Introduction: The Transparency Formula

Created in a dorm room at Harvard University, Facebook was a simple website set up to compare two pictures of female students at a time, inviting fellow students to mark them as hot or not. Since then, the scope and ambitions of Facebook have expanded considerably. Here is what Mark Zuckerberg said about the role of Facebook at a meeting on the financial results of the company ten years later: "Next, let's talk about understanding the world. What I mean by this is that every day, people post billions of pieces of content and connections into the graph and in doing this, they're helping to build the *clearest model of everything there is to know in the world*" (Facebook, 2013, italics added).

This book is about the promise that digital technologies and data can help us understand everything in the world. The hope that digital transformations will create transparency and clarity has spread beyond Silicon Valley and shapes all sorts of discussions about technology, politics and society. Contemporary moves toward openness and transparency in corporate and political affairs, we are told, are a direct result of developments in the realm of digital technologies (Finel and Lord, 2002; Sifry, 2011). This hope for societal and political re-engineering through technology is driven by a belief in transparency as a panacea – a form of sunlight that will work as a disinfectant (Brandeis, 1913) on all societal illnesses – and has given rise to an increasingly institutionalized transparency movement consisting of organizations, corporate actors and activists peddling this ideal. This "triumph of transparency" (Braithwaite and Drahos, 2000) revolves around a belief in increased information and communication as a direct path to accountability, trust and legitimacy (Power, 1997; Garsten and de Montoya, 2008). That is, if information is shared, we

can see everything, we can understand everything and we can take command of everything so that no bad behavior takes place. Such hopes about transparency rely on a simple and deceptive formula that equates information with clarity and considers more information as a direct path to accountability. However, as this book argues, they overlook what is a much more intricate and paradoxical relationship between digital transformations, transparency projects and organizational and regulatory effects (Hansen and Flyverbom, 2015).

The companies driving contemporary digital transformations are a good starting point for this book's attempt to problematize the transparency formula. Google prides itself as a driver of transparency. Its search engine makes the world's information available, the company has developed a work culture focused on openness and it pushes for more transparency in politics and societies broadly. However, the first thing you do when entering the Google headquarters in Silicon Valley is to sign a non-disclosure agreement stating that you cannot disclose any information afterwards, or even tell anyone about the agreement. Also, it is impossible to get information about the earnings of the company in specific countries, and no one at Google will talk about how user data is commercialized across the different services and projects that it develops. Digital transformations make it possible to see everything, but some things are kept in the dark, and many of the tech companies pushing for transparency prefer to remain out of sight.

Similarly, one of Facebook's promises is also transparency. This goes for the internal workings of the company, and the way it tells users that they can see and control the data they share via the platform. Questioned by the US Congress over the Cambridge Analytica scandal, Zuckerberg repeatedly stressed that Facebook users have "complete control" over their data. As he explained in response to the many Congressmen posing vague, but critical questions, all you need to do is go to the privacy settings and tools of your account, and you can decide what to share with whom. However, these user settings are only part of the story,

and the very reason he was being questioned was that a wealth of user data travel in ways that users have not asked for, and have no way of seeing or controlling. Third parties can track and extract data. Facebook compiles data about users and their friends, even people not using Facebook, as well as from data brokers who can fill in the final gaps. So rather than transparency and control, users get an opportunity to manage the data they make visible on the front page. In contrast, Facebook's business model is based on extracting all data, and the company refuses to explain how it uses these data. Digital platforms like Facebook allow for extensive transparency in some areas, but also ways of limiting who can see and control what.

Also smaller tech companies are increasingly committed to transparency as a mission and core value. For instance, at the social media company Buffer, all emails can be seen by everyone, and employees can take as much vacation time as they want, as long as they tell everyone about it. As a result, people use the shared email service less and less, and switch to other ways of communicating. And hardly anyone goes on holiday, especially because employees can see that their bosses never take time off. Digital possibilities for increased transparency create not just more clarity and insight, but also the need for strategies for concealing and staying out of sight.

I start with these peeks into corporations engaging with transparency efforts to highlight the argument that this book pursues, namely that transparency is no simple matter of opening up and sharing information, but rather a matter of managing visibilities in careful and strategic ways. Tech companies and the digital transformations they pursue are, at one and the same time, very visible, secretive, transparent, hidden and open, and the curiosity about this paradox is central to the book. The pages to follow explore, conceptually and critically, these intersections of digital transformations and transparency, secrecy and other visibility practices and their consequences for individual, organizational and societal affairs.

DIGITAL TRANSFORMATIONS

Digital transformations shape our lives in myriad ways. The reliance on digital technologies and the internet, and the emergence of big data and artificial intelligence have widespread consequences for economic, cultural, political and social activities. At present, these discussions take a number of shapes and are marked by disagreements as to whether we should think of digital transformations as blessings or curses.

Early discussions of the invention and spread of the internet focused on the potentials for dialogue, expression and democratization offered by this open and inclusive communications platform. Suddenly, it seemed like established institutions and elites, such as governments, editors and corporations could be challenged, we would all have possibilities for expression, and information would be set free. Celebrations of this new space – often referred to as *cyberspace* – and its potentials often focused on the importance of keeping it separate from governmental and corporate interests. Today, both the promises and this separation seem like wishful thinking, particularly when we consider how governments rely on the internet for surveillance schemes and how large companies like Amazon, Google and Facebook seek to dominate large chunks of this space. But the depictions of the internet as a liberating force continue to shape many discussions. The emergence of social media and the spread of user-generated content reignited hopes about democratization and possibilities for free expression; however, at present, the picture seems murkier, and we have a growing focus on surveillance, corporate dominance and the negative effects of digital transformations. Especially the scope of US surveillance schemes exposed by Edward Snowden in 2013 propelled these discussions into the public domain. Surveillance, it turned out, was not a targeted or abnormal effort, but most governments' default approach to dealing with citizens' activities in digital spaces. These developments, including the largely hidden role of internet companies as suppliers of data for

government surveillance schemes, such as that of the US National Security Agency, have also propelled discussions about the relationship between digital transformations and citizen rights. The key questions, it seems, are increasingly about the roles and responsibilities of tech giants and the way they both come to govern many spheres of social life, and are subjected to new forms of governance (Flyverbom, 2016a; Gillespie, 2017b).

Another key issue is that digital technology makes it easier than ever to collect, store and distribute information. In a largely digital world, searches for information, comments and messages and walks through the city produce vast amounts of digital traces that can be picked up and used again and again. Internet companies have access to mind-blowing amounts of data showing everything we do, care about and search for in digital spaces. In many ways, we have gone from a situation where information was scarce and expensive to store to a situation where information is abundant and easily stored (Mayer-Schönberger, 2009; Andrejevic, 2013). While processes of digitalization have been under way for a long time, a new development that we can think of as *datafication* (Mayer-Schönberger and Cukier, 2014) is increasingly important. Datafication means that many parts of social life take the shape of digital traces. Friendships become "likes" on Facebook, movements through the city produce extensive digital footprints in GPS-enabled devices, and our searches for information show what we value or wish for as individuals and societies. In combination with automated sorting mechanisms, such as algorithms and artificial intelligence, these massive streams of digital traces can be used to identify important patterns and inform decisions about anything from consumers to health conditions to criminal activities. The excitement surrounding these developments has been massive and, despite its fuzziness, the term *big data* has been taken on by the public, by companies and by politicians.

Increasingly, much of what we know about people, organizations and societies comes from digital sources. We are told that these developments will solve many of the problems that have always

marked science, statistics and other ways of producing knowledge. Soon, we will have access to all or most of the data about a given phenomenon, and have consistent and neutral forms of intelligence that can give us exact answers. Finally, we will know everything and have unbiased answers to all our questions. Some have even suggested that we will no longer need theories and other types of structured explanations, because the digital evidence will speak for itself (Anderson, 2008), and some have expectations that we will have forms of superintelligence that do not require human interference (Good, 1965; Bostrom, 2014). At the same time, we are also increasingly concerned about the fate of the masses of data that result from our reliance on digital technologies. As automated forms of analysis and artificial intelligence weave into the governance of social affairs, such as crime, risk assessments and other kinds of decision-making, we need to consider what happens to our ways of running societies and securing fundamental rights. Datafication not only gives us more insights, but also makes it possible to keep track of people and regulate behavior in new and problematic ways.

As a result of these developments, another concern is how digital transformations lead to the disruption of established industries. Newspapers and media companies are losing their ways of creating revenue as contents become digital and largely free, and advertising becomes a primary competence and the core business model of internet companies such as Google and Facebook. Traditional taxi companies are losing the fight against the influx of cheaper Uber drivers working under less rigid forms of regulation. Similarly, the hotel industry and existing models of urban development are challenged by the possibilities for short-term rentals and new sources of income offered by Airbnb. These developments point to the gap between the conditions and approaches of established industries and the more unruly possibilities that digital transformations afford when it comes to new business models and ways of organizing our societies.

At present, the disruptive and possibly negative consequences of digital transformations are on the minds of scholars, policymakers and

the wider public (Foer, 2017; Taplin, 2017). To grapple with these, we need to consider what it means that digital technologies – often developed and controlled by a few giant companies – are becoming the backbones of commercial, political, cultural and other social affairs. We used to think of digital technologies as simple tools, or as spaces that we could enter and leave again. Earlier accounts focused on how individuals, organizations and societies made use of digital technology and sought to capture what the implications of these uses were (Zuboff, 1988; Castells, 1996). How will work routines be altered as a result of new, automated production techniques? Will personal computers change the way we learn and think? And what happens to power relations when we start to rely on information and communication technologies that may challenge existing strategies, hierarchies and authorities? Such questions were important and relevant to ask when hardware, software and computer networks emerged as new tools to be taken up or rejected. However, digital technologies are no longer simply tools that we pick up to do a particular task or use to find a quicker way of working. They can no longer be put down, because they have merged with social life and become societal backbones, rather than tools at the periphery of what we do and are. We no longer go online – i.e. enter a new space – because we are already and almost always connected. These infrastructural developments have consequences for how we think about digital technologies and their relation to social life. It no longer makes sense to talk about cyberspace as an independent, separate sphere or to distinguish between online and offline activities. We are, as DeNardis and Musiana (2016: 19) put it, entering "an era of global governance *by* Internet infrastructure," and we need to consider what this entails and where it takes us, as individuals, organizations and societies.

THE POWERS OF TECH COMPANIES

At present, digital spaces are dominated by a small handful of tech companies, and we need to understand these commercial and technical forces. We can think of tech companies as powerful in a number of

ways – as financially, technologically, politically and culturally potent. Certainly, tech giants exercise these forms of power. They are now among the most profitable companies in the world. Measured by market value, Apple, Google, Microsoft, Amazon and Facebook have surpassed the giants of the past, such as banks and energy companies (Economist, 2016). By leading technological innovation, these companies control large chunks of the internet and seek to build monopolies by crushing or acquiring competitors. As one of the key figures in Silicon Valley puts it, "competition is for losers" (Thiel, 2014) and tech companies pursue market dominance in aggressive ways. Tech companies also take on roles in politics and regulation, either by invitation as experts or innovators, or through their extensive lobbying efforts (Flyverbom, 2018). Furthermore, we are increasingly aware that tech companies shape cultural production through the tools and services they offer. For instance, digital platforms, and in particular Facebook, have become the primary gateway to news and other kinds of cultural products. This creates increased pressure on all sorts of content production, and the foundations of, for instance, newspapers seem to be eroding: People no longer need a subscription because a lot of content is circulated via digital platforms. Advertising revenue also ends up elsewhere, because the same digital platforms offer more agile and targeted ways of reaching customers and more elaborate ways of documenting the effectiveness and reach of their services. Without these financial pillars, quality journalism and news production are under pressure, and a lot of newspapers and similar companies are searching for new business models and ways of producing, distributing and extracting value from their work. Digital platforms also increasingly take on the role as archives and editors of social life. When Google publishes its yearly list of words we have searched for in the past year – aptly named Google Zeitgeist and later renamed Google Trends – it reflects what we focus on, value or want to know, as individuals and societies. It may come as no surprise that in 2016, Pokémon Go, iPhone 7 and Donald Trump made the top of the list of search terms. Or that in 2017, people were highly interested in iPhone X, Hurricane Irma and Harvey Weinstein.

These many and entangled forms of power are important, but not exhaustive of how tech companies shape social affairs. What media critics, such as Walter Lippmann, said about newspapers in the 1920s, also goes for digital platforms: they play an important part in controlling how we view the world. Because they focus on what people like and share most, popular phenomena like sensational news stories come to the fore, while more complex ones move in the background. The content policies and values of digital platforms set limits to what we see in the first place. Facebook's automatic deletion of Nick Ut's iconic photo of a naked Vietnamese girl fleeing the US napalm bombings is one example. The photo was uploaded first as part of a series of images that changed our perception of wars, and later by a Norwegian newspaper reporting on the story. In both cases, it was automatically identified as nudity, which clashes with the guidelines and policies of the platform, and taken down. The ensuing critique of Facebook's role as the "world's most powerful editor" censoring an important historical image highlighted how such companies increasingly shape public domains.

As they become our entry points for an increasing number of daily activities, digital platforms become intimately involved in editing and the ordering of social life. Without being very explicit about it, internet companies seek to become our gateways into whatever slice of social life they focus on, whether it is search, social relations, images, books or movies. From a business perspective, the ambition is obviously to become dominant in areas where they can gain access to more data and insights about people using their platform, and thus make it more difficult for competitors to gain a foothold. But the consequences of these attempts at carving out chunks of social life by offering infrastructures and services cut deeper. Facebook, for instance, is not interested in news as such, but as content that people are eager to click on and share. While the company has insisted that it is a technological utility, and not a media company, developments such as the deletion of the picture of the Vietnamese girl and the widespread circulation of "fake news" have increased the pressure

for more reflections on the roles and responsibilities of digital platforms.

The power of tech companies extends beyond finances, technologies and politics. To grasp their significance, we need to include a focus on how they have access to information that was previously invisible or inaccessible, because it was controlled by corporations or individuals, and how they use such information to shape what we see and give attention to. There is a growing awareness that internet companies and technological innovation are mainly US phenomena. Also, questions about job creation, economic growth and taxes come up in many discussions about digital transformations. Internet companies and social media platforms may not be very labor intensive industries, but the concerns about the effects of Europe's poor performance in the digital domain are widespread. When internet giants operate outside the USA, Europe gets very few taxes and a small number of data centers with a minimum of local job openings. Related discussions of digital transformations focus on US cultural dominance. Because of the popularity and size of these companies, they can turn US values and standards into global ones. This often happens simply by demanding users to accept an overwhelming list of terms of service or through the adherence to community standards defining what can and cannot be shared or done on their platform (Gillespie, 2018b). On most social media sites, some forms of violence are acceptable, but no naked breasts, and free speech is balanced against concerns about discrimination and hatred. Contents and users that violate these standards simply disappear from the site, either through handheld or automated forms of content moderation. In itself, this is not at all surprising or controversial: internet companies, like all other companies, are free to make these decisions about what they want and do not want to accommodate. However, these digital platforms increasingly function as backbones for a wide number of human activities, such as building social relations, finding information or shaping cultural formations, and we need to consider their roles and responsibilities.