

Surveillance Capitalism: The Broken Icon of Shoshana Zuboff

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Shoshana Zuboff defines surveillance capitalism as “claims on human experience as free raw material for translation into behavioral data.”¹ Probably everyone today is aware that data is being collected on and from us as we negotiate our virtual, and indeed our real world lives. But only some of that collected data is actually needed for products and services. The rest Zuboff terms the “behavioral surplus.” This surplus allows firms such as Google, Facebook and Amazon to create “predication products” that anticipate the future, our future, a future from which we are being deprived of free choice. Her book, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, has gained praise from top journalist such as Fintan O’Toole and Alex Rose, well known authors such as Naomi Klein and Tom Peters, and economists such as Robert Reich and Damon Acemoglu. *The Times* called it “Das Kapital for the Digital Age.” The book in short is a force to be reckoned with, synthesizing much existing literature and also presenting a distinctive case for not just how surveillance works in capitalism, but especially why it is a great danger.²

¹ Shoshana Zuboff, *Surveillance Capitalism*, 8. See also Zuboff, “Surveillance Capitalism and the Challenge of Collective Action,” *New Labor Forum* 2019, Vol. 28(1) 10-29; and Zuboff, “Big Other: Surveillance Capitalism and the Prospects of an Information Civilization,” *Journal of Information Technology* (2015) 30, 75-89.

² Though Zuboff is now most closely associated with the term surveillance capitalism, it is part of a longer discourse on information and the information society. By most accounts, the term “surveillance capitalism” was coined by John Bellamy Foster and Robert W. McChesney, “Surveillance Capitalism: Monopoly-Finance Capital, the Military-Industrial Complex, and the Digital Age,” *Monthly Review* 66,

The book's argument, spelled out over a dense but evocative 525 pages, can be summed up briefly. Social media, search engines and other tools of the information economy extract data about you at no cost to themselves, merely by vacuuming up the "data exhaust" you leave behind in your clicks, likes, purchases (or even considered purchases) friends networks, page views, apps, and locations. This is the behavioral surplus that is used to map your behavior and claim possession of your being. Virtually no corner of our lives and experiences is hidden from these data miners. And while there is no reason that Google, for example, must store and organize this information indefinitely or read your Gmail account, it does so because can monetize the information for a profit far greater it might earn by merely selling access to its search engine. Using data that rightfully belongs to us, the information and media companies predict our behaviors and sell those predication rights on the market to the highest bidder. Those who buy are those who want to know what we will do, where we will go, what we will purchase, how much we will pay, and who we will vote for. Since the value of the data depends on the precision of the predictions,

no. 3 (2014): 1-31. Vincent Mosco also used the term in *To the Cloud: Big Data in a Turbulent World* (Boulder, CO: Paradigm Publishers, 2014), 10. The reframing of information as a defining feature of late twentieth-century capitalism, the prerequisite of surveillance capitalism, can be traced to Fritz Machlup's *The Production and Distribution of Knowledge in the United States* (Princeton, NJ: Princeton University Press, 1962); Daniel Bell's *The Coming of the Post-Industrial Society: A Venture in Social Forecasting* (New York: Basic Books, 1973); and Marc Porat's *The Information Economy: Definition and Measurement* (Washington, DC: Department of Commerce, May 1977). Related variants of surveillance capitalism include information capitalism (Manuel Castells, *The Rise of the Network Society* [Oxford, UK: Blackwell, 1996]), digital capitalism (Dan Schiller, *Digital Capitalism: Networking the Global Market System* [Cambridge, MA: MIT Press, 1999]), platform capitalism (Nick Srnicek, *Platform Capitalism* [Cambridge: Polity, 2017]), and data capitalism (Sarah Myers West, "Data Capitalism: Redefining the Logics of Surveillance and Privacy," *Business & Society* 58 [2019]: 20-41). See also Jathan Sadowski, "When Data Is Capital: Datafication, Accumulation, and Extraction," *Big Data & Society* 6 (2019), <https://doi.org/10.1177%2F2053951718820549>.

the companies have incentive to wring out every last drop from us. More data, consistently streaming in, trains the algorithm and increases the value of the resulting predictions. Increasingly our data is being exploited not just to map us but to replace us, as improved algorithms can be used for robotics and artificial intelligence systems to substitute capital for labor in both blue and white collar work environments.³ In fact, it is no longer just about you individually, but what people like you, who can be categorized together with you will do. Individual claims of privacy are of little effect. The algorithm moves like a virus through the body politic and needs something like herd immunity to stop it.

How did all this happen? Zuboff places great emphasis on the 2000 Dot.Com crash as a defining moment, causing the IT sector to realize new sources of revenue were needed to survive. This economic turning point crossed paths with a political turning point-- the attacks of September 11, 2001. In the aftermath of terrorism, the US government became much more interested in what private companies could do for the state's surveillance and intelligence community. Admiral John Poindexter's fanciful Total Information Awareness program may have been stillborn, but the connection between the state and private information firms was bonded nonetheless. About that time I happened to meet General Michael Hayden, who was then directing the National Security Agency, the government's super-secret cyber intelligence arm. He was quite clear that the NSA had to start learning from private sector companies if

³ Carl B. Frey, and Michael Osborne, "The Future of Employment: How Susceptible are Jobs to Computerisation?" *Technological Forecasting and Social Change*, 114 (2017), 254-280. Daron Acemoglu and David Autor, (2010). "Skills, Tasks and Technologies: Implications for Employment and Earnings," NBER Working Papers. 2010, 4. 10.1016/S0169-7218(11)02410-5.

it wanted to keep up. More practically the events of 9/11 assured that few legal or political roadblocks would stand in the way of the companies as they perfected the tools and techniques for tracking our virtual lives. Undeterred by law, the surveillance capitalists took command.

For all the praise Zuboff's work has earned, it has received its share of criticisms as well. Scholars in the loosely defined field of surveillance studies fault it for leaning on many previous works without fully engaging them.⁴ How modern surveillance operates to profit from exploitation, was already known. Even the term surveillance capitalism is not new. Zuboff also ignores the long lineage of surveillance as an integral part of capitalism, insisting a radical break has occurred in the past decade or so. But tools of surveillance have been deployed to monitor, control, measure and assess workers, both free and enslaved for centuries. Companies intensely scrutinized workers with Taylorist logic in the early twentieth century and administered tests to white collar workers to make sure they fit company needs after World War II. Credit reporting was condemned as spying and surveillance as far back as the mid-19th century. Insurance companies had long assessed clients for risk and profit. Corporate marketing departments have scrutinized the buying public and continuously upgraded their techniques for studying and knowing customers, feeding that information back for sales and advertising for more than a century.⁵

⁴ Blayne Haggart, "The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power, S. Zuboff (2018)," *Journal of Digital Media & Policy* Volume 10 Number 2 (2019), 229-243.

⁵ Lauer and Lipartito, *Surveillance Capitalism in America*.

Others fault her understanding of capitalism. One of the longest and sharpest of critiques was penned by Evgeny Morozov, who wrote a twelve-thousand-word takedown that appeared in *The Baffler*. Morozov argued that much of what she writes about could be explained by good old capitalism proper. Its imperatives to expand into all human spaces, take, commodify, sell, and exploit human experience for profit is long standing, as is its ruthless overturning of legal and political barriers that stand in the way. By insisting that the surveillance form of capitalism operates by taking command of our “selves” and directing us into predictable patterns, Zuboff ignores a lot of material exploitation, preferring instead to dwell on the sort of activities that might bother mostly the middle class of the developed world. Meanwhile, the hardware of surveillance like iPhones are still assembled by poorly paid workers under authoritarian conditions in China and necessary raw materials such as cobalt are mined by children in African under horrendous conditions. Natural resources are still being stripped, rain forests plowed under, the environment placed in grave danger.⁶

One might assume that Zuboff is drawing heavily on Marx, with language like behavioral surplus recalling surplus value. Indeed, she argues that the surveillance capitalists are enclosing the information commons, dispossessing us of our data without asking.⁷ In one of her most striking images she explains that the free services Google and the others provide us does not mean, as is sometimes claimed, that “we

⁶ Evgeny Morozov, “Capitalism’s New Clothes,” *The Baffler*, February 4, 2019,

⁷ Citing David Harvey and Hannah Arendt, she notes that there was not one but many dispossessions in the history of capitalism and this is now the latest.

are the product.” Rather, we are the raw material. Like the rotting carcass of an elephant left behind by ivory poachers once they have got what they came for, the hopes, dreams, emotions, desires lodged in our brains and bodies are left behind once we are dispossessed of our data. The data hunters are not interested in us as full individuals, only as avatars whose behavior they can predict and control.

While commodification, dispossession, not to mention monopoly power, weak antitrust, and corporate lobbying by Google, Microsoft Facebook and the rest are part of the story, this is not, in fact, simply a story of capitalists doing capitalism. Indeed, Zuboff insists surveillance is actually a perversion of capitalism, an aberration on the long road of capitalist development. In her view capitalism is not inherently evil and indeed is largely beneficial, if occasionally unruly and in need of regulation. Surveillance capitalism, however, is something altogether new and malign: reductive, controlling, totalitarian. At the same time, the very tools that surveillance capitalists deploy, and she would argue pervert, are themselves crucial and deeply embedded features of modern life, necessary features that are part of a longer history of how we have grown into modern, liberated individuals over the past century and a half.

To understand her position here one must read her book in relation to other key texts, including her own. Contrary to expectations, however, Marx is not her prime interlocutor. Despite the language about accumulation, surplus, dispossession, deskilling, monopoly and commodification, this is not at base an economic or materialist argument. The book certainly is informed by Marx, and like him Zuboff sees this new capitalism as not just commanding the economy but

structuring a whole way of life. As she notes repeatedly, surveillance capitalism is as significant a transformation of our lives as Henry Ford's mass production factories were a transformation of the lives of our grandparents. But despite invocation of Marx, not to mention Karl Polyani, Alfred Chandler, Joseph Schumpeter, Ulrich Beck and more, it is really other classical social thinkers of the nineteenth century that underscore her text: Weber, Simmel, Tönnies, some of whom are mentioned directly, others of whom are alluded to. But above all of them stands Emile Durkheim. As she states in the first chapter, "The great sociologist Emile Durkheim...will be a touchstone for us throughout this book."⁸ Starting your exploration of capitalism with Durkheim turns out to yield some interesting results.

The Durkheim Zuboff refers to is that of his first book, *The Division of Labor in Society*.⁹ Durkheim of course was one of the towering figures of nineteenth century social thought. He was among an elite group who we can say "discovered" society, or the concept that people collectively were different than they were individually and thus needed to be studied in a distinctive way. Collective behavior obeyed regular, empirically discoverable rules or laws, akin to those governing the natural world. This naturalism was propounded most forcefully by Auguste Comte, who died a year before Durkheim's birth but whose philosophy of positivism touched the entire nineteenth century. Eighteenth century thinkers too had recognized a connection between individual and collective behavior, for example Adam Smith and Bernard

⁸ Zuboff, *Surveillance Capitalism*, 32.

⁹ Durkheim, *Division of Labor*

Mandeville, who argued that private acts could add up to important social outcomes resulting in a well-functioning social order guided simply by the pursuit of individual interest. In Durkheim's time this line of thought, associated with classical liberalism, was being broadcast most forcefully by Herbert Spencer. Durkheim borrowed from Comte the belief in regular, discoverable laws of society and argued against Spencer's purely individualist model of how societies came and stayed successfully together. Society was something more than self-interest mediated by a market. It was more solid than that and required some principle of solidarity, which needed elucidation and explanation for a true science of society. At the same time, he accepted from Spencer the notion of social evolution, that society changes much the way that Darwin explained change in nature, by an evolutionary process of adaption and fit.¹⁰ Finally, Durkheim departed from Marx, emphasizing not class conflict but social integration, though like every other continental thinker of the time, he emphasized the transition from traditional or feudal society to the modern, industrial, urban order.¹¹

In *The Division of Labor*, Durkheim set out both a method and a historically based explanation for what had occurred with this transition. As a social fact, labor was becoming more divided, steadily advancing, at least in advanced western society. This was evident not only in the factory, but in the rise of distinct professions, the specialization of trades, and the proliferation of scientific fields. Modern men

¹⁰ Evolutionary thinking was common and dominant across the new social sciences, including anthropology and in economics in the German Historical School. Steven Conn

¹¹ Thomas Bender, *Community and Social Change*; H. Stuart Hughes, *Consciousness and Society: The Reorientation of European Social Thought* (Cambridge: Harvard University Press, 1958).

gained status by their depth of knowledge in a single field, not their superficial breadth in many pursuits. It could even be seen in the division between the sexes. In primitive society, men and women were similar in stature and had similar sized heads—Durkheim relying on the quasi-racist anthropology of his era to link head size and brain capacity. But in modern civilizations men and women were more distinct. Men had larger bodies and brains, so they could venture forth into the world to work, think and lead, while women were more suited to the home and domestic labor.

So while economists might focus on the productive advances caused by the division of labor in the factory, Durkheim maintained that this was merely an emblematic example of a much wider trend. When businesspeople followed Adam Smith's advice and used a division of labor to increase productivity, they were engaging in an intentional act with a manifest effect. Durkheim's method, however, argued that one must also examine unintended, latent, and functional aspects of social phenomena to fully grasp them. In fact, the division was the product of social evolution.

Growth of human population, concentration of people in cities, and greater intercommunication between populations led inexorably to the need for new principles of social order and relations. As formerly isolated bands and communities were brought into contact with each other, they came into competition and conflict. Just as Darwin showed in nature, when resources were abundant species could be very similar, but as resources became scarce speciation took place and different

organisms filled different, noncompeting niches. So too with humans.¹² Earlier communities were largely homogenous. Social solidarity was “mechanical,” based on the sameness of identity, blood, race, ethnicity, and culture, enforced by restrictive laws and strong behavioral prohibitions. The band did not tolerate individualism. But modern societies were integrated by the division of labor, with differentiation leading to a variety of specialized roles, jobs, and functions linked through their mutual interdependence. Here individual differences and distinctions could flourish, and law was “compensatory” rather than prohibitive. “Organic” solidarity characterized modern society. This was the latent function of the division of labor.

Functionalism has many critics. In sociology and indeed economics it can result in “just so” stories, where a behavior or institution is presumed to serve a social function in a smooth, conflict free way. As the social philosopher Jon Elster has written, an effective functional argument must satisfy five rigorous conditions, ending with a clear mechanism whereby the consequent outcome (social solidarity in this case) maintains the institution (division of labor) by some feedback loop from the population that reinforces the institution without the population being aware of it.¹³ In biology, behaviors of species that are beneficial to survival are maintained by natural selection. Poorly adapted behaviors lead to the decline or elimination of the species while well adapted behaviors lead to survival and reproduction. Eventually natural selection eliminates the poorly adapted and reinforces the well adapted. In

¹² Durkheim, *Division of Labor*, 256-282

¹³ Jon Elster, *Explaining Technical Change*, 49-68. Also *Ulysses and the Sirens*, 28-35.

certain forms of evolutionary economics, competition and profits can play the same role, eliminating firms that have inefficient internal routines and allowing those with efficient and profitable routines to grow and takeover the losers, until only the efficient and profitable routines are left. Without these strict conditions, however, functionalism tends to degrade into teleology or even theodicy---a best of all possible worlds assumption that we must end with only beneficial institutions and behaviors. Durkheim, following the biological metaphor, made a claim similar to natural selection in his functional depiction of the division of labor. Human institutions that were poorly adapted, say for example not finding a successful resolution to growing conflict, would disappear because the people would disappear--through war, struggle, and strife. So the division of labor was a successful adaption that prevented population growth and increasing intercommunication from leading to our species extinction. But it's not clear he had a true feedback mechanism that maintained this happy state of affairs.¹⁴ And this sort of partial functionalism also is found in Zuboff's work, where the drive for individualism is assumed as an imperative that must lead to new economic and business practices that will support and maintain it. It is a form of what Elster terms a sociodicy; all apparent evils in the social world are actually beneficial when we understand the larger patterns that explain and justify them.

The larger patterns Zuboff describes in her metanarrative of the stages of capitalist evolution draws less on Marx than on the business history of Alfred

¹⁴ It is possible that people have come to realize the beneficial effects of the division of labor and thus consciously strive to maintain it. But this intentionality is not part of a functional explanation proper, as the feedback loop that maintains the behavior or institution should be unrecognized by those who benefit from it.

Chandler. Reading this story across a number of her works, Zuboff discusses a transition from Fordist (or corporate) capitalism to the current stage of surveillance capitalism. But while others might begin with matters of production, productivity, transactions costs, value and labor, following Durkheim Zuboff argues that all the changes that we see in production are in fact led and formed by the needs of people living in the modern world. To some degree she is speaking about consumers, a topic we will turn to next. But in fact the link is deeper.

Zuboff, in line with a number of thinkers, including some Marxists, connects capitalism and modernity. This connection appears strongly in the work of Marshall Berman for example, who sees a dual side to capitalism.¹⁵ It liberates us from the restrictions of the past and offers marvelous opportunity for self-realization through technology, cities, control of nature, and material abundance. But it is also destabilizing, destructive, dissolving or “melting into air” all the solid ground of community, affective relations, and established hierarchies, leaving us unmoored and forced to make our own way, despite the psychological costs. It is of course this unmooring from tradition that Durkheim argued required the division of labor, a functional adaptation that kept society together despite the loss of the mechanical sameness of traditional life. For Zuboff too capitalism is both liberating but also frightening. In another evocative passage from *Surveillance Capitalism*, she recounts the story of her great-grandparents departing the pale of settlement and heading for

¹⁵ Marshall Berman, *All That is Solid Melts into Air*. Marx too saw the dual side of capitalism, with the bourgeois extirpating the old feudal classes and liberating production, setting the stage for the eventual social revolution and the universal class, the proletariat.

the new world, leaving behind the comforts of community and shtetl for the frightening liberation of the modern city.

As the Marxist sociologist Ellen M. Wood has written, there is no necessary link between capitalism and modernity. It is possible to imagine the one arising from different circumstances than the other.¹⁶ Wood argues, for example, that it was from the non-capitalist (not, it should be noted, anti-capitalist) past that ideas of freedom and liberation of individuals emerged. The 18th Enlightenment gave rise to these ideas, taking down the oppressive triumvirate of king, clergy, and aristocracy, eradicating feudal dues and mandated labor, abolishing slavery. Capitalism on the other hand reimposed new restrictions and new forms of exploitation. Different masters perhaps but masters nonetheless. By decoupling modernity and capitalism it becomes possible to see the transitions and phases that the economy has gone through over the century—mass production, Fordism, flexible accumulation, post Fordism, networked capitalism and indeed surveillance capitalism--not as radical departures but as simply as the fuller extension of capitalism proper into more realms of life.

As it turns out, Zuboff agrees that these changing forms and features of capitalism are merely epiphenomena. But it is not the working out of the laws of motion of a single capitalism that animates her narrative, for hers is a humanist story. History is propelled by the inexorable drive and yearning of people for the freedom, self-expression, and individuality set forth by the first modernity that Durkheim

¹⁶ Ellen Wood,

witnessed and sought to explain. Advances in the economy were led by a flourishing of this individualism, which then reinforced economic growth in an evolutionary process, very much the way Durkheim saw it too. Capitalism had to evolve to meet the demands of increasingly liberated individuals, breaking from its past in a series of stages or phases. This style of narrative and temporality explains Zuboff's passionate denouncing of surveillance as a bastard form of capitalism and thus accounts for her shock that Google, Facebook and the like have gone the road they have.¹⁷ It also limits what she can say about power and inequality within capitalism.

While Durkheim could not see beyond the era of mass production and industrialization, Zuboff has picked up the story and extended it through the mass production and the corporate or managerial capitalism stage, to the present state of surveillance capitalism. But there was a stage between, one that is alluded to in her book as the "second modernity," with Durkheim's era being the first and surveillance capitalism threatening to create a third. This second modernity, with the attendant stage of capitalism and the economy, is explored in depth in another book, one Zuboff wrote in 2002 with her late husband and former Laura Ashley CEO James Maxmin, *The Support Economy*.¹⁸ It is a remarkable book on many levels, but one cannot understand *Surveillance Capitalism* without it.

Following the initial phase of modernity and individualization, Zuboff argues that (as with the story of her great-grandparents) the human quest to be full, self-

¹⁷ It is for this reason that the science of evil in her book is behaviorism. Zuboff recounts her experiences as a student in B. F. Skinner's seminar. His reductive view of human beings, more than the economic exploitation, is what endangers our humanistic selves.

¹⁸ Zuboff and Maxmin, *The Support Economy*

realized individuals has continued throughout the twentieth century. As with the original division of labor, this evolutionary process demands new markets, new organizational structures, and new arrangements of labor and capital. This next stage of modernity was meant to come about through a system of “deep support” to help people realize their goals, desires, and aspirations, taking full advantage of the advances in information technology to reorient the economy for that purpose. The individualization started in the first modernity with the division of labor would, in the new millennium, extend and fully realize itself through a second modernity and a new form of capitalism.

The Support Economy was a departure for Zuboff in a number of ways. Her first, widely praised book, *In The Age of the Smart Machine*, examined the future of work with the arrival of information technology. She concluded that there was potential to upgrade jobs by “informating” workers, increasing their scope, autonomy, and responsibilities. But the same technology could also be used to monitor, control, and surveil them, and it was not clear that companies locked into the traditions of managerial capitalism and bureaucratic hierarchies were prepared to let go of control. *The Support Economy*, by contrast, focused on consumers, though consumer meant pretty much all of us and referred less to a distinct class or category than to how we lived our lives, both at work and at home. It is also a more historical work and outlines a theory of history that explains where the modern economy came from and where it is going.

In the book, as well to a lesser extent in *Surveillance Capitalism*, Zuboff expresses her admiration for the earlier, managerial phase of capitalism.¹⁹ Here she is inspired by the works of Alfred Chandler, whose name appears several times. But an even deeper influence seems to have been Chandler's successor as the Strauss Professor of Business History at Harvard Business School, Thomas McCraw, whose endorsement appears on the back cover and who is thanked in the acknowledgements. Zuboff acquired her knowledge of business history from the work McCraw and his colleagues at HBS did in developing the class and course materials for "The Coming of Managerial Capitalism."²⁰ So while deeply "Chandlerian" in orientation, Zuboff's history also draws on a wide range of sources in business history, social history, the history of technology, and non-orthodox economics.

Her narrative picks up at the point where Durkheim left off, moving from the industrial revolution generally to the specific phase of mass production, or Fordism, that gave rise to the managerial strategies and structures of the twentieth century Chandler famously elucidated. Ford and General Motors CEO Alfred Sloan are the representative actors of this phase of capitalism, bringing the benefits of consumer goods to a wider and wider range of the public, providing stable, remunerative

¹⁹ In his review Morozov claims that Chandler was responsible for the deep functionalism of Zuboff's work, though it now seems clear that she took functionalism right from the source, Durkheim himself. However, Chandler, or more precisely the Harvard Business School historians, do figure in an important way, as we shall shortly see.

²⁰ The case materials were originally written by Chandler but revised significantly under McCraw and subsequently. Currently they include not only the classic ones on railroads, Jay Gould, Standard Oil, DuPont, but classes on slavery, Indian removal, the labor movement, and the American Dream. <https://www.hbs.edu/businesshistory/Documents/CMCSyllabusWithLinks.pdf>

employment for workers. Although aware of literatures that stress the alternatives to mass production, her focus is on large scale, vertically integrated corporations. They represent the essence of this phase of capitalism, as the mills of Manchester represented the essence of capitalism for Marx in his time.

Managerial capitalism did a good job of making us modern, while providing through the factory and the corporate hierarchy protections from some of the anxieties that emerge once we have made the transition out of the bosom of traditional society. Like Marx she sees capitalism as having a liberatory side, unleashing productive forces that set us up for the final stage of freedom---socialism for Marx, an economy of deep support for Zuboff. So when she published *The Support Economy* in 2002 she believed it was high time for capitalism to make its turn, to help us move on to the next stage of modern life as fully free and fully realized individuals. The outcome, it should be noted, is individualization, not individualism. The latter Zuboff derides as the "neoliberal ideology" (and one might add liberal ideology), that "shifts all responsibility for success or failure to a mythical, atomized, isolated individual, doomed to a life of perpetual competition and disconnected from relationships, community and society."²¹ One hears the echoes of Durkheim's disputation with Herbert Spencer in these words. Our individualization, a product of modernity, is made by and through society, not against or apart from it.

What mass production had provided in the early twentieth century, the emerging support economy was to provide in the twenty first century. Breaking from

²¹ Zuboff, *Surveillance Capitalism*, 33.

the long Chandlerian tradition focused on production and the crucial role of managers, Zuboff emphasizes consumption and the consumer as leading the process of change. Some of this consumer orientation can be found in the larger corpus of cases and writings surrounding “The Coming of Managerial Capitalism” and more generally in the many works produced by economic and social historians that saw the industrial revolution itself as led by the desire to consume more things—an industrious revolution.²² So Zuboff’s history of nineteenth century industrialization shifts from the mills of Manchester to the many everyday items and artifacts produced in cities such as Birmingham. She also reinterprets Henry Ford through the lens of mass consumption more than mass production. Ford understood that he was really tapping into vast new market of unmet demand for personal transportation. The assembly line and machine tools were simply the way of getting cars to the largest group of people.²³

Shifting the emphasis to the consumer brings together modernity’s advance of the individual with the changing economic systems that respond to that advance. Zuboff notes, perhaps as a retort to Durkheim’s retrograde view of women, that the leaders of the consumer revolution were often female. Both in the past and today they are the family’s purchasing agents and make the key spending decisions. It is as consumers and in consumption, not as workers, that people find their full expression as individuals. In *The Support Economy* the world of work has proved disappointing—

²² Jan DeVries; John Brewer; Nancy Koehn; Richard Tedlow

²³ This consumer first orientation, including seeing the five-dollar day as a way to increase mass consumption, can be found in for example Steven Watts, *The People’s Tycoon: Henry Ford and the American Century*.

no informing that Zuboff had earlier hoped for. Indeed, the pressures of globalization, financialization, and the imperatives of maximizing shareholder value are only going to make work less fulfilling, more stressful, and more closely monitored and controlled, at least if managerial capitalism stays in place. But as the workplace grows more stressful, the need for a support economy only increases. Demands on the job and at home are putting more and more pressure on time, especially for women. Consumption offers hope for relief from stresses that the life of individualization brings, at least a particular type of consumption.

Zuboff is quite critical of puritan types who see in the word consumption connotations of weakness, corruption, even femininity. Likewise she chides those on the left, such as economist Juliet Schor, who say we have locked ourselves into a consumption rat race, working far too long and hard just so we can buy more things we do not need.²⁴ By contrast Zuboff believes we can reconcile the virtues of a high income, productive society—which pushed us into modernity in the first place—and our desire for more time for family, leisure, and the pleasures of living. The answer is not to reduce consumption or commodification, but to transform it radically. In 2002 she believed the forces of history were aligned for this transformation.

Just as the needs and demands of people led to the first division of labor, so too Zuboff maintains our needs and demands will usher in a new type of economy. Managerial capitalism, which served its purpose, must now give way to different types of business organizations. The seeds of this change can be traced back to the

²⁴ Schor, *The Overworked American*

rebellious 1960s, when the children of the Fordist generation were rebelling against the limitations and restrictions of conformist, corporate work, and seeking new avenues of self-expression. By the 1980s and 90s, aided by new information technology, they were able to engage in many forms of what Zuboff terms “self-support” (that word self is indicative). They were leaving corporate jobs to become independent contractors or to start their own firms. They were abandoning public schools for home schooling. They were telecommuting to work, seeking their own medical knowledge from the web, shopping online, managing their finances themselves through investment portals. “Here was a way to remaining safely within the comfort of one’s sanctuary and still get things done,” Zuboff writes. “Self-support means hassle-free, rapid, and reliable transactions.”²⁵

It’s hard, from the vantage point of 2021, not see the problems with this quasi-utopian vision of the future. Discounting experts and seeking one’s own medical knowledge looks far less benign in the middle of a pandemic. Working from home seems more a burden to women with children than a solution to work-life balance. Opting out of public education can be done (and often is) by those with strong religious values, often highly patriarchal values that express a fear of secularism and disdain for individuality. Many of the virtues of the support economy seem to redound to the benefit of upper middle-class professionals, with the work often being done by people at the lower end of the economic scale. As with Zuboff’s tendency to ignore how new forms of capitalism can still be exploitative in old, traditional ways,

²⁵ Zuboff, *The Support Economy*, 297

these are all valid criticisms. But it's worth exploring further her vision of economic transformation, as it will shed considerable light on her critique of surveillance capitalism.

To Zuboff, the rise of self-support indicated a demand for a new type of capitalism, but the response from the business sector was less than impressive. She runs through all the changes that took place in the economy from the 1970s forward. Flexible production, mass customization, business process reengineering; none of them were the fundamental break with the past that people needed. Correctly Zuboff argues that these modifications of production do not in and of themselves portend a new capitalism—a point that some, though not all Marxists also make.²⁶ This is because Zuboff has hitched the capitalist wagon to the star of modernity. So unless economic changes are bringing about a new, or at least greatly enhanced modern life, it is not the sort of full scale, Schumpeterian break with the past that we need.

One of her favorite metaphors is the horseless carriage. Early car makers bridged the gap between carriages and cars by terming the car a horseless carriage. But that half measure limited the revolutionary potential of the new technology. Only when Ford saw the mass market for automobiles was the full scale of its potential realized, and the old horseless carriage metaphor abandoned. Too many companies, with their reengineering and customer service portals and chatbots, are taking similar half measures. Indeed, much of what was passing as support was actually an

²⁶ Ellen M. Wood article; others like David Harvey and Ulrich Beck are more willing to see these changes as a postmodern capitalism.

offloading of the labor onto customers, who were required to make their own flight arrangements, hotel bookings, investment decisions and the like. Life had become a nightmare of arranging health care, paying medical bills, arguing with insurance companies, waiting on the phone and badgering sellers to accept returns of defective products. Self-support indicated the need, but it can only be a bridge to a far better future. The moment had arrived for a Schumpeterian entrepreneur to move beyond the merely “adaptive” business innovations to something far more radical.

To get beyond these half measures required putting an end the existing “enterprise logic” of now outdated managerial capitalism. Managerial capitalism was useful when internalizing operations and reducing transactions costs were paramount. But with new technology, the goal should no longer be profiting on transactions, but unleashing value by relationships. In their most radical claim, Zuboff and Maxmin argue that value is not lodged in the enterprise but in the individual. The only way money will be made in the future will be by serving the individual. An emerging “distributed capitalism” will use a relationship economics to provided deep support to individuals. Whereas the managerial capitalism deployed internal systems run by professional managers to generate shareholder value, distributed capitalism will rely on external multiple “owners” including, workers, networks of firms, and the customer-individual him or herself. This new system will eliminate the divergence between the profits for shareholders and the value contained in the individual,

connecting consumers, producers, and shareholders in a single integrated, socio-economic system.²⁷

In this new phase of capitalism, people would be recognized and served as full individuals, something far beyond traditional marketing approaches of customization or market segmentation. A fictional family, which appears at the beginning and end of the book, illustrates how it would work. Lillian and Carlos Acero, she a librarian, he a software engineer, rely on an “Advocate,” David, who helps them seamlessly navigate their lives. David handles routine payments and purchases for the household, monitors their appointments, helps them pick the best combination of price and quality for key purchases such as a computer for their daughter, makes travel arrangements, tracks deliveries, and more. When Lillian’s trip is interrupted by a flight cancellation David is on the spot, rebooking her on a new flight, rearranging her hotel reservation, keeping the family back home apprised. David also draws on a larger network, or “federation.” Cutting across individual enterprises and industries, these are the real competitors of the new economy. The federations erase the old self-contained corporate hierarchies in favor of a platform of services that can meet people’s needs as individuals. Clients choose from among different federations, or even combine several, that offer different forms of deep support. Once again Zuboff is extending the trends toward vertical disintegration and networked capitalism that were apparent in the new millennium, but taking them much further, away from the “horseless carriage” stage. The goal is to eliminate as many stresses and as many

²⁷ Zuboff and Maxmin, *The Support Economy*, 325.

barriers between people and the market as possible, maximizing time and reducing anxiety, to let us live as full individuals.²⁸

If deep support seems like something perfect for a well-off upper-class family, you are right. Despite the Hispanic surname, it is clear that Zuboff is focused on the lives of the professional middle and upper middle class of a wealthy society like the United States. The examples seem quite remote from the lives of the poor or even most of the middle class. How many people care only about the convenience of rebooked reservations without first focusing intensely on “what’s this going to cost and will it exceed my budget?” For many just getting enough material goods like food to survive is more important, and people on tight budgets expend extraordinary amounts of time to get the best deal because they don’t have the luxury of spending what it takes to get what they want conveniently.

Zuboff and Maxmin have an answer to this, or at least a partial answer. Their response is revealing. “Deep support is for individuals at every income level,” they write. “Everyone else has equally great needs for deep support but fewer resources to secure it. In the new enterprise logic, levels of deep support can be developed so that they are widely affordable.”²⁹ As Ford did with managerial capitalism so the new entrepreneurs of deep support will do for distributed capitalism. What makes deep support scalable is new technology. “The merger of infrastructure activities...to a ubiquitous digital platform.” This will allow “the individual” to be “the common

²⁸ Zuboff and Maxmin, *The Support Economy*, 332-340.

²⁹ Zuboff and Maxmin, *The Support Economy*, 355.

denominator for all data.” At all times we are “the fundamental unit of analysis for data capture, data operations, and data retrieval. All transactions and all payments are identified by the individual. The digital platform can act as a giant pipeline, capturing all relevant transactions and other necessary data. All federations could access all relevant information directly from this pipeline.”³⁰

For the economy to serve them, people must be fully visible as individuals, so that the goods and services they seek can be most individualized. Deep support is about knowing customers in what Zuboff and Maxmin term an “I-You” relationship, far different from the abstractions that companies traditionally use in marketing and advertising to “know” or categorize the consumer. In good functionalist fashion business and the consumer would be fully integrated, a beneficial, interdependent relationship that supports social stability in what otherwise is a stressfully, anxiety ridden overly competitive world. The proliferation of information technology was still in an early phase when the book was written. But at this point Zuboff was predicting that full realization its power would create transparency, giving people eyes on prices, products and services all the time. Intensified competition with this level of customer scrutiny will force companies to abandon internal economies and narrow strategies of profit for deep support in firm transcending federations.

Not much time is spent on what labor will be like in this new system. Zuboff does suggest advocates will be fully informed workers (generally actual humans not robots) who will have much autonomy and will be presumably well compensated.

³⁰ Zuboff and Maxmin, *The Support Economy*, 356-57.

Good advocates will use their creativity, empathy, and experiences to provide service. These are qualities they possess, a form property that the company cannot own and thus must pay for. Far less attention though is given to more traditional labor activities. After all, while people need service they also still need goods, and someone has to make them and source the raw materials. There is reason to expect that life for those working in the traditional production sectors will only get worse as the pressures of competition in the support economy assure that individuals get exactly what they want. Advocates and federations were to be monitored closely by metrics of performance to be sure they are serving their clients, and workers have to bring their “whole selves” to the job. Zuboff gave up much hope for a humanized workplace after her first book and this one does not seem much different. But at least there is compensation. The David’s of the world will have access to federations of deep support as well. In the future, even the servants will have servants.

Here then the relationship between *The Support Economy* and *Surveillance Capitalism* becomes clear. In 2002 Zuboff was explaining how the proliferation of information technology could provide the platform for seeing people as full individuals and meeting their needs. She expected an equality to come from this from transparency. Instead, what we got was the unequal power relationship that goes by the name surveillance.

At one rather revealing point in *The Support Economy*, Zuboff and Maxmin liken the shift from consumer of the corporate economy to the individual of the support economy to the change from subject to citizen after the French Revolution.

The first in both cases involved fitting people into pre-determined categories and subjecting them to larger power structures—kings, corporations—without much attention or even knowledge of them individually. The latter by contrast involves free individuals, with rights and autonomy, known and seen as distinct beings. This is a more revealing analogy than the authors realize. When people became citizens the state also began to make enormous efforts to surveil them, to log their identities, track their characteristics and behavior, measure their potential, organize them in schools, the military, the factory and the prison, to police and order them in the absence of traditional authority from family, patriarch, aristocracy, church. The private sector participated in this enhanced social surveillance as well, with the growth in devices such as credit reporting that would render a society of strangers visible. Indeed it was during and just after the French Revolution that the term “surveillance” was coined, a new word for a new task, the watching of people. Citizens must be known, subjects not so much.³¹

Such surveillance, of course, is just the sort of thing Zuboff condemns as depriving us of our individuality and autonomy. But like many a reformer before her, she assumed that this dangerous technology of knowledge and control could be turned to good in the right hands—to reform not to suppress or exert power.³² Like other disappointed utopians, Zuboff is dismayed to learn that not every company had

³¹ Sarah Igo, *The Known Citizen*.

³² To a degree her utopian vision was itself blind to the obvious interests of companies and profit. Would the support networks and federations really provide “Model T” levels of support available to all, or would they rigorously discriminate and seek out only the highest paying clients, doing everything to deny the lower strata of society their help, using the same information technology to discriminate the way insurance companies do?

the best interests of the people at heart. Power, expressed in the nasty form of surveillance, upended the future and replaced the distributed capitalism with surveillance capitalism.

Reading the two books back-to-back makes clear that the same technology that underwrites the vast apparatus of surveillance was what Zuboff had in mind for the support economy as well. Indeed, one might argue had she waited a few years the deep support, frictionless commerce, and personalized services she sought would have been brought to her by Amazon, Google, DoorDash, Uber, Fitbit, TaskRabbit and all the rest. But there is a vast difference between her vision for a distributed capitalism providing deep support and these new entities, which are reworked versions of old managerial enterprises flogging stuff to customers. Except now enterprises have surveillance. They know far more about their customers and can exploit them through the one-way optic that gives them access and ownership of all our data, exactly the opposite of what transparency supposed.

How did all go so wrong? *Surveillance Capitalism* starts with an anecdote that reveals what might have been. In 2000 engineers at Georgia Tech developed a project, the Aware Home, a “living laboratory” for “human-home symbiosis.”³³ With sensors and wearables, inhabitants would feed personal and environmental information into a platform, yielding an entirely new form of knowledge that heretofore would have been impossible gather. The purpose was to give occupants greater control over their lives and environment. Zuboff notes bitterly how similar but

³³ Zuboff, *Surveillance Capitalism*, 5-7.

how radically different the Aware Home was from its current progeny, notably monitoring and control devices from companies such as Nest, Alexa, Ring and other networked appliances that have invaded the sanctuary of the home. What made the Aware Home radical was the principles underlying the collection and use of information. At all times the data belonged exclusively to the occupants, who would control its deployment and dissemination, assured that any information collected would be for their benefit and not released to other parties. Nest and purveyors of surveillance capitalism violate all these principles, ripping the data for themselves, denying the people access, ownership or control of their data, and putting the data in service of corporate profits. It seems clear that the Aware Home of 2000 occupied the space that Zuboff hoped distributed capitalism would carving out.

Seen this way, surveillance capitalism has proved to be not the information revolution but the information reaction, with 9/11 our Thermidor. Instead of moving us further on the road of individualization, surveillance capitalism has trapped, captured, and stripped us of our right to decide for ourselves as fully realized autonomous beings. Much as Marx saw how capitalism had only replaced the exploitation of feudalism with exploitation through wage labor, so too has surveillance capitalism entrapped us in a web of behavioral control to deny, rather than extend our individuality.

So technology marched on, new firms arose, old ones fell away, corporate structures got tweaked but not fundamentally altered. CEOs did recognize individuals as the source of all value but pursued shareholder with a renewed vigor

between 2000 and 2021. Workers were not informed but surveilled and controlled even more closely. Companies continued to see and treat people as mere means to ends, not individuals in an I-You relationship. And ownership of assets and properties was not dispersed among workers and consumers, but ever more tightly controlled by corporate insiders. Indeed, the information and media enterprises grew larger and even more monopolistic, with the vestiges of antitrust no match for their size and media and political savvy. It is no wonder there is an angry, even thunderous tone to *Surveillance Capitalism*. Not only have our individual futures been hijacked by algorithms and behaviorism but the future hope for capitalism, for society, has been thwarted as well.

One could argue that Zuboff is a victim of her own naiveté. How could a professor at Harvard Business School expect companies to not pursue profit and self-interest? Why wouldn't they use advances in technology strategically and take advantage of the unequal optic of surveillance to maintain informational advantage over customers, clients, competitors, and even the regulatory state? To be fair, she is not actually so gullible. As she notes, Durkheim himself wrote about what he called "abnormal forms" of the division of labor. These occur under conditions of great inequality or vast difference in political power.³⁴ In Zuboff's narrative such conditions have arisen in the past. For all the progress they brought, Fordism and managerial capitalism also created conditions of exploitation and inequality. The result was the reform movements of the twentieth century—she has less to say about labor

³⁴ Durkheim, *Division of Labor*, 374-88.

movements—such as progressivism and the New Deal that reconciled the virtues of mass production with the needs of the people. Companies instituted social welfare programs, adopted social responsibility measures, and offered long term employment opportunities, while delivering a cornucopia of material abundance. For a time, after World War II, a regulated and tamed managerial capitalism offered people great opportunity for a secure life and individual advancement. But when history moved forward, producing the conditions that should have replaced managerial capitalism with distributed capitalism, surveillance capitalism intervened. Looking at movements like Occupy Wall Street and reading the work of Thomas Piketty on inequality, Zuboff expects, or at least hopes, a new social movement will be in the offing to take on surveillance capitalism. A revolution deferred is not necessarily one defeated.

So it is not political naiveté that clouds Zuboff's vision. It is rather her humanism, which seems to have little place for power, at least the more subtle workings of power. True, market power and raw, instrumentalist behaviorism are present in her book, but there remains a flattening of social life, a lack of distinctions and hierarchies among and between people, who are all assumed to possess the same humanistic drive for individuality and the same resources, possibilities, and capabilities of getting there.³⁵ She seems unaware of the post humanist literature that challenges this essentially Enlightenment view. There is lots of discussion of

³⁵ True, this is not the individualism of neoclassical economics. Individuals for her as for Durkheim are socially made.

modernity, but no acknowledgement of post modernism. The postmodern critique emphasizing subjectivity and subject positions has long called into question the humanistic conception of the individual. Institutions, such as schools, prisons, workhouses, panopticons of all sorts, as well as credit bureaus, insurance companies, corporate personnel departments, all do a tremendous amount of surveillance, keep records, categorize people, and uphold truth claims. They not only control or shape behavior, they put forward the conditions of possibility by placing people into certain categories, defining them as certain sorts of individuals. In *The Support Economy*, Zuboff imagined that information technology would be harnessed to pure individualism, without power, without reductive categories. But data can never be free of categories; the more data the greater the need for ways to organize and sort it. As Foucault noted, subjectivity involves both an extreme individualization as well as the sweeping up of individuals into certain categories. These categories regulate mass society but they are not the opposite of individualization. The two work together. Individuals are formed in the many mechanisms of power that surround us and seep into our lives from many openings. Surveillance capitalism operates like other systems, purporting to help, support, and liberate us, while at the same time controlling and categorizing us into subject positions.

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Zuboff's trajectory, from utopian hope to crashing disappointment, is typical of those who came of age in the age of information. Information technologies have long been seen as having limitless potential for remaking people and society in ways that free

up individuality and eliminate the need for hierarchies, bureaucracies, and mediators of all types, from financial institutions to mass media. The belief that transparency through technology would give individuals control of their destiny, make capital servant rather than master, can be found in the early pioneers of Silicon Valley and the first geeks of the personal computer.³⁶ Likewise there have been many proponents of new institutional arrangements aimed at satisfying the conditions of individuality: perfected property rights regimes to permit seamless exchange; markets that work like automatons to give us a libertarian paradise; Bitcoin and Blockchain, another form of distributed capitalism to dispense with banks and financial intermediaries. If nothing else, Zuboff's exhaustive narrative of how capitalism became surveillant should disabuse us finally of such utopianism. Of course historians would tell you that there was never a moment that capitalism was not surveillant. It just took the rest of the world a little more time to catch on.

Read together these books impart an elegiac tone. Members of the educated professional classes, not so much an elite as a vanguard, were supposed to be leading the way to a new economy, both as producers and especially as informed, engaged and demanding consumers. Though found in large numbers in the United States and Western Europe, a similar class seemed quite likely to arise in emerging economies like China and India, in a reformed Latin America emphasizing free trade and openness to global capital, and perhaps in Russia and Eastern Europe as well.

³⁶ For examples of this, see Fred Turner, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism* and Yochai Benkler, *The Wealth of Networks*. A work somewhat balanced between hope and fear of the future is Jonathan Zittrain, *The Future of the Internet, and How to Stop it* (New Haven, Yale University Press, 2008).

Other places, still very poor, would probably follow a similar trajectory a generation or so later. Education, women's liberation, secular values, individual aspirations, open societies, and the triumph of democracy all portended a prosperous and humane future for people across the globe.

There was at the millennium little sense that inequality might become a vexing problem, that repression and control not democracy would mark a wealthy and powerful China, that fundamentalism would emerge in a growing, purportedly democratic society like India. No one might guess that in the United States modern values would face strong opposition from evangelicals rejecting science, secularism, and feminism for patriarchy and traditional family-based authority, with a concomitant return to the racial and ethnic homogeneity of the tribe. Or that the confident professional classes would lose face in a global crash, their expertise and leadership called into question and their once secure economic position lapped multiple times by a true super elite of the top .001% of wealth and income. Even truth was a casualty of the information revolution. Fake news is as good at feeding the predictive algorithm as are facts, maybe better.

All this has become clear in 2021. As raw capitalism in the past threatened nature (doesn't it still?) so now raw surveillance capitalism threatens human nature. The teleology of history doesn't point to the triumph of the individual, at least not the humane individual Zuboff seeks. Her screed against surveillance capitalism is the anguished cry of the humanist who fears that they may not be the masters of their own fate after all. Committed market economists like Friedrich Hayek had argued

that the pragmatic interaction of people led to a collective wisdom about a future filled with uncertainty. The only wisdom was the wisdom of the crowd. In this model of society, individualism and the diversity of individuals are key. But surveillance capitalism does not enable such interactions; it frustrates them by channeling, controlling, predicting, and directing behavior. As Zuboff notes, it claims ownership of the future in this way, negating the sort of humanistic individualism and free social communication need both for political democracy and liberal market economics.³⁷ When the opportunity for individual self-realization is frustrated, then, as Hannah Arendt argued, fascism and authoritarianism will follow.

So what is to be done? An outpouring of democratic participation is one possible antidote to the rising authoritarianism of both the surveillance capitalists and the political figures who exploit the public's frustrations. It is an appealing answer. But it is not clear how we get to it if surveillance capitalism undermines truth and public discourse. Perhaps a "consumer rebellion" might force companies to stop using us as objects to feed their algorithms and establish a socially beneficial integrative connection with us if we act as "friction" in the gears of the system. At one point Zuboff recalls her nineteen year old self sitting in the back of Milton Friedman's classroom at the University of Chicago as he lectured graduate students from Chile.³⁸ Friedman and his students would eventually go on to restructure Chilean society along strict free market principles, in a regime that was anything but democratic. But

³⁷ Although Zuboff invokes both Hayek and Milton Friedman in her book, she remains Durkheimian in rejecting the purely individualistic interpretation of markets. Markets are social institutions requiring the free interaction and interdependency of free, but social beings.

³⁸ Zuboff, *Surveillance Capitalism*, 520.

Zuboff notes a point that Friedman made: play the long game of changing public opinion and in a generation or so law and politics will catch up.

With her book she aims to do just that for us against surveillance capitalism. It is not a modest hope, but then the book is not a modest achievement. Capitalism, she contends, can still be saved, saved by individuals even as it frustrates our individuality. It happened with managerial capitalism and mass production—Ford’s five dollar day and all that—because capitalism is plastic. While it rests on the combination of private property, the profit motive, and growth, it adapts new “forms, norms and practices” to “generate wealth to meet new needs.” It can evolve again, a new synthesis that will unite it with, not against the population.³⁹

Whether or not you believe individualism can save us depends if you believe capitalism and modernity are inexorably linked historically to the liberation of the individual. If they are not, if the parts of modernity we value for its respect for and promotion of individualism and autonomy come from elsewhere, then Zuboff, like Durkheim, is looking in the wrong place. The increasing productivity and wealth generated by the division of labor is not necessarily liberating, at least not by itself, as China today is showing. If, following Polanyi, Zuboff sees information as one more public and socially necessary good that raw capitalism transforms into a fictitious commodity, then we need a re-embedding of the market. For the majority of people the support they need to handle the pressures, anxieties, and indeed limitations on individual autonomy may only be possible through a social welfare system, no matter

³⁹ Zuboff, *Surveillance Capitalism*, 520-21.

how beneficent and charitable the capitalists. Perhaps it is no coincidence that in 2021 the public sector is again on rise.

I would argue that between the giddy utopian future of the support economy and the Orwellian despair of surveillance capitalism lies a middle landscape of possibility. It is this terrain that needs more exploration. The world has been for more than a century a world of distended social and economic relations. Half the population is urban, mega cities are growing, and many people work, live, and move among multiple communities. Most people are, perforce, strangers to each other, making the problem of trust real. Historically such conditions have called forth new forms of surveillance to track, identify and evaluate people. We can critique the epistemologies that create and inculcate discourses of truth. We can open up the institutions that make subjectivity. But we still need ways to assure people can interact with knowledge, confidence, and trust in the vastness and diversity of modern societies, without retreat to smaller homogenous communities that can be rife with intolerance and authoritarian impulses.

Zuboff has in her writings posed the essential question about information technology and surveillance. Is it possible that this massive infrastructure can be deployed in ways that inculcate trust, facilitate a more democratic and equal interaction, rather than impose behavioral control?⁴⁰ There is some evidence such a

⁴⁰ In actual experience trust and surveillance may not be categorical opposites. At least there is a case to be made that surveillance can inculcate trust. On a related issue, the potential for trust and control to be mutually reinforcing, see Michael O'Leary, Wanda Orlikowski, and JoAnne Yates, "Distributed Work over the Centuries: Trust and Control in the Hudson's Bay Company, 1670-1826," in Pamela Hinds and Sara Kiesler, eds., *Distributed Work* (MIT, 2002), 27-54.

middle landscape can exist. In Scandinavia, for example, the population seem willing to have themselves known and revealed, to accept the advantages in efficiently running society where information helps to include rather than exclude citizens. Perhaps of course, this is a reflection of preexisting levels of trust, or perhaps it is due to laws, rules and institutions that encourage a two-way window of transparency rather than a one-way mirror of surveillance.⁴¹

The other society where trust and high levels of surveillance seem to go together is, rather surprisingly, China.⁴² Its massively invasive social credit system, though presumably a powerful tool of social control, also seems to engender high levels of trust in the population, confident that social credit provides valued levels of security and reduces risk in social and economic interactions. Perhaps Chinese respondents are only giving answers to surveys that the government expects. Maybe social credit is working all too well as a mechanism to stifle dissent. And clearly in the deployment of surveillance against the minority Uighur population, there are vast differences in experience depending on which group of the population one is a member of.

Even in China, arguably the most surveilled place on earth, there is also some evidence that the mechanisms of surveillance are not quite as omnipotent and top

⁴¹ At one time the Nordic countries were among the most accepting of surveillance and least bothered by privacy concerns. This may have changed given the might stronger surveillance put into place over the past decades reflecting concerns about terrorism as well as reactions to increasing numbers of immigrants. Still trust remains high in these places, and a willingness to give up information in the belief it will improve social well-being. David Flaherty, *Protecting Privacy in Surveillance Societies* (Chapel Hill, 1989); <https://worldhappiness.report/ed/2020/the-nordic-exceptionalism-what-explains-why-the-nordic-countries-are-constantly-among-the-happiest-in-the-world/>

⁴² Genia Kostka, "China's Social Credit Systems and Public Opinion: Explaining High Levels of Approval," *New Media & Society* 2019, Vol. 21(7) 1565-1593.

down as we might imagine. To a degree they can be bent and negotiated there too, in ways that serve the interest of the surveillance subjects. The very platforms of surveillance that seem designed for asymmetrical control may afford as well opportunities for pushback and mobilization around grievances that allow the taking back of some control, or conversely may encourage redesign of these systems in ways that people accept as legitimate.⁴³ More than the technology itself or even the context of capitalism, surveillance in modern life may well offer options, choices of paths that are more inclusive, less controlling, more aware of the needs of people rather than the needs of those who own or run the system. On the middle landscape, where technology in use meets institutions of civil society, is where the future could be made.

What will this take? Pitting state against private sector does not seem adequate, given that in China and in other authoritarian societies, the state can be just as nefarious as private actors in the use of surveillance. But the simple expedient of corporate social responsibility, Google's "don't be evil" has failed as well. As with many giant infrastructures that we rely on and which even enable many aspects of our lives, it is easier to throw around words like "democratic control" and "technology for human needs" than it is to find a way to bend these enormous systems and hierarchies to our will. We don't have the answer yet, but Zuboff's book, perhaps best characterized as a Jeremiad, has given us the questions to ask.

⁴³ Ya-Wen Lei, "Delivering Solidarity: Platform Architecture and Collective Contention in China's Platform Economy," paper presented at the conference Just Code: Power, Inequality, and the Global Political Economy of IT, Charles Babbage Institute, University of Minnesota, October 23 - 24, 2022.