Metadata, The Public-Private Nexus and Modern Surveillance

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Abstract

This essay discusses the relation of surveillance in the modern world to that in the surveillance society of Orwell's *Nineteen Eighty-Four*. We establish a link between the motivations of the governments in the two worlds, and use this link to investigate the role of surveillance in each society. We further analyze the two primary types of modern surveillance — internet tracking and data collection carried out by private corporations and the collection of metadata by government agencies — to support this comparison.

RWELL'S *Nineteen Eighty-Four* portrays a frightening world where the rules of modern society are not applicable. It depicts a dystopia where the modern notions of privacy and individuality do not exist. This aspect of the book caused a resurgence in its popularity when Edward Snowden's recent revelations about the NSA's mass surveillance program came to light. However, there are many journalists and policy-makers who believe that comparing modern society to that in *Nineteen Eighty-Four* is foolish. For instance, Michael Moynihan argues in Newsweek that since "1984 is a book not only about surveillance but also the full-spectrum dominance of Stalinist totalitarianism, from the government-directed corruption of language ... to absolute control of information and historical inquiry." and that since no modern state is so far down that path of tyranny, even accounting for mass surveillance is not enough to "establish the literary analogy" with *Nineteen Eighty-Four* [Moy13]. However, what such analysis fails to realise is that Orwell's purpose in writing *Nineteen Eighty-Four* was never to imply that society in the Western world would someday

become an exact reflection of that in Oceania. Rather, he meant for the book to serve as a warning to Western societies against the dangers of going over board in the fight against external dangers. Orwell expresses this fear concretely in a letter he wrote in 1944, stating that since Britain and the USA had not suffered severe hardships yet, maintaining a policy of proclaiming that everything was fine without analyzing the sinister symptoms would simply lead to a quicker rise of the totalitarian state [OD11, p. 232-233].

These "sinister symptoms" are readily visible in modern society, with little effort from the authorities to hide them. To analyze them we must first identify why the world of *Nineteen Eighty-Four* comes off as frightening to modern readers. In Orwell's story, society itself is the site of horror. The world of *Nineteen Eighty-Four* is an alien one, with none of the freedoms and rights that one expects from Western society. This change stems from a change in the purpose of governance. Those in charge do not rule with any material goal in sight. Instead, the aim is simply to maintain power interminably. O'Brien, an important member of the Inner Party confirms this stance when he says to Winston Smith, the protagonist, "The Party seeks power entirely for its own sake ... Not wealth or luxury of long life or happiness; only power, pure power." [Orw61, p. 263]. To achieve this, the party tries to eradicate emotions other than fear and hatred, and attempts to use these remaining emotions as a tool to maintain control over the populace. The foremost application of this policy is seen in the use of surveillance. Dissidents cannot partake in any subversive actions due to the fear that every action of theirs is being watched. Hence to link modern society to *Nineteen Eighty-Four*, it is essential to consider it in the context of these two phenomena. This essay will explore how surveillance and the use of fear as a tool of control have proliferated in modern Western society as well as the consequences of these changes.

The use of fear to subdue the citizenry is a tactic that has been used time and again by successive administrations in the USA. It dates back to the early twentieth century, with the two Red Scares in the 20s and the 50s. Closer to the modern age, we find that wars' on various abstract topics such as the "War on Terror" have been used to justify an increase in military and civilian police powers while simultaneously reducing civil liberties. For instance, the War on Terror has been used to justify the invasion of Afghanistan and to an extent Iraq, which has resulted in the deaths of thousands of Western soldiers and hundreds of thousands of innocent civilians [Cos]. This "war" has furthermore been used to pass acts like the USA PATRIOT Act that legalize expanded spying efforts and make it more difficult for

the average US citizen to challenge this spying in the name of fighting the abstract concept of terrorism. Some of these expanded abilities include appropriation of any individual's records that are held by a third party and secret searches that the victim is not informed of. These actions are eerily reminiscent of the situation in *Nineteen Eighty-Four*, where the state of Oceania is constantly at war with one of the other two superpowers of the world, and the state of war is used as an excuse to deprive the people of even basic necessities such as food [Orw61, p .5]. Citizens are expected to spend their entire lives under surveillance, and nearly everyone does so, believing that their sacrifices are for the greater good. Further parallels between the constant state of war in Oceania and modern society are found in Goldstein's *The Theory and Practice of Oligarchical Collectivism*, where we find the following passage:

... war hysteria is continuous and universal in all countries, and such acts as ... reprisals against prisoners which extend even to boiling and burying alive, are looked upon as normal, and, when committed by one's own side and not by the enemy, meritorious. But in a physical sense war involves very small numbers of people, mostly highly trained specialists, and causes comparatively few casualties. The fighting, when there is any, takes place on the vague frontiers whose whereabouts the average man can only guess at ... [Orw61, p. 186]

This passage reminds one strongly of the wars being fought in Iraq and Afghanistan. Inhumane torture of prisoners is a frequent practice in prisons like Abu Ghraib and Guantanamo Bay, where many innocent people have been horribly tortured with the perpetrators often escaping scot-free [Sha12]. These prisoners have been incarcerated due to wars that are fought in remote corners of the world that many Americans had no prior knowledge of. The soldiers that fight in these wars are trained in the use of the best weapons and military technology, and the number of casualties on the USA's and it's allies side is relatively small given the length of these wars. Suddenly the world of *Nineteen Eighty-Four* does not seem all that distant. This use of fear as tool of justifying militaristic policies serves as powerful proxy for power in a society that is split along patriotic lines. It serves to foster an "us vs. them" divide by providing a sense of belonging with fellow countrymen. This creates an illusion of a united populace, since those who raise dissenting voices can easily be denounced as unpatriotic traitors.

This phenomenon is observed both in *Nineteen Eighty-Four* and in modern Western society. For instance, whistleblowers such as Edward Snowden are frequently labeled as traitors by Western governments, while in *Nineteen Eighty-Four* Goldstein, the head of the resistance, is a fiction kept alive by the party for the sole purpose of generating fear that this anarchist traitor would somehow destabilize Oceanian society and would gift an easy victory to Oceania's enemies. Hence the state of constant war makes fear an easy tool to use in establishing dominance and power.

So how does surveillance fit into this narrative? How does surveillance create fear and establish governmental power? To answer this, we turn to Michel Foucault's arguments in the book "Discipline and Punish: The Birth of the Prison". Foucault discusses a structure originally envisioned by Bentham called the "Panopticon" [Fou95, p. 200]. The Panopticon is a prison where the cells are arranged in a circular fashion, with a guard tower at the center that watched over all the cells at once. Inmates are kept isolated from each other and from all contact with the outside world. Furthermore, they can never know when they are being watched. This creates a one-way flow of information from the inmates to the watchers, and thereby establishes their dominance. The inmates are in a state of "permanent visibility", as Foucault puts it, and have to always ensure that their actions conform to the rules, rules that changes arbitrarily at the command of those in power. This fear is similar to the fear that Winston experiences in *Nineteen Eighty-Four* while doing tasks as mundane as writing in a book [Orw61, p. 7].

One can argue that modern systems of government are not as restrictive as the Panopticon. However, with modern capabilities of data storage, what matters is not what is illegal now, but rather what might be illegal in the future. What further exacerbates this is a complex legal system that is far too abtruse for the average citizen to easily understand. This can result in taking actions that one believes are legal, but are actually not. Thus the fear of performing an action that might or or might not be illegal results in a severe curtailing of one's freedoms, and this self-censorship is slowly infecting modern society. For instance, PEN America reports that the NSA scandal caused 28% of interviewed writers to self-censor the topics they were writing about, with another 12% considering doing the same [PEN13, p. 6]. The scandal further encouraged them to avoid conversing about controversial topics in emails [PEN13, p. 6].

However, upon delving into the details, one notices that modern surveillance

differs from that described by Foucault and Orwell in two fundamental ways. The first is the fact that the authority responsible for gathering intelligence, namely the National Security Agency (NSA), claims that it only collects metadata (data about data) about American citizens. This is different from the direct surveillance that Oceanian citizens are subject to, where their every move is analyzed. The second point of contention is the fact that unlike in Nineteen Eighty-Four, today a large amount of data collection is carried out by private companies, such as Google and Facebook. These companies, unlike the NSA, do handle actual data, building profiles of their consumers that enable them to effectively target advertisements towards them. However, these corporations, unlike Oceania's Thought Police, do not appear to use this power for policing the behaviour of their users. So on the one hand we have that the authorities who do have power to police the citizenry cannot collect the data to do so, and the corporations that can collect this data, do not have the power to modify their users' behaviour. It would appear that these two factors differentiate modern surveillance from that found in Nineteen Eighty-Four to a large enough extent so as to cause the comparison to break down. However, this essay will proceed to show that these differences do not significantly affect the comparison.

One of the many arguments that supporters of the NSA's actions put forth is that collecting metadata is not as a revealing as actual surveillance. Furthermore, these supporters, such as Sen. Dianne Feinstein, claim that since metadata collection does not involve collection of the actual data, it cannot even be even called surveillance [Fei13]. This is a highly flawed argument. Metadata can be potentially as revealing as direct surveillance. Indeed, often times it is easier to process metadata, which, as Mark Bernstein, a famous political and legal writer, explains, is structured data; the information it contains is regular and easier to perform computations on [Ber14]. For instance, the metadata of phone calls that the NSA collects consists of information like phone numbers of both parties in the phone call, location data, call duration, etc. [Gre13a]. This information can easily be tallied and stored in an organized manner in a remote data center with little to no human intervention. Felten argues that the content of the phone calls themselves, on the other hand, requires human interpretation and the application of contextual understanding [Ber14, qtd.]. Moreover, various other factors such as voice quality further influence the feasibility of analyzing this call data. However, even if this metadata is easier to store and extract information from, it still remains to show that this extracted information is as useful to government agencies as actual surveillance data. Research has answered this question too, with researchers at Stanford University demonstrating that metadata can reveal highly private information such as the medical institution one visits, what kind of doctors one consults and the identity of one's contacts [MM14]. Thus collection of metadata is a win-win situation for the NSA; it enables them to easily collect and analyze large amounts of data fairly quickly, while at the same time providing them with enough information to get a warrant to obtain the actual data. For the common man, however, it is an even worse position to be in because it enables the authorities to mine his life for information while claiming that they are not actually invading his privacy. In fact, since modern technology is a black box to most users, collecting metadata is easier than ever before, as users are not even aware of what information they are leaking when they (for example) upload photographs or even just visit different websites.

However, collecting actual data is still very useful, as it provides hard evidence of "illegal" activities. Here is where we see the role of private corporations bloom. Modern technology companies such as Google and Facebook rely on gathering information on their users. They do so so that they can build better profiles of their users, and can therefore serve them more relevant ads. This in turn increases the chances that the user will click on the ad increasing revenue for these corporations. Thus each of these corporations functions as a "Little Brother", constantly gathering data about their users. For instance, the Facebook app for Android requires access to users' SMSes, their locations, and even asks for permission to place calls without the users permission [Fac]. Since the source code of the application is not openly available, it is impossible to know what the app is doing with these permissions. Furthermore, advances in technology have made long-term storage of this data highly feasible. Thus the surveillance carried out by these Little Brothers is as invasive as that in *Nineteen Eighty-Four*. As in *Nineteen Eighty-*Four, people using services from Google, Facebook, Amazon and so on agree to hand over personal information such as search and browsing history, preferences in different fields such as literature and music, real-world relations, and so on, in exchange for the use of convenient services like online shopping, web search and email. This mirrors the situation in *Nineteen Eighty-Four*, where citizens willingly give up various freedoms in exchange for the convenience of perceived security from external enemies.

However, what makes this situation truly dangerous is the fact that these companies share the private data they collect with government agencies like the NSA. As Edward Snowden revealed in June 2013, many big tech companies such as

Google, Microsoft and Facebook are part of a program called "PRISM" created by the NSA which forces them to hand over user data [GM13]. Under this program, the NSA can force the aforementioned companies to hand over the data of non-American users, as well as American users who have communicated with non-Americans, which, by the nature of online interaction, includes nearly all American internet users [GM13]. This process does not require a warrant, and hence is painless to do *en masse*. Moreover, unlike the collection of call metadata, PRISM enables the NSA to collect the actual data for easy analysis. Such freedom to collect data goes beyond even what Orwell would have envisioned, since gathering such vast amounts of information is relatively painless with modern technology, and advances in machine learning are making this vast stored data increasingly more useful as an indicator of trends and public opinion.

Despite this, one can still claim that since the authorities do not use the data they collect both directly and via private corporations to control minute details of citizens' lives, it would be irresponsible to claim that modern society is heading towards an Orwellian future. However, one would once again be mistaken, since there is evidence that the NSA makes data on American citizens available to local law enforcement agencies for use in investigating activites such as illegal drug trading and tax violations [SC13; SI13]. Moreover, since using the evidence collected by the NSA to prosecute US citizens would violate a number of laws, these law enforcement agencies cover up the source for their evidence, thereby lying to courts and undermining the judicial process that serves as a foundation of a democratic society [SC13]. Another instance of this data being misused was brought to light by Greenwald in an article where he detailed NSA programs created to discredit their targets through character assassination based off of sensitive personal data that made them vulnerable to blackmail [Gre13b].

Hence we see that modern society is not too far removed from Oceanian society. Any differences are merely in degree rather than in kind. Modern governments have all the pieces needed to successfully enforce a Orwellian dystopia. Indeed, it is no coincidence that the novel is set in the Western heartland of Great Britain and the USA. Orwell realised that power was a great motivator that could corrupt even those societies that held values of freedom and democracy dear, and thus wrote *Nineteen Eighty-Four* as a warning against the lures of power. It is up to the common man to ensure that such a catastrophe never takes place. Indeed, Orwell believed that the final hope of mankind in the face of totalitarian rule would come from the masses. This is evident from Winston's belief that the salvation of

Oceania and humanity as a whole would come from the proletariat. The common man must remain ever on guard to prevent the formation of such a society as seen in *Nineteen Eighty-Four*.

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