

# Facebook in the Surveillance State

## Introduction

Shoshana Zuboff calls the marriage of neoliberal economic policies and digital omniscience '*surveillance capitalism*'; a term referring to a branch of capitalism in which private companies produce capital by extracting user information instead of the traditional production of goods. The recent phenomenon is reflected best in the business models of technology giants such as Google and Facebook, both of which rely almost entirely on targeted advertisements for revenue. In turn, their ability to present relevant ads to a user depends on the sophistication of their data collection algorithms. As a consequence, these companies often keep tabs on the slightest interactions with their services in hopes the data will yield profit with future personality analysis - Facebook has went as far as tracking cursor movements<sup>2</sup> in the absence of clicks.

Coupled with the addictiveness of the platform, the continuous social media feed of Facebook has changed the way people come across content on the Internet – Pew Research Center's 2016 study indicated that 62% of US adults got news through social media<sup>3</sup>. Unsurprisingly, due to its large user base, Facebook leads the pack. Undoubtedly, governments and private companies can gain immense power over public opinion by possessing personal information about Facebook users and further, by controlling what people see online.

By analysing reports and studies, this piece explores the conscious and unconscious role of Facebook in surveilling the population and exerting influence over its decisions. Incidents indicating the use of personal information beyond the commonly understood intent of presenting relevant advertisements raise ethical questions about the role of private companies in surveillance and citizen profiling.

## What Facebook Collects

Facebook maintains that personal user information that they possess is a trade secret and constitutes intellectual property<sup>4</sup> belonging to Facebook. Thus, the lack of a strict legal framework on online data policy makes it impossible to know the entirety of Facebook's knowledge of your personal life, personality traits and relationships with people - Facebook only allows users to download a copy of the data they have explicitly shared on their public profile. By analysing information from user-facing source code, reverse-engineering the Facebook app, and public announcements; we can attempt to fairly assess Facebook's data collection capabilities.

To present more relevant content, Facebook tracks *reactions* which are a form of direct engagement. But when user engagement was at its low, the company commenced measuring the time users spent looking at posts, photos and comments<sup>6</sup>. As an experiment, they also collected drafted posts and messages which the user ultimately did not send<sup>8</sup>. It is currently unclear whether the practice continued after the experiment. When installed, the Facebook phone app collects complete contact lists<sup>7</sup>, snapped photographs<sup>13</sup>, location, etc., which are among 98 personal data points that the company uses to target ads to users<sup>9</sup>. When Facebook purchased Whatsapp, it pledged to not incorporate private information from the messaging service into their database. However, a few months later, it did exactly that<sup>14</sup>.

Of course, Facebook's data collection isn't limited to activity on their own services or to online activity. Through cookies stored on users' devices, the company has the ability to track people's activity on other websites if the *Like* button has been integrated on the website<sup>11</sup>. This secondary data collection which enables profiling people who are not signed up for Facebook accounts continues globally despite violating EU privacy laws<sup>12</sup>. The company also engages in an active purchase of offline user activity through other companies "including their income, the types of restaurants they frequent and even how many credit cards are in their wallets"<sup>10</sup>.

Technically, presenting relevant ads to an anonymous individual is possible through an analysis of user activity on Facebook and other websites. Knowledge of a person's purchase habits, interests and psychological profile are possibly the best ways to market a product but then, why does the social media platform require that users make an account with their real name? Facebook regularly suspends accounts which it suspects are using assumed names, and to determine so has asked users seemingly random questions about themselves and their friends<sup>5</sup>.

Every second, massive amounts of data are collected by the company and then constantly analysed to create fine-grained personal profiles of users. The current state of internet surveillance resembles a digital manifestation of what Jeremy Bentham called the Panopticon.



Theorised as an institutional correctional facility, its design places the inspection house at the center from which everything around it can be observed. What Bentham envisioned was that the inability of a single watchman to surveil everyone would be counterweighted by the fact the inmates would not know when they were being watched. As a result, the inmates would self-discipline themselves succumbing to the fear of their misbehaviour being detected by the watchman at the center. In the current context, the metaphor is strengthened for the surveiller - the watchman isn't an imperfect human but an algorithm capable of watching everyone constantly. Further still, every moment under the surveillance (even if no wrongdoing is committed under watch) contributes to a larger dataset about the person's behaviour. The digital panopticon feeds itself for strength. With these extensive data extraction measures, companies like Facebook have the ability to draw unprecedented precise conclusions about its users.

## What Facebook Knows

In the multitude of data points collected by Facebook, there lie both the mundane habits and the most intimate secrets of a user. By monitoring activity, it is easy for Facebook and other users to make an accurate judgment of the sleep cycle<sup>15</sup> of users. With constant location detection, Facebook notices that two people are often in each other's vicinity and then suggests that they become Facebook friends. Through image analysis, Facebook has the ability to (now a feature on Facebook) to automatically recognise people in photographs<sup>16</sup> and therefore, arrive to factual conclusions of a person's friends and location even if the person does not actively share their own information on Facebook or even sign up for an account.

The most important aspect the surveillance is the one plagued with controversies of ethics for the social media company - psychological profiling. A variety of conclusions about the user can be made with just access to what the person has 'liked' on Facebook; these inferences include race, sex, sexuality, IQ, and political views. In fact, Facebook guesses each of these and lets advertisers direct ads at people on the basis of most of these (including race)<sup>19</sup>.

In a widely discussed paper titled *Computational personality recognition in social media* by Farnadi, et al (2015)<sup>17</sup>, a methodology to infer personality traits through Facebook 'likes' has been discussed.

*“The strength of their modeling was illustrated by how well it could predict a subject's answers. Kosinski continued to work on the models incessantly: before long, he was able to evaluate a person better than the average work colleague, merely on the basis of ten Facebook "likes." Seventy "likes" were enough to outdo what a person's friends knew, 150 what their parents knew, and 300 "likes" what their partner knew. More "likes" could even surpass what a person thought they knew about themselves. On the day that Kosinski published these findings, he received two phone calls. The threat of a lawsuit and a job offer. Both from Facebook”<sup>24</sup>*

To appreciate the far-reaching implications of psychological profiling, we must first understand a popular model based on personality descriptors - the Big Five Personality Traits. Also called the OCEAN Model, this five factor test makes inferences about:

1. **Openness to experience** marked by appreciation for art and unusual ideas; intellectual curiosity
2. **Conscientiousness** - a tendency to be organised and disciplined)
3. **Extraversion** marked by sociability, social energy

4. **Agreeableness** - a tendency to be cooperative towards ideas rather than be suspicious of them
5. **Neuroticism** which is a measure of emotional stability

Coupled with a person's interests and leanings, this information about these five personality traits can make possible the prediction an individual's response to presented content. In fact, researchers consider information shared on social media profiles are painting a more accurate picture than self-reported data for tests in psychology and psychiatry<sup>18</sup>. This data can be used to predict mental health issues before they are diagnosed by a professional.

In his book *Madness and Civilisation*, Foucault analyses the history of psychiatry and deconstructs forms of segregation on the basis of mental illnesses. The segregation and surveillance of such individuals serves to exert power over their actions. Through psychometrics, profiling and control have been age-old partners but only recently has continuous internet use made these methodologies accessible to private companies and individuals at a massive scale. Personal information and inferences from the information, in the age of reason, will be increasingly used to weed out the "undesirables" who willingly or unwillingly stray from conformity.

To demean the autonomy of an individual, online psychological profiling has objectified the human personality. With the knowledge of a person's psychological state, it remains a matter of pushing the right buttons to extract the desirable behaviour from an individual.

For example, due to the spread of misinformation from the most powerful of politicians, traditional conservatives in the US are increasingly of the opinion that global warming is a hoax. Even if they accept global warming as fact, pro-environment ideas are not a priority for the populace usually associated with the Republican Party. In a 2016 study by Oregon State University, *Effects of moral framing on climate change attitudes and conservation behaviors* (2016)<sup>27</sup>, it was found that conservatives were as likely as liberals to support pro-environment ideas if the arguments were framed in a way to appeal to their morals.

Hence, the presentation of the argument, if catered specifically to appeal to a person's moral foundation, is often more important than the argument itself. So like Bentham's panopticon, the constant centralised surveillance by private companies can and will be used to exert influence over one's opinions and actions.

## What Facebook Controls

The first thing Facebook users see when they log in is the Facebook newsfeed which consists of updates from one's friends, the pages one has followed, and messages from advertisers. The order of the items in the newsfeed is not chronological or random - it is determined by the company's proprietary algorithms. This is where Facebook has the most control over its platform - it decides what users see and when they see it. The company constantly experiments with how they present advertisements, and have progressively muddled the line between organic and sponsored content.

### OPINION

To get more traction, Facebook pages and users can pay Facebook for a post to get more eyeballs. And to promote ads effectively, the company will often link it to your friends' actions even if they would not approve of the message.



In the pictured newsfeed item<sup>28</sup>,

- The user with his/her name blurred out never consented to a post suggesting that they support the repeal of ObamaCare.
- The user would have liked the page 'ForAmerica' but it could have been any time from the last week to years ago.

With no regard to the sensibilities of the user, the company uses past actions to paint a picture of them for other users. In fact, with its current user agreement, there is no way for users to stop their faces from appearing next to advertisements.

## MOOD

Browsing through the Facebook newsfeed is a mundane task for regular users of the social network; people report experiencing a “second hand stress”<sup>22</sup> which comes at the cost of caring about something you wouldn’t normally find out. According to Facebook’s own data, scrolling down the feed is habitual for regular users who spend almost an hour each day on the website. It is not uncommon for users to check Facebook as soon as they wake up or just before they sleep. Social interactions are usually positive for humans and ironically, the use of Facebook is accompanied by a negative self-image and worse moods for the user. A recent study<sup>25</sup> with a large sample size (5,208) confirmed this by concluding:

*“Overall, our results showed that, while real-world social networks were positively associated with overall well-being, the use of Facebook was negatively associated with overall well-being. These results were particularly strong for mental health; most measures of Facebook use in one year predicted a decrease in mental health in a later year. We found consistently that both liking others’ content and clicking links significantly predicted a subsequent reduction in self-reported physical health, mental health, and life satisfaction.”*

While numerous studies conclude with similar results, these specific long-term negative effects on mental health are hardly in the direct control of the company. One would assume that these are unintentional side effects of using the platform but it would be facetious to say that Facebook does not use its ability to alter its users’ moods. In 2014, the company did exactly that in an “experiment” to confirm the hypothesis of online emotional contagion. The study, a collaboration between Facebook and Cornell University, summarised in the coauthors’ own words:

*“We show, via a massive (N = 689,003) experiment on Facebook, that emotional states can be transferred to others via emotional contagion, leading people to experience the same emotions without their awareness. We provide experimental evidence that emotional contagion occurs without direct interaction between people (exposure to a friend expressing an emotion is sufficient), and in the complete absence of nonverbal cues.”*<sup>26</sup>

State-of-the-art natural language processing enables the company to analyse the emotions behind content. Essentially, Facebook altered the newsfeed for 689,003 users - showing some of them posts with negative emotions (anger, sadness) while it showed others posts with positive emotions (happiness, celebration); the study concluded that the emotional states were transferred to the viewers of these posts since they created content reflecting the same emotions. Interestingly, Cornell University reported that the research was funded



by the Army Research Office (a US Army agency that funds corporate research in its interests) but a correction<sup>29</sup> was later made removing the original mention.

For contrast, consider traditional research in academia which involves human subjects - strict consent forms for participation with usually not more than thousand participants. While in Facebook's study, not only were the participants not aware of the emotional contagion, they were unaware of their own participation in their experiment. The unconsented participation of human subjects (689,003 Facebook users in this case) in psychology research raises doubts about the company's ethics and the *National Academy of Sciences* journal it was published in. With over 2 billion potential unaware participants, Facebook Research is an unregulated psychological experimentation center with unprecedented amounts of personal user information.

## THE POPULAR MANDATE

One of the authors of the paper mentioned in the previous section (*Computational personality recognition in social media*), Michal Kosinski was approached by Aleksander Kogan, a psychology professor, for access to their research database<sup>20</sup>. Kosinski refused to do so, but the company Kogan worked for, Strategic Communications Laboratories (SCL), developed their own psychometric methods based on Facebook 'likes'. SCL is known as Cambridge Analytica in the US where it claims to have a psychometric profile on every citizen.

Cambridge Analytica, using data mined from social media platforms, provides data analysis and promotional services for elections. Its prominent clients have included the Brexit campaign and Donald Trump's presidential campaign. Through targeted advertisements they purchase online and offline, the company claims to have a deep influence on voters.

Their work goes beyond the usual promotion of the candidate they work for, or positive messages for the campaign. For example, for citizens that the company determined would definitely not vote for Donald Trump, the company dissuaded them from casting a vote at all. An instance of this strategy was showing African Americans videos of Hilary Clinton where she allegedly calls black men violent predators. Their marketing and promotional strategies continue to blur the line between convincing voters and manipulating them.

The primary source of their psychometric profile has been data mined from Facebook and is based on the OCEAN model explained previously - the company claims to have an average of 4,000 data points on every citizen. Facebook's immaculate data collection, has therefore, led to private companies influencing important referendums and elections, and undermining the very spirit democracy. In fact, Facebook has admitted that local governments have used data analysis in similar ways to influence the citizenry<sup>32</sup>.



## What Facebook Wants

On February 16 of this year, Mark Zuckerberg published a letter titled *Building Global Community*<sup>20</sup> which details his vision of building meaningful communities around the world using the social media platform. The letter has five points of concern and action which point to how Facebook intends to use their data collection and analysis in social and political spheres.

Starting off with nothing too objectionable, the first section *Supportive Community* highlights a vision to create meaningful social groups, members of which have physical interaction as well. In the second section titled *Safe Community*, Zuckerberg reveals his plan for Facebook:

*“To prevent harm, we can build social infrastructure to help our community identify problems before they happen”*<sup>20</sup>

And further,

*“Going forward, there are even more cases where our community should be able to identify risks related to mental health, disease or crime.”*<sup>20</sup>

It is clear that Facebook plans to use its surveillance architecture to monitor the activities and mental state of its users, and further take preemptive action. Since Facebook does not have a global police force, it is safe to assume that the company will be cooperating with law enforcement agencies around the world to prevent what is crime according to local law.

In this vision for an *Informed Community*, Facebook’s statements seem mature given the recent incidents for which the company came under scrutiny in not controlling “fake news” - rather than increasing censorship on the newsfeed, the company intends to roll out tools for users which promote critical thinking and fact checking. This April, Facebook also publicly acknowledged and confirmed many suspicions – governments have been exploiting the social network to influence public opinion by amplifying certain viewpoints, suppressing others and increasing distrust in political processes<sup>32</sup>.

In another contradictory measure, Facebook adds a warning when links to purportedly fake news pieces appear on a user’s newsfeed but the blurry line between news and satire is difficult for automated systems to detect. The company’s history of notorious submissiveness to governments around the world casts a shadow of doubt on whether they really want an informed community. Facebook has actively censored news in the past under pressure from governments.

In the past, it has already done so – Facebook developed software specifically given to governments to help them censor content on the social media platform<sup>31</sup>. Practically, for citizens, Facebook allows its users to organise movements and spread awareness only as

long as it does not betray their government's ideals. Effectively, governments around the world are using censorship tools built by the company to stifle personal liberty.

In the next section, Zuckerberg identifies two ways to increase civic engagement:

1. Increasing participation in current political processes
2. Creating a new process for political participation online

Contrary to their promises, Facebook's actions in the past show that their notion of political participation is detached from the democratic spirit and often guided by directives from authoritarianism. In December 2014, Facebook deleted an event page for a protest in Russia by order of the Russian government<sup>21</sup>. Of course holding protests in a tyrannical state is illegal, the instance shows that the company will hold governmental interests in higher regard than citizen interests (the actual users of the service) if they are in conflict.

In the highly unlikely scenario that a user agrees with everything in this manifesto, the move still seems like a step in the direction of more control over what people see and interact with online. Leonid Bershidsky, for Bloomberg, criticises Zuckerberg's letter:

*“It shows that Facebook -- launched, in Zuckerberg's own words five years ago, to "extend people's capacity to build and maintain relationships" -- is turning into something of an extraterritorial state run by a small, unelected government that relies extensively on privately held algorithms for social engineering.”*<sup>23</sup>

Even though the letter does not disclose the author's political leanings, it is clear that Facebook has political agendas and wants to become a central tool for politicians. The original vision of the company and the title of the letter point to a global vision of community, while the tone it sets with its content guidelines is increasingly geopolitical. The notion of an ideal community has been traditionally built on the principle of liberty of sharing and implementing ideas whereas Facebook is becoming increasingly paternalistic with its unabated power to censor and control.

Facebook is a for-profit company and its actions will always be driven by the interests of shareholders. The company is at the forefront of technology while democratic governments around the world are run by politicians scrambling to grasp the true power of modern technology. It is no surprise the legislative framework to control online surveillance has lagged behind the actions of companies like Google and Facebook.

While Bentham and Foucault accurately described surveillance measures and its connotations of power, they assumed that the disciplinary protocol was controlled by the state or community. However, the most intimate details of a person's life are more accessible to private companies today. It remains to be seen whether the digital panopticon will continue to be controlled by these companies or government intelligence agencies will

exert influence over the operations. As an increasing number of companies begin to conform to surveillance capitalism, the need of the hour is a push for critical thinking and humanistic values. What Foucault said about the distinction between power and disciplinary power is pertinent to the abilities of companies like Facebook:

*“Traditionally, power was what was seen, what was shown, and what was manifested... Disciplinary power, on the other hand, is exercised through its invisibility; at the same time it imposes on those whom it subjects a principle of compulsory visibility. In discipline, it is the subjects who have to be seen. Their visibility assures the hold of the power that is exercised over them. It is this fact of being constantly seen, of being able always to be seen, that maintains the disciplined individual in his subjection. And the examination is the technique by which power, instead of emitting the signs of its potency, instead of imposing its mark on its subjects, holds them in a mechanism of objectification. In this space of domination, disciplinary power manifests its potency, essentially by arranging objects. The examination is, as it were, the ceremony of this objectification.”<sup>30</sup>*

## References

- 1 Sterling, Bruce (March 8, 2016) "[Shoshanna Zuboff condemning Google 'surveillance capitalism'](#)". Wired
- 2 Johnston, Casey (October 31, 2013) "[Facebook may start logging your cursor movements](#)". Ars Technica
- 3 Gottfried, Jeffrey (May 26, 2016) "[News Use Across Social Media Platforms 2016](#)". Pew Research Center
- 4 Protalinski, Emil (October 12, 2011) "[Facebook: Releasing your personal data reveals our trade secrets](#)". ZDNet
- 5 Flacy, Mike (September 22, 2012) "[Facebook Wants You to Snitch on Friends Not Using Real Names](#)". Digital Trends
- 6 Dante D'Orazio (June 13, 2015) "[Facebook will favor posts in News Feed based on time friends spend looking at them](#)". The Verge
- 7 Joshua (January 30, 2016) "[I accidentally uploaded your personal information, and I'm sorry](#)". Joshua's Blog
- 8 Casey Johnson (December 17, 2013) "[Facebook is tracking what you don't do on Facebook](#)". Ars Technica
- 9 Caitlin Dewey (August 19, 2016) "[98 personal data points that Facebook uses to target ads to you](#)". Washington Post
- 10 Julia Angwin, Terry Parris Jr. and Surya Mattu (December 27, 2016) "[Facebook Doesn't Tell Users Everything It Really Knows About Them](#)". Pro Publica
- 11 Asher Moses (October 4, 2011) "[Facebook's privacy lie: Aussie exposes 'tracking' as new patent uncovered](#)". The Sunday Morning Herald
- 12 Samuel Gibbs (March 31, 2015) "[Facebook 'tracks all visitors, breaching EU law'](#)". The Guardian
- 13 Richard Chirgwin (November 10, 2015) "[Facebook conjures up a trap for the unwary: scanning your camera for your friends](#)". The Register
- 14 Dan Tynan (August 25, 2016) "[WhatsApp privacy backlash: Facebook angers users by harvesting their data](#)". The Guardian
- 15 Matt McFarland (February 24, 2016) "[Why a privacy advocate made it easy to track when your Facebook friends sleep](#)". Washington Post
- 16 Charles Arthur (June 8, 2011) "[Facebook in new privacy row over facial recognition feature](#)". The Guardian
- 17 Farnadi, Goolnoosh; et al (April 15, 2015) "[Computational personality recognition in social media](#)". The Journal of Personalization Research
- 18 Inkster, Becky; et al (November, 2016) "[A decade into Facebook: where is psychiatry in the digital age?](#)". The Lancet Journal Vol. 3
- 19 Gillian B. White (October 28, 2016) "[How Facebook's Ad Tool Fails to Protect Civil Rights](#)". The Atlantic

- 20 Zuckerberg, Mark (February 16, 2017) "[Building Global Community](#)". Facebook Newsroom
- 21 Roth, Andrew; Herszenhorn, David (December 22, 2014) "[Facebook Page Goes Dark, Angering Russia Dissidents](#)". New York Times
- 22 Chelsea Wald (December 3, 2015) "[Is Facebook Luring You Into Being Depressed?](#)". Nautilus
- 23 Leonid Bershidsky (February 17, 2017) "[Facebook Plans to Rewire Your Life. Be Afraid.](#)". Bloomberg View
- 24 Hannes Grasseger; Mikael Krogerus (January 28 2017) "[The Data That Turned the World Upside Down](#)". Motherboard
- 25 Shakya HB, Christakis NA (February 1, 2017) "[Association of Facebook Use With Compromised Well-Being: A Longitudinal Study](#)". American Journal of Epidemiology
- 26 Kramer, Adam; Guillory, Jamie; Hancock, Jeffrey (June 17, 2014) "[Experimental evidence of massive-scale emotional contagion through social networks](#)". Proceedings of the National Academy of Sciences Vol 111
- 27 Christopher Wolsko; Hector Ariceaga; Jesse Seiden (July 2016) "[Red, white, and blue enough to be green: Effects of moral framing on climate change attitudes and conservation behaviors](#)". Journal of Experimental Social Psychology Vol 65
- 28 Ed Bott (July 12, 2012) "[Is Facebook damaging your reputation with sneaky political posts?](#)". ZDNet
- 29 H. Roger Segelken; Stacey Shackford (June 10, 2014) "[News feed: 'Emotional contagion' sweeps Facebook](#)". Cornell Chronicle
- 30 Foucault, Michel (1975) "Discipline and Punish". Pantheon Books
- 31 Samuel Gibbs (November 23, 2016) "[Facebook developed secret software to censor user posts in China, report says](#)". The Guardian
- 32 Jen Weedon; William Nuland; Alex Stamos (April 27, 2017) "[Information Operations and Facebook](#)". Facebook Newsroom