALISM: The Google-China saga and the freeinformation regimes as a new site of cultural imperialism and moral tensions

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*I wrote this talk as a keynote speech for Commonground Publishing's <u>New Directions in the</u> <u>Humanities Conference at UCLA</u>. I delivered a portion of this talk to a conference audience that was primarily comprised of scholars in the humanities and social sciences. This expanded online version is aimed at a broader and more tech-focused audience.

*my blog post about this talk is here. http://culturalbytes.com/post/781876273/googoochinasaga

** in the PDF version the html links don't work. Please look at the online version for working html links http://docs.google.com/View?id=dzmq3s9_276fxxt4dcj

INTRODUCTION

Welcome

Good morning and welcome to California, my home state! I'm really excited to share my ideas at such an interdisciplinary conference and feel fortunate to have the opportunity to work through my ideas with such accomplished scholars.

I've been invited here to share my analysis on an event between two of some of the most powerful institutions in the world: Google and China. Last summer in 2009, I working at the <u>China</u> <u>Internet Network Information Center</u> 中国互联网络信息中心, located in Beijing, China. CNNIC is the equivalent to the FCC in the US. This world wide drama began to unfold while I was doing ethnographic fieldwork with government policy-makers, academics, youth, migrants, and low-income users on technology use. There were a few days spread out over the summer where I had lost access to all Google services that were once available in China: gmail, documents, excel spreadsheets powerpoints, instant messaging, video chatting, rss feeds, and more. Essentially, I lost access to my entire life. I went through an information withdrawal. I kept hitting refresh, over and over hoping my Gmail would come back. CCTV (Chinese Central Television - government sponsored programming) was<u>reporting that Google was a porn</u> machine. I just wanted to check my email!

Quick Google & China Brief

So for those of you who haven't been following the saga of Google and China¹, let me give you a quick refresher.

Most people are familiar with Google Search right? With over 1 million servers around the world and 1 billion search requests a day, Google Search is the world's most popular internet search engine.²

Google Search is available in 40 different languages and is localized for over 180 countries. For example, if we were to search or the word *coneja*, the Spanish word for bunny, on Google.COM and Google.COM.MX, a site for spanish-speaking Mexico, you will get two different results. But whether or not if you are in in Mexico or the US, Google.COM or Google.COM.MX is always accessible.

Google.COM, however, is not always accessible in some countries, like in China.³ Yet tides changed in 2006, when China allowed Google to create a local Chinese version, Google.CN under two main conditions 1.) Google.CN would follow the information filtering rules that applied to all foreign internet companies operating in China and 2.) Google.COM would remain blocked.⁴ Even though Google.COM's search service wasn't accessible in China, other Google services were, such as Gmail. China users who wanted to access Google.COM had to continue using third party servers. However, this type of service is usually costly and most Chinese netizens don't have a need to search on Google.COM because they don't read English.

Signs of discontent between Google and China began to surface in 2009, around the time that I was doing research in China. Sites that were once accessible such as Gmail were no longer reachable. Even Google's local search, Google.CN was down.⁵

January 2010, Google <u>announced on its company blog</u> that Chinese hackers had attacked the accounts of users who were involved in human rights. Google said that the attacks had originated in China. China defended itself and was adamant that it held no relation to or responsibility for the attacks.

Google stated that it was "no longer willing to continue censoring our results." Google hinted at the possibility of closing Google.CN in China.

By <u>March 2010, Google</u> negotiated a plan with the Chinese government that allowed them to move their servers off the mainland to Hong Kong where its search services would remain unfiltered.⁶ So while Google.COM.HK. was being created, Google.CN was also shut down.⁷ Users mourned the departure, leaving goodbye flowers at Google's office in Beijing.

Outline of my talk

Since Google first made their announcement in January 2010 about the attacks, countless Western news sites have praised Google for standing up to the Chinese and for reclaiming goodness. These articles insinuated that if Google.CN hadn't been so censored, then Chinese people would have used it. But that simply wasn't the case. I argue that Google wasn't being used because Google.CN wasn't useful.

So in the first half of my talk today, I will draw upon ethnographic research that I conducted in China among non-elite digital users to explain why Google was not useful overall. This sets up a discussion of the cultural dimensions of information accessibility which will help us understand why Google.CN failed in China.

In the second part of my talk, I will make the case that the Google and China saga is an example of a clash in moral orders rendering the free-information regime as a battle site of cultural imperialism. Information politics is ultimately a struggle over meaning and symbols.

And then I get to the fun section in part three - the macro-commentary! I'm going to propose my theoretical position that the Google free-information regime is an example of neo-informationalism, a retooling of neo-liberal ideals and a re-envisioning of imperialism based on information as a commodity for the digital age.

I will then close my talk with a reflection upon the role of humanities and social science researchers in an era of information politics.

To preface, I will generalize in order to make the point that there is a paradigm shift in information markets and that we should become attuned to these changes. This is not how I normally speak as an ethnographer of human interaction. Nation-states and institutions are necessary but not always sufficient analytical frameworks on their own because we risk simplification and totalization. However, please bear with me during my talk because I want to make the point that what we expect information *to do* matters. I will engage in some harmless generalizing as long as we can keep in mind that I am not placing a value judgement on Google or China or trying to explain away the complexity of these institutions. It is also not my goal to do a <u>Samuel</u> <u>Huntington redux of clash of civilizations</u> (East vs. West 2.0! No!). Unlike Huntington, I do not believe that clashes are inevitable, but that when they do happen they are opportunities for us to examine the stories we tell about ourselves and others. My goal for us *is not to judge* capitalism, imperialism, Google or China, but for us to think about what knowledges and practices are emerging from these interactions so that we can be aware of possible outcomes and respond in such a way that minimizes conflict and maximizes understanding.

PART 1

So what was going on with Google.CN before they went public with the security problems?

When Google announced their exodus from the mainland, many argued that this would be catastrophic for Chinese netizens. But on the basis of publicly available data and my own research, I wrote a <u>post on my website *Cultural Bytes*</u>, that suggested that Google's struggle in China had started long before the attacks on its servers. I argued that Chinese people weren't using Google not because Google.CN was filtered, but because they didn't find it useful. I argued that it wouldn't have been catastrophic because there weren't that many Chinese people using Google and those who did use it were using .COM instead of .CN.⁸

While the security breach was out of Google's reach, I argued in my blog post that Google failed to execute on 3 main factors: achievement of brand recognition, creation of a successful marketing campaign, and understanding the local use contexts of non-elite internet users; all factors that Google could have controlled.

1.) Brand Recognition

Google failed at brand recognition. They were not successful at making their services relevant for the average Chinese internet user nor did they make it easy for people to recognize, speak, or even type their name on a keyboard.

Many Chinese internet users do not know how to get to the Google site.

First of all, people didn't even know how to pronounce Google's name in Chinese much less agree on the pronunciation. Google never succeeded in having an immediately recognizable oral or visual name like Yahoo (Yahe), Apple (Pingguo), or Microsoft (Weiran).

For example, many people still call Google, <u>GouGou -(狗狗)</u>, which means dog. So they will often type in the phonetic letters for Gougou and land on the Google copycat site with a dog for its logo. Or they will type Google's name with one less "O" and end up at Gogle.CN, a phishing site. Phishing sites try get you to enter in your password with the hopes of stealing your online information. So imagine this being your first Google experience. Not likely to return, right?

When Google created Google.CN (the censored version), it declared its Chinese name to be GuGe in April 2006, meaning "Harvest Song." In addition to the pastoral images connoted by Harvest Song, Guge could also be easily interpreted to mean <u>grasshopper</u>, <u>groins</u>, or <u>shaving breasts</u>. Users hated the name so much that they <u>started a petition for Google</u> to change its name, creating the www.noguge.com website to protest the name. Google didn't listen. Nevertheless, these petitioners weren't using Google.CN anyways as most of them were more than likely already using third party clients to access Google.COM.

2.) Creation of a successful marketing campaign

Google also didn't create a successful marketing campaign. Maybe Google thought people would just start to use their product based on word of mouth. Though people *were* familiar with Google, they just didn't want to use it because it was associated with being "Un-Chinese."

Baidu is the home-grown reigning search engine in China, with twice the market share of Google (Baidu 63%). Part of Baidu's success lay in its powerful symbolic marketing campaign against Google, using nationalism as one of their publicity strategies. It's worked well. The campaign is so effective that netizens associate the use of Google with being unpatriotic. In an <u>infamous Baidu</u>

<u>commercial</u> from 2006, Baidu wins an intelligence contest over the its unnamed foreign competitor (Google) who is represented by the white male actor. Baidu succeeds in "knowing more" in the back and forth banter over the meaning of the scroll. The white man's Chinese female lover decides to leave him for the Chinese scholar who "knows more." Let's take a look at this video.

As this short clip shows, Baidu does an excellent job at tapping into nationalistic fervor to promote itself as being the most superior search engine for Chinese users.

3.) Understanding local usage context of non-elite users

So here's the thing, solving the marketing and brand recognition problem is relatively simple when the bigger problem is that Google's services are not useful!

The youth I spoke to across China just didn't see how any of the services offered by Google were easier to use than the ones that they were already using, such as Baidu.

First, Google operates in an e-mail paradigm while other local Chinese services operate in a instant messenger paradigm. There's a major disconnect in communication culture between the West and China because Chinese people primarily use messenger services to chat, not email. We need to better understand what it means to live in an instant messaging paradigm as opposed to a delayed e-mail paradigm.

Second, Baidu offers really good mp3 music searches, Google doesn't.⁹ MP3 is the most common file format for digital music. Chinese consumers really like to listen to music and they are used to having easy access to it. Music is one area of the internet that is most free from censorship and mostly widely available in China.¹⁰

Digital Elite-Users in China

So who is using Google in China? Interestingly, the biggest fans of Google were Chinese academics and business people age 18 years and older, who I call the "digital elite-users." This group of digital users tended to be highly educated, were fluent in the English language, and owned a credit card. Some have been abroad or at least have a social network of international ties. The digital elites, however, are such a small percentage of Chinese internet users that Baidu is still overwhelmingly the number one search service in China.

But here's the thing, even the digital elites weren't using local Google.CN. Rather they were using third-party servers, that sometimes required a fee paid through a credit card, to access the otherwise blocked Google.COM and other Google services, such as Google Scholar, Google Translation, and Gmail.

Essentially, digital elites in China use Google for the *same purposes* as Western users. They relied on Google for their research and said that there was no site that even matched Google's services. Highly educated Chinese users organize and prioritize information in ways that are much more similar to Western users than non-elite Chinese users. By failing to reach the less-elite-users, Google wasn't going to trump Baidu by only being the search <u>engine for the digitally elite.</u>

One software does not fit all

Google has built an empire of services that work for Western contexts and values. So it's no surprise that their most loyal fans outside of the US are elite users who share similar class and occupational backgrounds with Western users.

I suggest that if Google wants to be more relevant in China, it should dedicate itself to understanding the Chinese market in a socio-anthropological way. They should be hiring teams of Chinese and non-Chinese ethnographers, sociologists, and anthropologists for long-term collaborations in all phases of research and design with human-computer interaction designers, user-interface experts, programmers, and R&D managers.

While usability tests and focus groups are useful for specific phases of application development, they aren't as useful for understanding cultural frameworks and practices because by the time an app is being tested. It has already accumulated so many cultural assumptions along the way in the design process that users are often asked to test something that functions in the programmer's world, not the user's world.¹¹

Sometimes, one size does not fit all.

No ethnographer or engineer could have saved Google

So that was what <u>I wrote back</u> in February 2010. While most of the blogosphere and news outlets cheered Google on for defying China, I argued that Chinese netizens JUST didn't find Google.CN useful.¹² And I believe that Google knew this too. Others, such as <u>Larry Salibra</u>, have suggested that Google.CN was trying to save face by blaming the security breach.

Now that I've had a few months to reflect upon this, I actually don't think any team of ethnographers, much less engineers, could have saved Google.CN. The problems with Google.CN were much deeper than what ethnographers could have solved. Google's difficulties in China were not just a result of their inability to understand the local market or create a recognizable marketing campaign or even to get people to say their name correctly.

The real issue was that most fundamentally Google and China clashed over differing moral paradigms of information.

PART 2

Clash of moral and ethic systems

So for the second part of my talk, I make the case that if we want to better understand Google and China, we have to think about the differences in how and why these two institutions control information flows. Google and China ascribe to two fundamentally conflicting visions about what kind of information should be available to whom, under what conditions, and so on.¹³ In my written work, I talk about normative or prescriptive moral orders and the ethical dilemmas of information control, but today I'll just say that Google and China are two of the largest information filtering institutions in the world. <u>Alex Pasterneck has pointed out that they are both after the same thing:</u> information. But it's not really just about information, it's about access to information.

China and Google both want to manage information flows, but they have very different visions for *how* and opposing motivations for *why* this will be accomplished. This is played out in their moral position -- their ideas about what is good and what is bad -- about providing information."

Google exemplifies a hacker ethic that can be traced back to Enlightenment ideals (1600CE - 1800 CE) of individual achievement while China reflects Confucian cultural norms of social harmony that emerged 2,400 years ago during the early Han dynasty (206 BCE – 220 CE). To be clear, these moral orders that I will speak of are contested spaces and neither of them are totalizing.

So let's explore Google's moral order.

Google's Moral Order: Seeing like a corporation

Google's mission is "to organize the world's information and make it universally accessible and useful. Their mission is guided by their central motto, "Don't be Evil," is a moral edict that reflects their moral code; there is good and then there is evil.¹⁴ "Don't be evil" isn't just a normative moral judgement on what is evil or good, it is framed as an imperative - a prescriptive order on how to conduct business. This prescriptive order is reflective of Google's moral stance that more information is good, and less information is evil; making information more transparent and available is good while attempting to obscure or hide information is bad.

Prescriptive moral orders don't just state what is good or bad, rather they express commands in which to carry out an injunction. So a moral statement like "squeezing bunnies is bad" becomes prescriptive when the statement is "don't squeeze bunnies."

Google's moral order is drawn from a set of guiding principles that have created the very internet technologies that have come out of the West.¹⁵ This set of principles is called the "Hacker Ethic," which emerged around 1950's and 60's with the advent of computers.¹⁶ ¹⁷

When I speak of hacker, I do not mean the media creation of the "scary hacker" who breaks into the CIA. Hackers in the traditional sense are software engineers who have a shared belief that information should be free and accessible, that computers can improve our quality of life and should be accessible to all, that problems can be solved through direct interaction with the technology or law, and that forms of authority are blockers to innovation.¹⁸

The hacker ethic is actually a revival of the underlying ethical systems that have shaped Western thought since the Enlightenment era of 17th and 18th century Europe.¹⁹ The principles proposed by Kant, Descarte, and Bentham introduced basic notions of individuals as being independently free, educated, and rational beings entering into a contract with society. Free individuals were supposed to challenge the state or church. One became human through independent thinking and creative information processing.²⁰

So with its mistrust of authority, commitment to unfettered information accessibility, its belief that technology would trump all and that individuals would make the "rational" decisions in their choice of search engines, Google went into China thinking that their moral paradigm of "Do no Evil" would trump a society with a 2,400 year old moral order.²¹

China's Moral Order: Seeing like a state

China's governing principle rests on the creation of a socially harmonious society. The social harmony doctrine has guided much of China's rulers for generations and was officially endorsed <u>as a doctrine in 2006</u>. The Chinese government drew upon this doctrine as a way to ensure that the contradictions and social costs of economic growth would be ameliorated in the coming years by giving more attention and dedicating more of the budget to non-economic aspects of society, such an the environment, education, and health.²²

It's critical that we try to understand the roots of the Chinese concept of a socially harmonious society in Confucianism, a 2,400 year old social practice and state philosophy. Confucianism is very complex. Without going into an in depth discussion, I call our attention to one relevant tenet, but a far-reaching tenet: obedience.

Confucianism dictates obedience to higher forms of authority starting from the king down to government officials, ancestors, elders, parents, and spouses. The doctrine effectively gives each individual a clear role in life - to be a virtuous person; a means to achieve this role - to obey higher forms²³ of authority; a responsibility to higher forms of authority- to maintain harmony; and a social reward - acceptance. To this end, one becomes human though compliance and one becomes a subject through acceptance. Social harmony is achieved through an individual's obedience to all forms of higher authority.

Moral Clash

In China's moral order, information that serves to prioritize the individual is "bad," and in Google's moral order, information that serves to prioritize the individual is "good." As such, it is understandable why there would be tension. A moral order rooted in Enlightenment ideals rewards rebels while a moral order rooted in Confucian ideals rewards followers.

But it's not as simple as saying that Google cares about individuals and China doesn't. Both China and Google have accomplished amazing feats for individuals in a short amount of time that is not only historically noteworthy but revolutionary. China has brought millions out of economic poverty. Google has brought millions out of information poverty. China has given the world access to efficiencies in manufacturing creating a world of unlimited dollar stores.²⁴ Google has given the world access to innovative advertising remedies with Adwords. China has succeeded in building the most extensive telecommunication and internet infrastructure in the shortest amount of time, enabling low-income people to have access to digital technologies. Google has succeeded in indexing the most information in the world in the shortest amount of time, enabling people to affordably and inventively make use of cloud computing, geo-location apps, and open platforms.

But at what costs have these measures been delivered?

Markets have a way of bringing odd couples together in the name of profit. Businesses, governments, and individuals that may not ascribe to each others morals find themselves cooperating and collaborating, each side willing to make concessions to reach their end goal(s).

But it appears that Google and China have discovered something that they cannot agree to - access to information. But disagreements are nothing new between institutions, much less between China and the US or China and Google.

What appears to be emerging here is that the fundamental moral differences as understood by Google and China appear be so vast that they have decided that they are unable to work together in the way that they had originally envisioned. There's some truth to this. China and Google both want to be the ruling gatekeepers of information. Yet, they have different moral orders that inform their visions for how this information monopoly will be achieved.²⁵

Give me my information!

Google is emblematic of a new paradigm of capital growth, the generation of wealth through information. This is based on the assumption that any form of culture, experience, and ideas can become digitized into bytes. So for example, when a physical book is digitized, that means it can be transformed into a digital file where the words are searchable and therefore commodifiable.

Google's wealth generation from information is historically situated in the transition from Fordism to Post-Fordism. Whereas labor was once the fundamental source of economic growth under a Fordist regime, in Post-Fordist economies information becomes the source of economic expansion.

This shift involves a few processes:

1.) Information as commodity, not resource: Information has become the key commodity of capital expansion. Pieces of information are subjected to the logics of the market - the value of information can increase or decrease depending on the conditions.²⁶ Hence the reason why <u>Twitter</u>, whose sole reason is to exchange 140 characters of information between followers, <u>can</u> be valued at \$60 million two years ago and at over \$1.2 billion this year.²⁷

2.) Production of virtual commodities: Market expansion in the information age increasingly involves virtual commodities - information. For example, information is the supply and demand in markets such as software, shipment tracking, virtual gaming, online dating services, web advertising, and search services.

3.) Digitizing information as a way to extend access: Just as public radio tries to make news accessible to a wide audience, information mediating companies work to discover information and to make it accessible. This requires information to be digitized. A physical book can become more accessible after it is scanned into a digital file and made available online.

4.) Expansion of information communication networks: This commodification of information is supported by the expansion of information communication technologies such as cellphone towers and internet cables. This process started in the <u>mid-1800's</u> with the first undersea cables. We now have

over <u>95,000 miles</u>(153,000km) of undersea internet cabling around the world with the <u>capacity to</u> <u>send 7.1 terrabytes</u> of data per second, connecting regions where markets prospects are most promising. Where ever there is internet, there is wage labor that can be imposed on the production and distribution of information. Thus, information becomes valuable not only through its digitization process, but through a process that is now tied to capital accumulation and surplus wealth.

5.) Wealth generation through advertising: One of the ways in which wealth is now created with information is through a revenue-generating advertising stream. The value of Google increases in proportion to the amount of digital information that can be indexed, filtered, searched, and commodified. Google offers advertisers highly micro-targeted advertising opportunities based on the kinds of information you and I search for. As such, <u>Google generated</u> nearly \$67 billion in ad revenue between 2007 and Q1 2010.

6.) User-generated content: The exponential growth of information is made possible through the cultural paradigm of sharing through user-generated content. The information that Google searches comes from you, me, and the world in the form of blog posts, posting videos and photos online, online new and etc.

I've just described to you the conditions that allow Google to make money off of information. Google is digitizing and commodifying as much of the world's information as possible to make available, searchable, and accessible bytes.

But here's the thing, Google wants us to believe that despite all the money that they make, ultimately they are delivering information that *should* already be available and accessible. They

say that their priority is bringing information freedom and choice to users around the world, but since they are a corporation, their actions are also driven by the search for profit.

Unless we reflect on the moral paradigm that drives Google's approach to information, we will fail to see how Google benefits as a corporation from an ethical system that prioritizes free information regime.

Info Bytes from You and Me!

Since Google's project is to turn the whole world into digital bytes of information, they view any efforts against this process as a threat to their business model. Even more, Google sees any attempt to limit or control the kind of information they provide as "evil" for two reasons.

First, it threatens their profits in advertising-based searching.

Google Search is run by its contextual advertising search service, Google Adsense. Businesses that pay for Google Adsense show up as paid links on the right hand side on Google Search.²⁸ Every time you click on a paid link generate shared revenue for both Google and the business that paid for the link. So we if we do a search for bunnies and click on the HumaneSociety.org link on the right hand side, we just generated income for Google and the Humane Society.

While Google also offers many other services such as email, translations, maps, blogging and more, 97% of Google's \$6.7billion revenue comes from Adsense. $\frac{29}{29}$

With 97% of their income generation through Adsense, it makes sense why Google would be worried.

But the second reason why efforts to restrict information can be interpreted as "evil" is because it calls into question their moral stance that information should be available anytime, anywhere, and to anyone.

Then you have China, which has an entirely different set of priorities for information management. With the government focused on "social harmony," China's stance is that too much open information could unbalance their country--a country undergoing radical social change.

For example, government files can be found much more easily online in the US whereas in China it can be criminal to look for them or put them online. Conversely, mp3s can be easily searched for on Baidu's site whereas in the states it is illegal to download mp3s of popular music artists.

The bottom line is that what counts as information is socially constructed. Google determines what information is "good" just as much as China does. For Google, downloading copyrighted songs through the internet is framed as "bad" information while in China this is seen as "good." In China, making government documents available online counts as "bad" information while in the US this rates as "good" information. Both Google and China are trying to enact a moral code which is embodied through their respective control of information availability.

<u>Google CEO Eric Schmidt's recent comment in an interview</u> reveals this point when he essentially said that privacy only matters for "bad" people doing "shady" or "evil" things:

"If you have something that you don't want anyone to know, maybe you shouldn't be doing it in the first place..."

This statement reveals Google's stance on what counts as information. Information that one would want to remain private doesn't count as legitimate information. This could be seen as a very problematic statement coming from the CEO of a company that handles individuals' private emails, search histories, documents, address books, and more. But with a moral paradigm of "don't do evil" as it relates to information transparency, we can understand why Eric Schmidt would believe that privacy really isn't necessary.

The entire existence of Google rests upon algorithms that crawl the web to make information more transparent and searchable. Their very business depends on a public culture that privileges a certain kind of information openness. Google can't do business in places that do not priortize a free information culture that they are familiar with because limitations on information availability would interfere with Adsense, a system of profits from public clicks. If, all of a sudden all internet users, communities, and corporations all decided that everything they ever created online would suddenly become private and inaccessible to the public, Google would have nothing to search or sell.

PART 3

From doing business with guns, germs, and steel to computers, code, and clouds

Some business analysts, politicians, and the Western media cheered Google on for standing up to China and relocating to Hong Kong which, mind you, is still a part of China. Others thought that the sheer size of the Chinese market would sway Google to stay in China, much like Microsoft, Yahoo, and others. But I want to highlight one particular analysis.

Umair Haque, an economist and Director of the Havas Media Lab, claimed on the <u>Harvard</u> <u>Business Review blog</u> that by leaving China Google had taken an ethically motivated, not an economically motivated stance. He argued that Google's decision gives them an "ethical edge...that's always been at the heart of Google's disruptive success." "...a Google that doesn't play by China's rules is a better business, which creates more thicker *[sic]*,sustainable, meaningful value." In his <u>Awesomeness Manifesto</u>, he asserted that corporations engaged in "ethical production" are more financially successful and meaningful than those that don't because they innovate in the name of a "higher calling" not in the name of profits.

Let's consider Umair's proposal on Google's ethical edge.

I agree that *Google* believes that they have an "ethical edge." They believe that they draw upon the qualities that stand opposite from evil-- benevolence, compassion, and kindness-- to serve their higher-calling of introducing the world to information.

But I absolutely disagree with Umair that this "ethical edge" is anything new. This is a common moral trope of colonialism, imperialism, globalization, and neo-liberalism: ethical beliefs that justify expansionary practices of extracting commodities and creating new markets in the name of a "higher calling."

But instead of extracting spices, opium, gold, bodies, labor or oil, Google was trying to extract information from the Chinese market and then commodify that information as it provided it back to Chinese consumers -- ostensibly in the name of "freedom". The weapon of choice is no longer guns, germs, and steel, but free-information, open platforms, and distributed architectures.

Tropes of colonialism

To be fair, this "ethical edge" of the free-information regime isn't just being practiced by Google. It's also practiced by countless other technology companies that make their way from the West to other continents. It's also the very rhetoric employed by many proponents of the free and opensource software movement, the ICT4D research field (Information Communication Technology for Development), and OLPC (One Laptop Per Child) community.³⁰

So I ask us, why are we so invested in the idea of Google being in mainland China? I suspect that one of the reasons is that Google's relocation of its servers to Hong Kong opened up an existing set of anxieties among ourselves about America's place in the global order. But what Americans don't get is that this openness is contingent upon America's vision of keeping markets open, tearing down national borders, and creating an open ICT network that preserves America's interest in being the world's police, superpower and economic leader.

We thought that we could bring the internet to the world and the architecture would remain open. What we didn't expect was for countries to use the internet to advance their own agendas in the same way that the US was already doing: using their own culture, policies, and system of ethics.

Algorithms of social change: new technologies, same old games

And here's the kicker - in leaving China because the Chinese government wouldn't conform to their rules, Google reproduced the very imperialistic behavior that have characterized the greatest imperial powers: leaving a country or region when they couldn't get the natives to abandon their own way of thinking or adopt a new way of behaving.³¹ $\frac{32}{22}$

What's emerging is a new rhetoric of development and globalization in what I am calling neoinformationalism: the belief that information should function like currency in free-market capitalism - border-less, free from regulation, and mobile. The logic of neo-informationalism rests on an moral framework that is tied to what <u>Morgan Ames</u> calls "information determinism," the belief that free and open access to information can create social change. This moral framework of neoinformationalism is so naturalized that Google and like-minded companies work their way around the world unquestioned for their position on open information. Phrases such as "information wants to be free" reflect the techno-anthropomorphizing of information, a necessary step in naturalizing any neo-informationalist agenda.

Neo-informationalism is a re-visioning of a non-redistributive laissez-faire ideology of modernization theory transplanted into Western technologies that assumes surely people cannot be self-sufficient without unlimited access to the tools that connect them to the world wide web. Underlying this ideology is the notion that information openness and market openness are inseparable and non-mutually exclusive. Information openness can *only* be achieved through free-market conditions.

This is a model of social change that puts faith in objects, not in governance processes. Neoinformationalism and neo-liberalism work symbiotically to create what Wendy Brown calls the governed citizen who seeks solutions in products as opposed to the political process. While Wendy wasn't speaking of technological objects *per se*, I make the case that this is indeed a variant of the hacker ethic; social change is made through direct programming of software code and interaction with technological devices while maintaining distance from the state.³³⁴

What I want to point out is that while this is a very reasonable process being accomplished by very reasonable people -- Westerners creating products and policies for Westerners - I am not comfortable with pushing this belief on others in the name of a "higher calling." This is simply a redux of cultural imperialism that says "we know better than you, and if you don't believe us, too

bad you have no choice, because we're offering you emancipation by giving you access to our Internets."

We should question any ethical system that reproduces a familiar trope of colonialism. Whereas past waves of imperialism used Religion, Science, or Globalization as a rhetoric of development, the new rhetoric of neo-informationalism is used as a guiding principle for entering new regions--ethical principles that can be used as proxies for pushing our belief system onto other people. As a result, the work can be less about free information and unlimited compassion and more about desires for free-access to new markets and new commodities.³⁵

CONCLUSION

Create understanding

So does this mean that we have to give up on Google? No, the world doesn't work in binaries and neither should you nor I. I depend on Google for most of on my online communication. I'm known among my friends as a Google evangelist. I force my friends onto gmail and its amazing filtering capabilities. I heart Google and could talk about its services *ad naseum*. But while I love the technical aspects of Google's products, I am at the same time critical of the limits and affordances of its technologies. Technologies are never just technologies. They are machines laden with cultural expectations imbued by their creators.

But herein lies my fear: What if we start thinking that there is no alternative to the institution of Google? What if the "Google model" starts to become what we think of as the most natural way to do things? We need to question any "reality that presents itself as natural"³⁶ and that includes something as apparently innocuous as Google.³⁷

We need to make sure that we don't succumb to Googlist Realism. Much like Capitalist Realism, the belief that there is no alternative to the reality of capitalism as a way of life, Googlist Realism is the belief that there is no alternative to Google as our search engine and as our gatekeeper of information. The belief that capitalism can improve life is now supplanted by the free-information regimes of neo-informationalism - the belief that unfettered information access *is* life.

Google has successfully linked the commodification of information to an ethical system of social change. This rhetoric is so strong that I worry that we could lose our imagination for any other form of information reality or social change outside of a Google-like model. I also worry that those who question this model will be framed as enemies of freedom, information, and social change.

Google and China have their own visions for the social life of information and for the role of information in society. We should be equally critical of a corporation with algorithms that create a consensual consumer culture based on advertising clicks as we are of a country with policies that create a consensual citizenry based on obedience through a paternalistic form of governance.

But we should also be equally hopeful of a corporation with digital applications that create access to information that was reserved for the privileged as we are of a country with social policies that empower people to explore their talents and scale their services through government-supported, free-market entrepreneurship.

Summarizing the five main points that I've made today

1. As countries create their own internet policies, information politics will become a key site of contestation in a globally networked society.

As corporations and governments use the ethics of neo-informationalism to look for new markets and cheap labor, some countries will also counter these efforts with their own ethics. Capitalist growth depends not only on the physical architecture of ICTs, but also on the reach of an ethical system to support the open use of ICTs. Ethics do matter. In the absence of religious or governmental heroes, the digital economy also needs its own goddesses.³⁸

Just as we've created public institutions to regulate, debate, and check transnational corporations in times of excess neo-liberalism, we've got to create similar institutions for information in times of excess neo-informationalism. As Theodore Porter demonstrated in his insightful work on accounting as a system of information and a site of ethical battles, "the history of information is almost synonymous with the history of large enterprises."³⁹

2. Information disjunctures will increasingly fall along moral and ethical disagreements between institutions, reflecting tensions in regional values and beliefs.⁴⁰

Institutions that mediate information will increasingly have to deal with a diversity of moral orders that are regionally specific, originally proposed in the the "Górniak hypothesis," in 1996.⁴¹ We have to realize that just like any other institution, the internet will be implemented and used in such a way that it maps onto existing social forces, institutions, and values. That is why understanding regional internet culture is important.

Here I draw upon institutional theory and in particular Philip Agre's amplification model of how new institutions don't necessarily create new social behaviors, rather they amplify existing ones.⁴² This theory explains why Google has not "changed" China to become a nation modeled in the image of the US. Even something as open as the internet will be localized. This is because 1.) not all people/countries are the same and 2.) not all sovereign nations will welcome neo-informationalism as envisioned by the West. Many countries and individuals are suspicious of how "The World Bank, the International Monetary Fund, the World Trade Organization, alongside the U.S. Trade Representative, the Federal Communications Commission, and other apostles of neo-liberalism, used multiple levers to pry open global networking to corporate-commercial investment" argues Dan Schiller.⁴³

3. I also argue that what's at stake in the clashes of moral orders is the determination of meaning. Google isn't just an information processing entity, it is a meaning-making entity.

As a meaning-making institution, Google is in the business of standardizing and universalizing the domination of "autonomous [and public] information" as attached to democracy, liberation, and excellence (Porter 228). Whoever controls information and the means of dissemination, controls meaning and the symbols associated with it--hence culture.

For nation-states, culture becomes an even more powerful instrument of social control which will increasingly be mediated through digital means.

For corporations, culture becomes an an ever more powerful instrument of profit and this will increasingly be mediated over digital information spaces where our desires and preferences can be sorted and indexed.

4. There is a diversity in cultural orientations and they matter in how technologies are used, received, and created.

As companies start designing more software for a diversity of communities and conditions around the world, there is a greater need to understand how culture is exhibited in emotive and tangible ways. We can no longer ascribe to traditional binaries that place culture on a local level and money on a global scale. However geographically stationary some groups may be, ideas and energies are mobile. But this does not necessarily mean that mobility leads to greater flows in cooperation, rather it can also lead to greater fluxes in stability. A nuanced understanding of cultural orientations as an ongoing narrative will be required to navigate this space.

5. Institutions will continue to make attempts to bound the internet. But in a digitallymediated network society where communication streams and physical contact are more frequent than ever, it becomes harder to maintain silos of communication. The digital mobility of ideas, people, and images means that moral orders are coming into contact with each other.⁴⁴

As information, culture, symbols, and ideas become more mobile, it will become harder for any entity to unilaterally enforce their own moral orders.⁴⁵ Because of this, we're going to see more collisions in moral orders as information becomes destabilized and detached from its geographic point of origin.

The internet is a host to amazing forms of participatory culture and will continue to be so precisely because its network architecture allows a diversity of interactions to take place - from gated communities to open spaces. Nation-states can try to create a bounded internet, but with *some* people and ideas more mobile than ever before, it becomes harder to enforce global digital walls.

In a digitally mediated world, the logics of replication do not function according to a mechanical order. A la Gilles Deleuze, Manual de Landa, and Felix Guattari, I think of Lucretius's quote on atoms:

"When atoms are traveling straight down through empty space by their own weight, at quite indeterminate times and places, they swerve every so little from their course, just so much that you would call it a change of direction. If it were not for this swerve, everything would fall downwards through the abyss of space. No collision would take place and no impact of atom on atom would be created. Thus nature would never have created anything."

As the moral orders of nations collide, some will clash and some will cohere. But the guarantee is that something is going to happen. It's already started and we're going to need people to deconstruct this and place what's happening in context amide all the noise.

Values in our technologies

Let us be attentive to the values that shape the way we interact with information and the architectures that mediate it. $\frac{46}{2}$

Today I've talked about how beliefs and values are layered onto our technologies and inform our expectations for how they are used. These technologies are never just technical, but they are social and luckily for us they are observable.

A few week ago, <u>Steve Jobs, the CEO of Apple</u> (the company that makes macs, ipods, ipads, and etc), said, "We're not just a tech company, even though we invent some of the highest technology products in the world," he said. "It's the marriage of that plus the humanities and the liberal arts that distinguishes Apple."

Let us be in dialogue with Steve Jobs and Google with some liberal arts magic. Kant, Bentham, and Descartes drew up a new ethical order at the turn of the Industrial Revolution that was a response to the social transformation from the printing age. This is happening now for the interneting age. The liberal arts is positioned with the analytical tools to be part of this dialogue. We should be doing all that we can to make our work public.⁴⁷

We cannot just leave this agenda to the technologists. We cannot let the new myths about freedom and information to pass without question. We must use critical theory, ethnographic methods, and common-sense to question how cultural values play out, in and around technology. Values not only reproduce contemporary tensions, but they are also sites of contestation.

So what can you do with all this information? Where do we go from here?

So for those who do want to question the limits and affordances of free-information regimes, where do we go from here? Well, here are some ways we can think about it. $\frac{48}{2}$

For social scientists and humanities scholars in academia, let's not be seduced by the medium, rather let's have fun with it. I hear from a lot of folks that they don't want to study or talk about the internet or media because they're not "techy" or it's not their thing. That's like saying I don't want to deal with capitalism. Whether you consider yourself techy or not, chances are you part of the internet and the internet is part of your life. Sign up for all those new social networks. Experience the privacy issues and confusions. Play some online games. Get on that Farmville. Try out ChatRoulette. My point is have fun and explore! But be careful of fetishizing the digital and avoid making normative claims of how technology has transformed "X" for the good or bad.

We have to think really hard about our intended audience. Conversations on the social aspects of technology are already happening in lots of places without the participation of social scientists. If we want to be part of that dialogue we have to engage in those conversations. Only publishing in journals and/or talking at academic conferences is not enough.

In academia, we are taught to be critical...of everything. But sometimes this comes at the expense of contributing to the dialogue of solution-making.⁴⁹ We can see companies, countries, and people as damaged, or we can see them as in process. It's much more inviting if we view them as the latter. Doing so not only changes the way we speak to them, but the way we observe, analyze, and talk about them.⁵⁰

Corporations and non-profits who are working to increase access to information - I ask you to closely examine the terms of your collaborations, sponsorship, and donors. Efforts to bring open access to information might be well-founded and well intentioned to its core, but the work that your organization or corporation does can be used by governments and corporations as a way to promote their own agenda. Negotiate agreements in such a way that your own missions aren't only being met, but are't being hijacked.

Policy makers - How information will be managed by governments and corporations is a moral and ethical question not just for the entities in charge of the information, but for the bodies of governance that can challenge these entities to continually function in the interests of its users/constituents. Regulatory efforts must think beyond the nation-state and see how information-mediating institutions are used globally.

Technologists, software programmers, and engineers - I encourage you to keep building amazingly innovative stuff. Without you, I wouldn't have been able to write my talk in 5 cities, on 3 computing devices, on 4 airplanes, and also get real-time online feedback from 6 colleagues who live in 4 countries around the world using just *one* virtual document. Thank Google Docs for cloud computing! So pease keep actualizing your fantastical dreams of a ubiquitous world of computing! But at the same time please be conscious of not pushing this onto other people - especially people who live in different countries or not in your image. Culture matters no matter how great the technology you build. It will save you a lot of money if you start the process to understand cultural orientations *before* you create technologies for another country or community.⁵¹

And to everyone working in the new media tech space - this includes the technologists, policymakers, venture capitalists, entrepreneurs, marketers, lawyers, marketers, advertisers, fans, participants, supporters - let us stop thinking of places outside of the US as undeveloped, less than us, or uncivilized. The way we see the world influences what we fund, innovate, and design in it.

Just as much as morals of good and evil are socially constructed, so are the very concepts that are integral to the development of communication technologies: privacy, social connections, innovation, and sharing. As more companies look to expand their core products to software based services, really getting at these intangible things of culture matter so much because they do manifest themselves physically in code, architecture, device, business plan, and policy. Culture is tangible, but usually we don't notice its effects on technology until it's too late or until we've lost too much money to continue. And by the time we do notice it, we frame it as a moral problem by framing non-adoption or non-use of technology as a problem with the audience, not the creators. I'm not saying that companies shouldn't have morals or ethics. Rather, I'm saying that morals and ethics are important, and they serve companies and their target audiences in different ways depending on context.

The perfect Way is without difficulty, Save that it avoids picking and choosing. Only when you stop liking and disliking Will all be clearly understood.

A split hair's difference, And heaven and earth are set apart! If you want to get the plain truth, Be not concerned with right and wrong, The conflict between right and wrong Is the sickness of the mind. (from the Hsing Hsing Ming.)

As we continue to create technologies for communities where we can't claim membership, let us be attentive to the how we conceive of those communities in the first place. We shouldn't go into situations with judgement or at least if we do, we should be aware of them. Corporations should not go into other countries or communities expecting for their business to change governments or enlighten people or force their own moral paradigm. We have to make sure we avoid the <u>"White God Syndrome"</u>in China as argued by Paul Denlinger.⁵²

So what's next for Google and China? Well, I last heard that they are trying to work something out. Regardless of what happens, I believe that this is not the end of the Google and China story. Just because they want the same thing, access to information, doesn't meant that they can't negotiate a shared access. It's kind of like two giants speaking different languages who both want to play in the same sandbox: they both have learned a lot about each other's boundaries and they will both see that they can learn a lot more by collaborating again. China has a lot to gain from

Google's expertise, especially in the areas of online advertising and metrics.⁵³ Google has a lot to offer and profit by operating in the largest online market in the world.

We have a lot of new questions to ask about "social information" in this age of neoinformationalism. What role do we want to play in a social agenda that prioritizes the ubiquity of free-information? How comfortable are we with this approach when it is part of an imposition of neo-informationalist values in support of capitalism's search for new information markets?⁵⁴

What are the underlying cultural values that information mediating institutions draw upon? What cultural values do people bring to the table as users, consumers or citizens of these technologically mediated spaces? What kind of epistemological and/or ontological shifts do we need to make in order to better analyze how information is embedded in institutions? Who is authorized to speak for the values, needs, or morals of a community or individual - tech companies, state, non-profits? How do information-institutions and devices create and reproduce how we see the world?

By reflecting on the questions I have posed, my hope is that we can understand the values that shape our technologies and the way we use them. And that we learn to better understand the values that define who we are and how we go about changing the world.

My slides and expanded talk are on my blog, Cultural Bytes, with additional footnotes and citations.

Thank you so much for your time and I look forward to hearing your feedback in person or over email!

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I want to thank the following people who gave amazingly insightful feedback and encouragement in the various stages of my analysis on Google and China: <u>Kenyatta Cheese</u>, <u>Christena</u> <u>Turner</u>, <u>Leah Muse-Orlinoff</u>, <u>Richard Madsen</u>, <u>Barry Brown</u>, <u>Morgan Ames</u>, <u>Silvia Lindtner</u>, <u>Chun</u> <u>Xia</u>, <u>Jakey Toor</u>, Erin Malone, and all the commentators from my <u>original blog post</u>.

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notes

¹ When I refer to China, I am not including Hong Kong.

² Google's architecture is cloud-computing where information is redundant, accessible, and always available. For example, if you have an email address with Google, instead of your email just sitting on one server, your email can sit on multiple services. This means that you can access information quickly and from anywhere. It also means if one server goes down, you won't notice because the other servers are not affected.

³ Other countries have also blocked Google.COM

⁴ Google.COM was and has never been accessible in China unless one is signed up for a service that would allow them to bypass the filter and access sites that weren't available in China, such as Google.COM or NYTIMES. Interestingly, back in 200_, even Sergy, the co-founder of Google quietly admitted that Chinese people were not using Google.CN. This is because most elite users pay for alternative internet servers (VPNs) that allows them to hop over to Google.Com and other censored sites.

⁵ Sometime in 2008. the auto-completion feature for word searches was not longer available.

⁶ in April 2010, Google dropped its Chinese name, Guge. http://bit.ly/agFDTR

⁷ Hong Kong law allows for unfiltered internet searches. Interestingly, check out Jonathan Stray's article on how people searched for banned search terms the day Google moved its China operations to Hong Kong. http://nyti.ms/8ZJxVs

⁸ My insights are based off of my fieldwork in China since 2006. I also spent over 300 hours conducting participant observation and informal interviews during the summer of 2009 with government policy-makers, academics, youth, migrants, and low-income users

⁹ Google did not provide mp3 search in fear of lawsuits from music labels.

Eventually Google did offer mp3 search, but it was too late and the service was not great either. http://tcrn.ch/90fe5s

¹⁰ Charles Frith just showed me that he wrote about this back in 2008. Check out his post, "Is Google Stupid?"http://www.charlesfrith.com/2008/06/is-google-stupid.html

¹¹ Even in the absence of usability tests and people still find new ways to interact with applications. Scholars such as danha boyd, Henry Jenkin, and Mimi Ito have conducted great research that shows how people make use of online media in really creative ways and outside of the original intentions of designers.

¹² Since I wrote my blog post in February 2010, a new search engine by The People's Daily, Goso.cn, has been launched. The People's Daily is a newspaper known as the mouthpiece of the Chinese government. Kai Pan provides some really great initial analysis of how GoSo compares to Baidu. http://bit.ly/avgRKH

Check out Kai Pan from China/Divide's most recent post on the Google-China debacle. It's an excellent take on how Baidu benefits from Google's departure. http://chinadivide.com/2010/google-left-china-baidu-gained-chinese-netizens-lose.html

¹³ This is not to say that Google's and China's approach to information will never be be

compatible.

¹⁴ Google has dropped the "Don't be Evil" mantra. http://bit.ly/bQXowP

¹⁵ Coleman, Gabriella. 2009. "Code is Speech: Legal Tinkering, Expertise, and Protest among Free and Open Source Software Developers." Cultural Anthropology 24:420-454.

Capurro, Rafael. 2003. "Passions of the Internet. "pp. 331-345 in Passions in economy, politics, and the media in discussion with Christian theology, W. Palaver and P. Steinmair-Posel. Vienna: Lit Verlag.

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Vuorinen, Jukka. 2006. "Ethical codes in the digital world: comparisons of the proprietary, the open/free and the cracker system." Ethics and Information Technology 9:27-38.

¹⁶ Stephen Levy was the first to publish a book on the history and philosophy of all the hacker ethics in 1984. The term has been around since the 1950's and 1960's at Massachusetts Institute of Technology.Levy, Steven. 1984. *Hackers: Heroes of the Computer Revolution*. Penguin.

¹⁷ Gabriella Coleman's work on F/OSS hackers is a great source for more on how computer programmers are guided by the hacker ethic and larger social commitments. Coleman, Gabriella. 2009. "Code is Speech: Legal Tinkering, Expertise, and Protest among Free and Open Source Software Developers." *Cultural Anthropology* 24:420-454.

Coleman, E Gabriella. 2004. "The Political Agnosticism of Free and Open Source Software and the Inadvertent Politics of." *Anthropological Quarterly* 77:507-19.

¹⁸ My observations on hackers is informed by my project on hacker values. I interview several hackers (N=12) in Silicon Valley during the spring of 2010 while I was researching at Nokia Research Center. I focused a on trying to understand how self-identified hackers embodied the hacker ethic in their personal values and their jobs. This was a collaboration with Jofish Kaye.

¹⁹ Capurro convincingly argues that hackers also embodies a Protestant Ethic of hard work for the sake of profits, referencing Max Weber's Protestant Ethic and the Spirit of Capitalism. Capurro, Rafael. 2003. "Passions of the Internet. "pp. 331-345 in *Passions in economy, politics, and the media in discussion with Christian theology*, W. Palaver and P. Steinmair-Posel. Vienna: Lit Verlag.

²⁰ Free individuals therefore had the freedom of the press and no longer had to abide by the existing rules around censorship imposed by the state or church. With the Descartian notion that doubting and questioning established knowledge was what made people human, Kantian belief that all moral rules are universal, and the Benthamian notion of Utilitarianism, that morally good acts are ones that bring happiness to greatest number of people, hackers embody the very ethical system that guided the founding of modern democracy and I argue, Google.

²¹ Check out Fred Turner's excellent scholarship on how Google's culture supports their innovative process. Turner, Fred. 2009. "Burning Man at Google: a cultural infrastructure for new

media production." *New Media & Society* 11:73-94. Also check out Pat Kane's latest book, *Play Ethic: A Manifesto for a Different Way of Living (2005)* makes the case that Google has successfully adopted a play ethic. An ethics of play is actually the foundation of a hacker ethic. Early hacking groups were initially formed by computer geeks who wanted to play games on one network, the LAN Party. They would meet at a person's house to create a local area network, hence LAN, as this was before the advent of the internet. On another note, China does not have a strong play culture and this is to a large degree consistent with Confucian culture. But what play culture China does have, I argue that Google failed to understand. The Chinese internet is one of the largest playgrounds in China and Google failed to build tools that allowed people to play more on Google than in other areas. For example, Baidu is successful because of its mp3 search. Is listening to music not a form of play? Google ignored existing play culture by not going into mp3 search. And when they did finally did do it in 2008, it was too late and it still wasn't as useful as Baidu's mp3 search.

²² China's governance is so much more complex than just a doctrine on "social harmony." But for the purposes of my talk, I am only focusing on this aspect of its governance policy.

²³ Of all the ways to fulfill one's duty in life, obedience was seen as the most virtuous.

²⁴ On a more serious note, China has innovated their manufacturing process to make products as cheap as possible.

²⁵ See discussions on regulating web 2.0 utilities by danah boyd. http://bit.ly/clNOKO

²⁶ The distinction on information as a commodity or resource is per the suggestion of communication theorist Dan Schiller's How To Think About Information. Schiller, Dan. 2006. *How to Think About Information*. Urbana.

²⁷ alternatively \$300M last year and "over \$1.2B on year later"

²⁸ Read John Battelle's book on Google. He does an excellent job at talking about how Google's culture points to larger social patterns. In particular, he talks about the cultural anthropology of searching. Battelle, John. 2006. *The Search: How Google and Its Rivals Rewrote the Rules of Business and Transformed Our Culture*. Portfolio Trade.

²⁹ http://news.bbc.co.uk/1/hi/business/8623881.stm

³⁰ Check out Morgan Ame's work on this aspect of the OLPC movement.

³¹ This point came out of a conversation with Christina Turner.

³² added on July 8. 2010: I just found out that China actually called the US an "information imperialist" after Hilary Clinton delivered a speech on internet freedom and Google's exit from mainland China.http://www.independent.co.uk/news/world/asia/the-google-war-china-calls-us-an-information-imperialist-1876409.html

³⁴ Mark Fischer talks abouts this aspect of Slavoj Žižek's work in Capitalist Realism.

³³ Brown, Wendy. 2006. "American Nightmare: Neoliberalism, Neoconservatism, and De-Democratization." *Political Theory* 34:690-714.Slavoj Žižek argues that this distance from the state favors neo-liberal corporations because it means they don't deny the state, but they manipulate the state to its own will. As such the hacker ethic embodies a loss of faith in the state and directs political engagement unfolds on the level of policy and law so that it can be re-written to support neo-informationalism, case in point the free and/or open-source software movements. Fisher, Mark. 2009. *Capitalist Realism: Is there no alternative?* Winchester, UK; Washington, USA: Zero Books. ³⁵ Kenyatta Cheese just pointed out this blog post by Glyn Moody to me on July 8, 2010. Glyn writes about Google's work in digitizing the US National Archives and says, "wittingly or not, Google becomes an instrument of cultural imperialism."

http://opendotdotdot.blogspot.com/2006/02/googles-creeping-cultural-imperialism.html

³⁶ pg. 17 in Fisher, Mark. 2009. *Capitalist Realism: Is there no alternative*? Winchester, UK; Washington, USA: Zero Books.

³⁷ If we don't, we fall into what Mark Fischer calls "reflexive impotence," the feeling in late Capitalism that "something is wrong" but we "can't do anything about it," and the privatization of these feelings instead of the questioning of the underlying social structures that may have caused them (pg. 21).Fisher, Mark. 2009. *Capitalist Realism: Is there no alternative?* Winchester, UK; Washington, USA: Zero Books.

³⁸ Read Charles Ess's wonderful book Digital Media Ethics

³⁹ pg. 229 in Porter, Theordore, 1994. "Information, Power, and the View from Nowhere." pp. 217-230 in *Information Acumen: The Understanding and Use of Knowledge in Modern Business*, Lisa Bud-Frierman. London: Routledge.

⁴⁰ Communication theorist Mark Poster (pg. 160) in Information Please, asserts that in a digitally networked society, there will be a a reconfiguration of the ethical in relation to the individual, I argue that the reconfiguration of the ethical will be extended to the nation-state and its relations to corporations. Poster, Mark. 2006. *Information Please: Culture and Politics in the Age of Digital Machines*. Duke University Press.

⁴¹ Gorniak-Kocikowska, Krystyna. 1996. "The computer revolution and the problem of global ethics." *Science and Engineering Ethics* 2:177-190.

⁴² Agre, Philip E. 2002. "Real-Time Politics: The Internet and the Political Process." *The Information Society* 18:311-331.

⁴³ pg. 120 in Schiller, Dan. 2006. *How to Think About Information*. Urbana.

⁴⁴ A must read on how China is attempting to reinforce its own virtual boundaries is Rebecca MacKinnon's piece on "networked authoritarianism." http://bit.ly/9E57dO

⁴⁵ In such a world, post-colonial theories that once assumed more or less stable boundaries of nation-states no longer suffice because these boundaries have become destabilized, transformed, or de-valued by global digital networks. This is an argument made by Mark Poster in the second chapter of Information Please: Culture and Politics in the Age of Digital Machines (2006). Power is distributed in new ways and is complicated by digital forms.

⁴⁶ In my own work, I look at how 3 intersecting institutions are changing as they relate to new forms of information access through digital tools in China and Mexico: migration, education, and the family. My analytical lens does not treat a specific technology as an object or place, such as a cellphone or an internet cafe, but as as social object and place embedded in institutions of changing practices, beliefs, norms, and strategies with generative implications on everyday life.

⁴⁷ This appears to the goal of the Institute of Ethics and Emerging Technologies. I just read about technoprogressivism as an ethical approach. This is something I need to learn more about. Here is a useful chart: http://ieet.org/index.php/IEET/biopoliticshttp://ieet.org.

⁴⁸ thank you to danah boyd for sharing with me the importance of providing concrete things that

people can do.

⁴⁹ I am personally trying to learn how to write in such a way that doesn't just alienate companies, governments, and individuals, but validates their expertise and makes them want to sit down at a table with me to talk about how to improve their service.

⁵⁰ I encourage people to read Eve Tuck's paper that asks us to stop approaching research from a damage-based and to a desire-based model. Tuck, Eve. 2009. "Suspending Damage: A Letter to Communities." *Harvard Educational Review* 79:409-428.

⁵¹ Paul Denlinger's 2007 article on why US companies fail in China is a great read. http://www.chinavortex.com/2007/08/why-most-us-market-entries-fail-in-china/I just came across this excellent article by Christine Ngo on the Transnational Law Blog: http://transnationallawblog.typepad.com/transnational_law_blog/2010/04/the-lure-of-china-andeconomic-activism.html

⁵² And for those who think the US is a free-information media space, please read this article Glenn Greenwald (thanks Paul Denlinger for the suggestion!) http://www.salon.com/news/opinion/glenn_greenwald/index.html

⁵³ Check out Paul Denlinger's latest article in the Financial Times on why internet advertising is not a big market yet in China. http://bit.ly/dpftOE

⁵⁴ Rafael Capurro poses some really important questions about ethics and technology, namely about how ethics can help us make decisions on preventing isolationism or conformity through tech use. He also points out that the digital divide is not only a technical issue, but an issue of colonialism and exploitation.Capurro, Rafael. 2009. *Digital Ethics*. Global Forum on Civilization and Peace, The Academy of Korean Studies.