

CHAPTER TWO

AUGUST 9, 2011:
SETTING THE STAGE FOR
SURVEILLANCE CAPITALISM

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And the way back by angels was defended
Against the poet and the legislator.*

—W. H. AUDEN
SONNETS FROM CHINA, II

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fable, doomed to retrace this looping path until the soul of our information civilization is finally shaped by democratic action, private power, ignorance, or drift.

I. *The Apple Hack*

Apple thundered onto the music scene in the midst of a pitched battle between demand and supply. On one side were young people whose enthusiasm for Napster and other forms of music file sharing expressed a new quality of demand: consumption my way, what I want, when I want it, where I want it. On the other side were music-industry executives who chose to instill fear and to crush that demand by hunting down and prosecuting some of Napster's most-ardent users. Apple bridged the divide with a commercially and legally viable solution that aligned the company with the changing needs of individuals while working with industry incumbents. Napster hacked the music industry, but Apple appeared to have hacked capitalism.

It is easy to forget just how dramatic Apple's hack really was. The company's profits soared largely on the strength of its iPod/iTunes/iPhone sales. *Bloomberg Businessweek* described Wall Street analysts as "befuddled" by this mysterious Apple "miracle." As one gushed, "We can't even model out some of the possibilities.... It's like a religion."¹ Even today the figures are staggering: three days after the launch of the Windows-compatible iTunes platform in October 2003, listeners downloaded a million copies of the free iTunes software and paid for a million songs, prompting Steve Jobs to announce, "In less than one week we've broken every record and become the largest online music company in the world."² Within a month there were five million downloads, then ten million three months later, then twenty-five million three months after that. Four and a half years later, in January 2007, that number rose to two billion, and six years later, in 2013, it was 25 billion. In 2008 Apple surpassed Walmart as the world's largest music retailer. iPod sales were similarly spectacular, exploding from 1 million units per month after the music store's launch to 100 million less than four years later, when Apple subsumed the iPod's functions in its revolutionary iPhone, which

concluded that Apple had generated more profit for investors than any other US company in the previous century.³

One hundred years before the iPod, mass production provided the gateway to a new era when it revealed a parallel universe of economic value hidden in new and still poorly understood mass consumers who wanted goods, but at a price they could afford. Henry Ford reduced the price of an automobile by 60 percent with a revolutionary industrial logic that combined high volume and low unit cost. He called it "mass production," summarized in his famous maxim "You can have any color car you want so long as it's black."

Later, GM's Alfred Sloan expounded on that principle: "By the time we have a product to show them [consumers], we are necessarily committed to selling that product because of the tremendous investment involved in bringing it to market."⁴ The music industry's business model was built on telling its consumers what they would buy, just like Ford and Sloan. Executives invested in the production and distribution of CDs, and it was the CD that customers would have to purchase.

Henry Ford was among the first to strike gold by tapping into the new mass consumption with the Model T. As in the case of the iPod, Ford's Model T factory was pressed to meet the immediate explosion of demand. Mass production could be applied to anything, and it was. It changed the framework of production as it diffused throughout the economy and around the world, and it established the dominance of a new mass-production capitalism as the basis for wealth creation in the twentieth century.

The iPod/iTunes innovations flipped this century-old industrial logic, leveraging the new capabilities of digital technologies to *invert* the consumption experience. Apple rewrote the relationship between listeners and their music with a distinct commercial logic that, while familiar to us now, was also experienced as revolutionary when first introduced.

The Apple inversion depended on a few key elements. Digitalization made it possible to *rescue* valued assets—in this case, songs—from the institutional spaces in which they were trapped. The costly institutional procedures that Sloan had described were eliminated in favor of a direct route to listeners. In the case of the CD, for example, Apple *bypassed* the physical production of the product along with its packaging, inventory, storage, marketing, transportation, distribution, and physical retailing. The combination

of the iTunes platform and the iPod device made it possible for listeners to continuously *reconfigure* their songs at will. No two iPods were the same, and an iPod one week was different from the same iPod another week, as listeners decided and re-decided the dynamic pattern. It was an excruciating development for the music industry and its satellites—retailers, marketers, etc.—but it was exactly what the new listeners wanted.

How should we understand this success? Apple's "miracle" is typically credited to its design and marketing genius. Consumers' eagerness to have "what I want, when, where, and how I want it" is taken as evidence of the demand for "convenience" and sometimes even written off as narcissism or petulance. In my view, these explanations pale against the unprecedented magnitude of Apple's accomplishments. We have contented ourselves for too long with superficial explanations of Apple's unprecedented fusion of capitalism and the digital rather than digging deeper into the historical forces that summoned this new form to life.

Just as Ford tapped into a new mass consumption, Apple was among the first to experience explosive commercial success by tapping into a new society of individuals and their demand for individualized consumption. The inversion implied a larger story of a commercial reformation in which the digital era finally offered the tools to shift the focus of consumption from the mass to the individual, liberating and reconfiguring capitalism's operations and assets. It promised something utterly new, urgently necessary, and operationally impossible outside the networked spaces of the digital. Its implicit promise of an advocacy-oriented alignment with our new needs and values was a confirmation of our inner sense of dignity and worth, ratifying the feeling that we matter. In offering consumers respite from an institutional world that was indifferent to their individual needs, it opened the door to the possibility of a new rational capitalism able to reunite supply and demand by connecting us to what we really want in exactly the ways that we choose.

As I shall argue in the coming chapters, the same historical conditions that sent the iPod on its wild ride summoned the emancipatory promise of the internet into our everyday lives as we sought remedies for inequality and exclusion. Of most significance for our story, these same conditions would provide important shelter for surveillance capitalism's ability to root and

owes its success to the destructive collision of two opposing historical forces. One vector belongs to the longer history of modernization and the centuries-long societal shift from the mass to the individual. The opposing vector belongs to the decades-long elaboration and implementation of the neoliberal economic paradigm: its political economics, its transformation of society, and especially its aim to reverse, subdue, impede, and even destroy the individual urge toward psychological self-determination and moral agency. The next sections briefly sketch the basic contours of this collision, establishing terms of reference that we will return to throughout the coming chapters as we explore surveillance capitalism's rapid rise to dominance.

II. *The Two Modernities*

Capitalism evolves in response to the needs of people in a time and place. Henry Ford was clear on this point: "Mass production begins in the perception of a public need."²⁵ At a time when the Detroit automobile manufacturers were preoccupied with luxury vehicles, Ford stood alone in his recognition of a nation of newly modernizing individuals—farmers, wage earners, and shopkeepers—who had little and wanted much, but at a price they could afford. Their "demand" issued from the same conditions of existence that summoned Ford and his men as they discovered the transformational power of a new logic of standardized, high-volume, low-unit-cost production. Ford's famous "five-dollar day" was emblematic of a systemic logic of reciprocity. In paying assembly-line workers higher wages than anyone had yet imagined, he recognized that the whole enterprise of mass production rested upon a thriving population of mass consumers.

Although the market form and its bosses had many failings and produced many violent facts, its populations of newly modernizing individuals were valued as the necessary sources of customers and employees. It depended upon its communities in ways that would eventually lead to a range of institutionalized reciprocities. On the outside the drama of access to affordable goods and services was bound by democratic measures and methods of oversight that asserted and protected the rights and safety of workers and consumers. On the inside were durable employment systems carved by

and steady increases in wages and benefits.⁶ Indeed, considered from the vantage point of the last forty years, during which this market form was systematically deconstructed, its reciprocity with the social order, however vexed and imperfect, appears to have been one of its most-salient features.

The implication is that new market forms are most productive when they are shaped by an allegiance to the actual demands and mentalities of people. The great sociologist Emile Durkheim made this point at the dawn of the twentieth century, and his insight will be a touchstone for us throughout this book. Observing the dramatic upheavals of industrialization in his time—factories, specialization, the complex division of labor—Durkheim understood that although economists could describe these developments, they could not grasp their *cause*. He argued that these sweeping changes were “caused” by the changing needs of people and that economists were (and remain) systematically blind to these social facts:

The division of labor appears to us otherwise than it does to economists. For them, it essentially consists in greater production. For us, this greater productivity is only a necessary consequence, a repercussion of the phenomenon. If we specialize, it is not to produce more, but it is to enable us to live in the *new conditions of existence* that have been made for us.⁷

The sociologist identified the perennial human quest to live effectively in our “conditions of existence” as the invisible causal power that summons the division of labor, technologies, work organization, capitalism, and ultimately civilization itself. Each is forged in the same crucible of human need that is produced by what Durkheim called the always intensifying “violence of the struggle” for effective life: “If work becomes more divided,” it is because the “struggle for existence is more acute.”⁸ The rationality of capitalism reflects this alignment, however imperfect, with the needs that people experience as they try to live their lives effectively, struggling with the conditions of existence that they encounter in their time and place.

When we look through this lens, we can see that those eager customers for Ford’s incredible Model T and the new consumers of iPods and iPhones

fact, each is the fruit of distinct phases of a centuries-long process known as “individualization” that is the human signature of the modern era. Ford’s mass consumers were members of what has been called the “first modernity,”⁹ but the new conditions of the “second modernity” produced a new kind of individual for whom the Apple inversion, and the many digital innovations that followed, would become essential. This second modernity summoned the likes of Google and Facebook into our lives, and, in an unexpected twist, helped to enable the surveillance capitalism that would follow.

What are these modernities and how do they matter to our story? The advent of the individual as the locus of moral agency and choice initially occurred in the West, where the conditions for this emergence first took hold. First let’s establish that the concept of “individualization” should not be confused with the neoliberal ideology of “individualism” 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. Neither does it refer to the psychological process of “individuation” that is associated with the lifelong exploration of self-development. Instead, individualization is a consequence of long-term processes of modernization.¹⁰

Until the last few minutes of human history, each life was foretold in blood and geography, sex and kin, rank and religion. I am my mother’s daughter. I am my father’s son. The sense of the human being as an *individual* emerged gradually over centuries, clawed from this ancient vise. Around two hundred years ago, we embarked upon the first modern road where life was no longer handed down one generation to the next according to the traditions of village and clan. This “first modernity” marks the time when life became “individualized” for great numbers of people as they separated from traditional norms, meanings, and rules.¹¹ That meant each life became an open-ended reality to be discovered rather than a certainty to be enacted. Even where the traditional world remains intact for many people today, it can no longer be experienced as the only possible story.

I often think about the courage of my great-grandparents. What mixture of sadness, terror, and exhilaration did they feel when in 1908, determined to escape the torments of the Cossacks in their tiny village outside of Kiev, they packed their five children, including my four-year-old grandfather Max, and

all their belongings into a wagon and pointed the horses toward a steamer bound for America? Like millions of other pioneers of this first modernity, they escaped a still-feudal world and found themselves improvising a profoundly new kind of life. Max would later marry Sophie and build a family far from the rhythms of the villages that birthed them. The Spanish poet Antonio Machado captured the exhilaration and daring of these first-modernity individuals in his famous song: "Traveler, there is no road; the road is made as you go." This is what "search" has meant: a journey of exploration and self-creation, not an instant swipe to already composed answers.

Still, the new industrial society retained many of the hierarchical motifs of the older feudal world in its patterns of affiliation based on class, race, occupation, religion, ethnicity, sex, and the Leviathans of mass society: its corporations, workplaces, unions, churches, political parties, civic groups, and school systems. This new world order of the mass and its bureaucratic logic of concentration, centralization, standardization, and administration still provided solid anchors, guidelines, and goals for each life.

Compared to their parents and all the generations before, Sophie and Max had to make things up on their own, but not everything. Sophie knew she would raise the family. Max knew he would earn their living. You adapted to what the world had on offer, and you followed the rules. Nor did anyone ask your opinion or listen if you spoke. You were expected to do what you were *supposed* to do, and little by little you made your way. You raised a nice family, and eventually you'd have a house, car, washing machine, and refrigerator. Mass production pioneers like Henry Ford and Alfred Sloan had found a way to get you these things at a price you could afford.

If there was anxiety, it reflected the necessity of living up to the requirements of one's roles. One was expected to suppress any sense of self that spilled over the edges of the given social role, even at considerable psychic cost. Socialization and adaptation were the materials of a psychology and sociology that regarded the nuclear family as the "factory" for the "production of personalities" ready-made for conformity to the social norms of mass society.¹² Those "factories" also produced a great deal of pain: the feminine mystique, closeted homosexuals, church-going atheists, and back-alley abortions. Eventually, though, they even produced people like you and me.

When I set out on the open road, there were few answers, nothing to emulate, no compass to follow except for the values and dreams that I carried inside me. I was not alone; the road was filled with so many others on the same kind of journey. The first modernity birthed us, but we brought a new mentality to life: a "second modernity."¹³ What began as a modern migration from traditional lifeways bloomed into a new society of people born to a sense of psychological individuality, with its double-edged birthright of liberation and necessity. We experience both the right and the requirement to choose our own lives. No longer content to be anonymous members of the mass, we feel our entitlement to self-determination, an obvious truth to us that would have been an impossible act of hubris for Sophie and Max. This mentality is an extraordinary achievement of the human spirit, even as it can be a life sentence to uncertainty, anxiety, and stress.

Since the second half of the twentieth century, the individualization story has taken this new turn toward a "second modernity." Industrialization modernity and the practices of mass production capitalism at its core produced more wealth than had ever been imagined possible. Where democratic politics, distributional policies, access to education and health care, and strong civil society institutions complemented that wealth, a new "society of individuals" first began to emerge. Hundreds of millions of people gained access to experiences that had once been the preserve of a tiny elite: university education, travel, improved life expectancy, disposable income, rising standards of living, broad access to consumer goods, varied communication and information flows, and specialized, intellectually demanding work.

The hierarchical social compact and mass society of the first modernity promised predictable rewards, but their very success was the knife that cut us loose and sent us tumbling onto the shores of the second modernity, propelling us toward more-intricate and richly patterned lives. Education and knowledge work increased mastery of language and thought, the tools with which we create personal meaning and form our own opinions. Communication, information, consumption, and travel stimulated individual self-consciousness and imaginative capabilities, informing perspectives, values, and attitudes in ways that could no longer be contained by predefined roles or group identity. Improved health and longer life spans provided the time

for a self-life to deepen and mature, fortifying the legitimacy of personal identity over and against a priori social norms.

Even when we revert to traditional roles, these are choices now rather than absolute truths imposed at birth. As the great clinician of identity, Erik Erikson, once described it, "The patient of today suffers most under the problem of what he should believe and who he should—or... might—be or become; while the patient of early psychoanalysis suffered most under inhibitions which prevented him from being what and who he thought he knew he was."¹⁴ This new mentality has been most pronounced in wealthier countries, but research shows significant pluralities of second-modernity individuals in nearly every region of the world.¹⁵

The first modernity suppressed the growth and expression of self in favor of collective solutions, but by the second modernity, the self is all we have. The new sense of psychological sovereignty broke upon the world long before the internet appeared to amplify its claims. We learn through trial and error how to stitch together our lives. Nothing is given. Everything must be reviewed, renegotiated, and reconstructed on the terms that make sense to us: family, religion, sex, gender, morality, marriage, community, love, nature, social connections, political participation, career, food...

Indeed, it was this new mentality and its demands that summoned the internet and the burgeoning information apparatus into our everyday lives. The burdens of life without a fixed destiny turned us toward the empowering information-rich resources of the new digital milieu as it offered new ways to amplify our voices and forge our own chosen patterns of connection. So profound is this phenomenon that one can say without exaggeration that the individual as the author of his or her own life is the protagonist of our age, whether we experience this fact as emancipation or affliction.¹⁶

Western modernity had formed around a canon of principles and laws that confer inviolable individual rights and acknowledge the sanctity of each individual life.¹⁷ However, it was not until the second modernity that expereience began to catch up with formal law. This felt truth has been expressed in new demands to make *actual* in everyday life what is already established in law.¹⁸

In spite of its liberating potential, the second modernity was slated to be-

trouble. Some of the challenges of the second modernity arise from the inevitable costs associated with the creation and sustenance of one's own life, but second-modernity instability is also the result of institutionalized shifts in economic and social policies and practices associated with the neoliberal paradigm and its rise to dominance. This far-reaching paradigm has been aimed at containing, rechanneling, and reversing the secular wave of second-modernity claims to self-determination and the habitats in which those claims can thrive. We live in this *collision* between a centuries-old story of modernization and a decades-old story of economic violence that thwarts our pursuit of effective life.

There is a rich and compelling literature that documents this turning point in economic history, and my aim here is simply to call attention to some of the themes in this larger narrative that are vital to our understanding of the collision: the condition of existence that summoned both the Apple "miracle" and surveillance capitalism's subsequent gestation and growth.¹⁹

III. The Neoliberal Habitat

The mid-1970s saw the postwar economic order under siege from stagnation, inflation, and sharply reduced growth, most markedly in the US and the UK. There were also new pressures on the political order as second-modernity individuals—especially students, young workers, African Americans, women, Latinos, and other marginalized groups—mobilized around demands for equal rights, voice, and participation. In the US the Vietnam War was a focal point of social unrest, and the corruption exposed by the Watergate scandal triggered public insistence on political reform. In the UK inflation had strained industrial relations beyond the breaking point. In both countries the specter of apparently intractable economic decay combined with vocal new demands on the democratic social compact produced confusion, anxiety, and desperation among elected officials ill-equipped to judge why once-reliable Keynesian policies had failed to reverse the course.

Neoliberal economists had been waiting in the wings for this opportunity, and their ideas flowed into the "policy vacuum" that now bedeviled both governments.²⁰ Led by the Austrian economist Friedrich Hayek, fresh from

his 1974 Nobel Prize, and his American counterpart Milton Friedman, who received the Nobel two years later, they had honed their radical free-market economic theory, political ideology, and pragmatic agenda throughout the postwar period at the fringe of their profession, under the shadow of Keynesian domination, and now their time had come.²¹

The free-market creed originated in Europe as a sweeping defense against the threat of totalitarian and communist collectivist ideologies. It aimed to revive acceptance of a self-regulating market as a natural force of such complexity and perfection that it demanded radical freedom from all forms of state oversight. Hayek explained the necessity of absolute individual and collective submission to the exacting disciplines of the market as an unknowable “extended order” that supersedes the legitimate political authority vested in the state: “Modern economics explains how such an extended order . . . constitutes an information-gathering process . . . that no central planning agency, let alone any individual, could know as a whole, possess, or control . . .”²² Hayek and his ideological brethren insisted on a capitalism stripped down to its raw core, unimpeded by any other force and impervious to any external authority. Inequality of wealth and rights was accepted and even celebrated as a necessary feature of a successful market system and as a force for progress.²³ Hayek’s ideology provided the intellectual superstructure and legitimation for a new theory of the firm that became another crucial antecedent to the surveillance capitalist corporation: its structure, moral content, and relationship to society.

The new conception was operationalized by economists Michael Jensen and William Meckling. Leaning heavily on Hayek’s work, the two scholars took an ax to the pro-social principles of the twentieth-century corporation, an ax that became known as the “shareholder value movement.” In 1976 Jensen and Meckling published a landmark article in which they reinterpreted the manager as a sort of parasite feeding off the host of ownership: unavoidable, perhaps, but nonetheless an obstacle to shareholder wealth. They boldly argued that structural disconnect between owners and managers “can result in the value of the firm being substantially lower than it otherwise could be.”²⁴ If managers suboptimized the value of the firm to its owners in favor of their own preferences and comfort, it was only rational for them to do so. The

the share price, as the basis for a new incentive structure intended to finally and decisively align managerial behavior with owners’ interests. Managers who failed to bend to the ineffable signals of Hayek’s “extended order” would quickly become prey to the “barbarians at the gate” in a new and vicious hunt for unrealized market value.

In the “crisis of democracy” zeitgeist, the neoliberal vision and its revision to market metrics was deeply attractive to politicians and policy makers, both as the means to evade political ownership of tough economic choices and because it promised to impose a new kind of *order* where disorder was feared.²⁵ The absolute authority of market forces would be enshrined as the ultimate source of imperative control, displacing democratic contest and deliberation with an ideology of atomized individuals sentenced to perpetual competition for scarce resources. The disciplines of competitive markets promised to quiet unruly individuals and even transform them back into subjects too preoccupied with survival to complain.

As the old collectivist enemies had receded, new ones took their place: state regulation and oversight, social legislation and welfare policies, labor unions and the institutions of collective bargaining, and the principles of democratic politics. Indeed, all these were to be replaced by the market’s version of truth, and competition would be the solution to growth. The new aims would be achieved through supply-side reforms, including deregulation, privatization, and lower taxes.

Thirty-five years before Hayek and Friedman’s ascendance, the great historian Karl Polanyi wrote eloquently on the rise of the market economy. Polanyi’s studies led him to conclude that the operations of a self-regulating market are profoundly destructive when allowed to run free of countervailing laws and policies. He described the *double movement*: “a network of measures and policies . . . integrated into powerful institutions designed to check the action of the market relative to labor, land, and money.”²⁶

The double movement, Polanyi argued, supports the market form while tethering it to society: balancing, moderating, and mitigating its destructive excesses. Polanyi observed that such countermeasures emerged spontaneously in every European society during the second half of the nineteenth century. Each constructed legislative, regulatory, and institutional solutions to oversee contested new arenas such as workers’ compensation, factory

inspection, municipal trading, public utilities, food safety, child labor, and public safety.

In the US the double movement was achieved through decades of social contest that harnessed industrial production, however imperfectly, to society's needs. It appeared in the trust busting, civil society, and legislative reforms of the Progressive Era. Later it was elaborated in the legislative, judicial, social, and tax initiatives of the New Deal and the institutionalization of Keynesian economics during the post-World War II era: labor market, tax, and social welfare policies that ultimately increased economic and social equality.²⁷ The double movement was further developed in the legislative initiatives of the Great Society, especially civil rights law and landmark environmental legislation. Many scholars credit such countermeasures with the success of market democracy in the US and Europe, a political economics that proved far more adaptive in its ability to produce reciprocities of demand and supply than either leftist theorists or even Polanyi had imagined, and by mid-century the large corporation appeared to be a deeply rooted and durable modern social institution.²⁸

The double movement was scheduled for demolition under the neoliberal flag, and implementation began immediately. In 1976, the same year that Jensen and Meckling published their pathbreaking analysis, President Jimmy Carter initiated the first significant efforts to radically align the corporation with Wall Street's market metrics, targeting the airline, transportation, and financial sectors with a bold program of deregulation. What began as a "rip-ple" turned into "a tidal wave that washed away controls from large segments of the economy in the last two decades of the twentieth century."²⁹ The implementation that began with Carter would define the Reagan and Thatcher eras, virtually every subsequent US presidency, and much of the rest of the world, as the new fiscal and social policies spread to Europe and other regions in varying degrees.³⁰

Thus began the disaggregation and diminishment of the US public firm.³¹ The public corporation as a social institution was reinterpreted as a costly error, and its long-standing reciprocities with customers and employees were recast as destructive violations of market efficiency. Financial carrots and sticks persuaded executives to dismember and shrink their companies, and the logic

of capitalism shifted from the profitable production of goods and services to increasingly exotic forms of financial speculation. The disciplines imposed by the new market operations stripped capitalism down to its raw core, and by 1989 Jensen confidently proclaimed the "eclipse of the public corporation."³²

By the turn of the century, as the foundational mechanisms of surveillance capitalism were just beginning to take shape, "shareholder value maximization" was widely accepted as the "objective function" of the firm.³³ These principles, culled from a once-extremist philosophy, were canonized as standard practice across commercial, financial, and legal domains.³⁴ By 2000, US public corporations employed fewer than half as many Americans as they did in 1970.³⁵ In 2009 there were only half as many public firms as in 1997. The public corporation had become "unnecessary for production, unsuited for stable employment and the provision of social welfare services, and incapable of proving a reliable long-term return on investment."³⁶ In this process the cult of the "entrepreneur" would rise to near-mythic prominence as the perfect union of ownership and management, replacing the rich existential possibilities of the second modernity with a single glorified template of audacity, competitive cunning, dominance, and wealth.

IV. *The Instability of the Second Modernity*

On August 9, 2011, around the same time that cheers erupted in Apple's conference room, 16,000 police officers flooded the streets of London, determined to quell "the most widespread and prolonged breakdown of order in London's history since the Gordon riot of 1780."³⁷ The rioting had begun four nights earlier when a peaceful vigil triggered by the police shooting of a young man suddenly turned violent. In the days that followed, the number of rioters swelled as looting and arson spread to twenty-two of London's thirty-two boroughs and other major cities across Britain.³⁸ Over four days of street action, thousands of people caused property damage of over \$50 million, and 3,000 people were arrested.

Even as Apple's ascension appeared to ratify the claims of second-modernity individuals, the streets of London told the grim legacy of a

three-decade experiment in economic growth through exclusion. One week after the rioting, an article by sociologist Saskia Sassen in the *Daily Beast* observed that “if there’s one underlying condition, it has to do with the unemployment and bitter poverty among people who desire to be part of the middle class and who are keenly aware of the sharp inequality between themselves and their country’s wealthy elite. These are in many ways social revolutions with a small ‘r,’ protests against social conditions that have become unbearable.”³⁹

What were the social conditions that had become so *unbearable*? Many analysts agreed that the tragedy of Britain’s riots was set into motion by neoliberalism’s successful transformation of society: a program that was most comprehensively executed in the UK and the US. Indeed, research from the London School of Economics based on interviews with 270 people who had participated in the rioting reported on the predominant theme of inequality: “no job, no money.”⁴⁰ The terms of reference in nearly every study sound the same drumbeat: lack of opportunity, lack of access to education, marginalization, deprivation, grievance, hopelessness.⁴¹ And although the London riots differed substantially from other protests that preceded and followed, most notably the Indignados movement that began with a large-scale public mobilization in Madrid in May 2011 and the Occupy movement that would emerge on September 17 in Wall Street’s Zuccotti Park, they shared a point of origin in the themes of economic inequality and exclusion.⁴²

The US, the UK, and most of Europe entered the second decade of the twenty-first century facing economic and social inequalities more extreme than anything since the Gilded Age and comparable to some of the world’s poorest countries.⁴³ Despite a decade of explosive digital growth that included the Apple miracle and the penetration of the internet into everyday life, dangerous social divisions suggested an even more stratified and antidemocratic future. “In the age of new consensus financial policy stabilization,” one US economist wrote, “the economy has witnessed the largest transfer of income to the top in history.”⁴⁴ A sobering 2016 report from the International Monetary Fund warned of instability, concluding that the global trends toward neoliberalism “have not delivered as expected.” Instead, inequality had significantly diminished “the level and the durability of growth” while increas-

The quest for effective life had been driven to the breaking point under the aegis of market freedom. Two years after the North London riots, research in the UK showed that by 2013, poverty fueled by lack of education and unemployment already excluded nearly a third of the population from routine social participation.⁴⁵ Another UK report concluded, “Workers on low and middle incomes are experiencing the biggest decline in their living standards since reliable records began in the mid-19th Century.”⁴⁷ By 2015, austerity measures had eliminated 19 percent, or 18 billion pounds, from the budgets of local authorities, had forced an 8 percent cut in child protection spending, and had caused 150,000 pensioners to no longer enjoy access to vital services.⁴⁸ By 2014 nearly half of the US population lived in functional poverty, with the highest wage in the bottom half of earners at about \$34,000.⁴⁹ A 2012 US Department of Agriculture survey showed that close to 49 million people lived in “food-insecure” households.⁵⁰

In *Capital in the Twenty-First Century*, the French economist Thomas Piketty integrated years of income data to derive a general law of accumulation: the rate of return on capital tends to exceed the rate of economic growth. This tendency, summarized as $r > g$, is a dynamic that produces ever-more-extreme income divergence and with it a range of antidemocratic social consequences long predicted as harbingers of an eventual crisis of capitalism. In this context, Piketty cites the ways in which financial elites use their outsized earnings to fund a cycle of political capture that protects their interests from political challenge.⁵¹ Indeed, a 2015 *New York Times* report concluded that 158 US families and their corporations provided almost half (\$176 million) of all the money that was raised by both political parties in support of presidential candidates in 2016, primarily in support of “Republican candidates who have pledged to pare regulations, cut taxes... and shrink entitlements.”⁵² Historians, investigative journalists, economists, and political scientists have analyzed the intricate facts of a turn toward oligarchy, shining a light on the systematic campaigns of public influence and political capture that helped drive and preserve an extreme free-market agenda at the expense of democracy.⁵³

A précis of Piketty’s extensive research may be stated simply: *capitalism should not be eaten raw*. Capitalism, like sausage, is meant to be cooked by a democratic society and its institutions because raw capitalism is antisocial. As Piketty warns, “A market economy... if left to itself... contains powerful

forces of divergence, which are potentially threatening to democratic societies and to the values of social justice on which they are based.⁵⁴ Many scholars have taken to describing these new conditions as *neofeudalism*, marked by the consolidation of elite wealth and power far beyond the control of ordinary people and the mechanisms of democratic consent.⁵⁵ Piketty calls it a return to “patrimonial capitalism,” a reversion to a premodern society in which one’s life chances depend upon inherited wealth rather than meritocratic achievement.⁵⁶

We now have the tools to grasp the collision in all of its destructive complexity: *what is unbearable is that economic and social inequalities have reverted to the preindustrial “feudal” pattern but that we, the people, have not.* We are not illiterate peasants, serfs, or slaves. Whether “middle class” or “marginalized,” we share the collective historical condition of individualized persons with complex social experiences and opinions. We are hundreds of millions or even billions of second-modernity people whom history has freed both from the once-immutable facts of a destiny told at birth and from the conditions of mass society. We know ourselves to be worthy of dignity and the opportunity to live an effective life. This is existential toothpaste that, once liberated, cannot be squeezed back into the tube. Like a detonation’s rippling sound waves of destruction, the reverberations of pain and anger that have come to define our era arise from this poisonous collision between inequality’s facts and inequality’s feelings.⁵⁷

Back in 2011, those 270 interviews of London participants in the riots also reflected the scars of this collision. “They expressed it in different ways,” the report concludes, “but at heart what the rioters talked about was a pervasive sense of injustice. For some, this was economic—the lack of a job, money, or opportunity. For others it was more broadly social, not just the absence of material things, but how they felt they were treated compared with others....”⁵⁸ The “sense of being invisible” was “widespread.” As one woman explained, “The young these days *need to be heard*. It’s got to be justice for them.” And a young man reflected, “When no one cares about you you’re gonna eventually make them care, you’re gonna cause a disturbance.”⁵⁸ Other analyses cite “the denial of dignity” expressed in the wordless anger of the North London rampage.⁵⁹

When the Occupy movement erupted on another continent far from London’s beleaguered neighborhoods, it appeared to have little in common

with the violent eruptions that August. The 99 percent that Occupy intended to represent is not marginalized; on the contrary, the very legitimacy of Occupy was its claim to supermajority status. Nevertheless, Occupy revealed a similar conflict between inequality’s facts and inequality’s feelings, expressed in a creatively individualized political culture that insisted on “direct democracy” and “horizontal leadership.”⁶⁰ Some analysts concluded that it was this conflict that ultimately crippled the movement, with its “inner core” of leaders unwilling to compromise their highly individualized approach in favor of the strategies and tactics required for a durable mass movement.⁶¹ However, one thing is certain: there were no serfs in Zuccotti Park. On the contrary, as one close observer of the movement ruminated, “What is different is that from the start very large sections of we, the people, proved to be wiser than our rulers. We saw further and proved to have better judgment, thus reversing the traditional legitimacy of our elite governance that those in charge know better than the unwashed.”⁶²

This is the existential contradiction of the second modernity that defines our conditions of existence: we want to exercise control over our own lives, but everywhere that control is thwarted. Individualization has sent each one of us on the prowl for the resources we need to ensure effective life, but at each turn we are forced to do battle with an economics and politics from whose vantage point we are but ciphers. We live in the knowledge that our lives have unique value, but we are treated as invisible. As the rewards of late-stage financial capitalism slip beyond our grasp, we are left to contemplate the future in a bewilderment that erupts into violence with increasing frequency. Our expectations of psychological self-determination are the grounds upon which our dreams unfold, so the losses we experience in the slow burn of rising inequality, exclusion, pervasive competition, and degrading stratification are not only economic. They slice us to the quick in dismay and bitterness because we know ourselves to be worthy of individual dignity and the right to a life on our own terms.

The deepest contradiction of our time, the social philosopher Zygmunt Bauman wrote, is “the yawning gap between the right of self-assertion and the capacity to control the social settings which render such self-assertion feasible. It is from that abysmal gap that the most poisonous effluvia contam-

inating the lives of contemporary individuals emanate.” And now, however in-

the centuries-old story of human emancipation, he insisted, must begin here. Can the instability of the second modernity give way to a new synthesis: a *third modernity* that transcends the collision, offering a genuine path to a flourishing and effective life for the many, not just the few? What role will information capitalism play?

V. A *Third Modernity*

Apple once launched itself into that “abysmal gap,” and for a time it seemed that the company’s fusion of capitalism and the digital might set a new course toward a third modernity. The promise of an advocacy-oriented digital capitalism during the first decade of our century galvanized second-modernity populations around the world. New companies such as Google and Facebook appeared to bring the promise of the inversion to life in new domains of critical importance, rescuing information and people from the old institutional confines, enabling us to find what and whom we wanted, when and how we wanted to search or connect.

The Apple inversion implied trustworthy relationships of advocacy and reciprocity embedded in an alignment of commercial operations with consumers’ genuine interests. It held out the promise of a new digital market form that might transcend the collision: an early intimation of a third-modernity capitalism summoned by the self-determining aspirations of individuals and indigenous to the digital milieu. The opportunity for “my life, my way, at a price I can afford” was the human promise that quickly lodged at the very heart of the commercial digital project, from iPhones to one-click ordering to massive open online courses to on-demand services to hundreds of thousands of web-based enterprises, apps, and devices.

There were missteps, shortfalls, and vulnerabilities, to be sure. The potential significance of Apple’s tacit new logic was never fully grasped, even by the company itself. Instead, the corporation produced a steady stream of contradictions that signaled business as usual. Apple was criticized for extractive pricing policies, offshoring jobs, exploiting its retail staff, abrogating responsibility for factory conditions, colluding to depress wages via illicit

noncompete agreements in employee recruitment, institutionalized tax evasion, and a lack of environmental stewardship—just to name a few of the violations that seemed to negate the implicit social contract of its own unique logic.

When it comes to genuine economic mutation, there is always a tension between the new features of the form and its mother ship. A combination of old and new is reconfigured in an unprecedented pattern. Occasionally, the elements of a mutation find the right environment in which to be “selected” for propagation. This is when the new form stands a chance of becoming fully institutionalized and establishes its unique migratory path toward the future. But it’s even more likely that potential mutations meet their fate in “transition failure,” drawn back by the gravitational pull of established practices.⁶⁵

Was the Apple inversion a powerful new economic mutation running the gauntlet of trial and error on its way to fulfilling the needs of a new age, or was it a case of transition failure? In our enthusiasm and growing dependency on technology, we tended to forget that the same forces of capital from which we had fled in the “real” world were rapidly claiming ownership of the wider digital sphere. This left us vulnerable and caught unawares when the early promise of information capitalism took a darker turn. We celebrated the promise of “help is on the way” while troubling questions broke through the haze with increasing regularity, each one followed by a predictable eruption of dismay and anger.

Why did Google’s Gmail, launched in 2004, scan private correspondence to generate advertising? As soon as the first Gmail user saw the first ad targeted to the content of her private correspondence, public reaction was swift. Many were repelled and outraged; others were confused. As Google chronicler Steven Levy put it, “By serving ads related to content, Google seemed almost to be reveling in the fact that users’ privacy was at the mercy of the policies and trustworthiness of the company that owned the servers. And since those ads made profits, Google was making it clear that it would exploit the situation.”⁶⁶

In 2007 Facebook launched Beacon, touting it as “a new way to socially distribute information.” Beacon enabled Facebook advertisers to track users across the internet, disclosing users’ purchases to their personal networks

without permission. Most people were outraged by the company's audacity, both in tracking them online and in usurping their ability to control the disclosure of their own facts. Facebook founder Mark Zuckerberg shut the program down under duress, but by 2010 he declared that privacy was no longer a social norm and then congratulated himself for relaxing the company's "privacy policies" to reflect this self-interested assertion of a new social condition.⁶⁵ Zuckerberg had apparently never read user Jonathan Trem's rendering of his Beacon experience:

I purchased a diamond engagement ring set from overstock in preparation for a New Year's surprise for my girlfriend.... Within hours, I received a shocking call from one of my best friends of surprise and "congratulations" for getting engaged. (!!) Imagine my horror when I learned that overstock had published the details of my purchase (including a link to the item and its price) on my public Facebook newsfeed, as well as notifications to all of my friends. ALL OF MY FRIENDS, including my girlfriend, and all of her friends, etc.... ALL OF THIS WAS WITHOUT MY CONSENT OR KNOWLEDGE. I am totally distressed that my surprise was ruined, and what was meant to be something special and a lifetime memory for my girlfriend and I was destroyed by a totally underhanded and infuriating privacy invasion. I want to wring the neck of the folks at overstock and facebook who thought that this was a good idea. It sets a terrible precedent on the net, and I feel that it ruined a part of my life.⁶⁶

Among the many violations of advocacy expectations, ubiquitous "terms-of-service agreements" were among the most pernicious.⁶⁷ Legal experts call these "contracts of adhesion" because they impose take-it-or-leave-it conditions on users that stick to them whether they like it or not. Online "contracts" such as terms-of-service or terms-of-use agreements are also referred to as "click-wrap" because, as a great deal of research shows, most people get wrapped in these oppressive contract terms by simply clicking on the box that says "I agree" without ever reading the agreement.⁶⁸

In many cases, simply browsing a website obligates you to its terms-of-service agreement even if you don't know it. Scholars point out that these diabolical

documents are excessively long and complex in part to discourage users from actually reading the terms, safe in the knowledge that most courts have upheld the legitimacy of click-wrap agreements despite the obvious lack of meaningful consent.⁶⁹ US Supreme Court Chief Justice John Roberts admitted that he "doesn't read the computer fine print."⁷⁰ Adding insult to injury, terms of service can be altered unilaterally by the firm at any time, without specific user knowledge or consent, and the terms typically implicate other companies (partners, suppliers, marketers, advertising intermediaries, etc.) without stating or accepting responsibility for their terms of service. These "contracts" impose an unwinnable infinite regress upon the user that law professor Nancy Kim describes as "sadistic."

Legal scholar Margaret Radin observes the Alice-in-Wonderland quality of such "contracts." Indeed, the sacred notions of "agreement" and "promise" so critical to the evolution of the institution of contract since Roman times have devolved to a "talismanic" signal "merely indicating that the firm deploying the boilerplate wants the recipient to be bound."⁷¹ Radin calls this "private eminent domain," a unilateral seizure of rights without consent. She regards such "contracts" as a moral and democratic "degradation" of the rule of law and the institution of contract, a perversion that restructures the rights of users granted through democratic processes, "substituting for them the system that the firm wishes to impose.... Recipients must enter a legal universe of the firm's devising in order to engage in transactions with the firm."⁷²

The digital milieu has been essential to these degradations. Kim points out that paper documents once imposed natural restraints on contracting behavior simply by virtue of their cost to produce, distribute, and archive. Paper contracts require a physical signature, limiting the burden a firm is likely to impose on a customer by requiring her to read multiple pages of fine print. Digital terms, in contrast, are "weightless." They can be expanded, reproduced, distributed, and archived at no additional cost. Once firms understood that the courts were disposed to validate their click-wrap and browse-wrap agreements, there was nothing to stop them from expanding the reach of these degraded contracts "to extract from consumers additional benefits unrelated to the transaction."⁷³ This coincided with the discovery of behavioral surplus that we examine in Chapter 3, as terms-of-service agreements were extended to include baroque and perverse "privacy policies."

establishing another infinite regress of these terms of expropriation. Even the former Federal Trade Commission Chairperson Jon Leibowitz publicly stated, "We all agree that consumers don't read privacy policies."⁷⁴ In 2008 two Carnegie Mellon professors calculated that a reasonable reading of all the privacy policies that one encounters in a year would require 76 full workdays at a national opportunity cost of \$781 billion.⁷⁵ The numbers are much higher today. Still, most users remain unaware of these "rapacious" terms that, as Kim puts it, allow firms "to acquire rights without bargaining and to stealthily establish and embed practices before users, and regulators, realize what has happened."⁷⁶

At first, it had seemed that the new internet companies had simply failed to grasp the moral, social, and institutional requirements of their own economic logic. But with each corporate transgression, it became more difficult to ignore the possibility that the pattern of violations signaled a feature, not a bug. Although the Apple miracle contained the seeds of economic reformation, it was poorly understood: a mystery even to itself. Long before the death of its legendary founder, Steve Jobs, its frequent abuses of user expectations raised questions about how well the corporation understood the deep structure and historic potential of its own creations. The dramatic success of Apple's iPod and iTunes instilled internet users with a sense of optimism toward the new digital capitalism, but Apple never did seize the reins on developing the consistent, comprehensive social and institutional processes that would have elevated the iPod's promise to an explicit market form, as Henry Ford and Alfred Sloan had once done.

These developments reflect the simple truth that genuine economic reformation takes time and that the internet world, its investors and shareholders, were and are in a hurry. The credo of digital innovation quickly turned to the language of disruption and an obsession with speed, its campaigns conducted under the flag of "creative destruction." That famous, fateful phrase coined by evolutionary economist Joseph Schumpeter was seized upon as a way to legitimate what Silicon Valley euphemistically calls "permissionless innovation."⁷⁷ Destruction rhetoric promoted what I think of as a "boys and their toys" theory of history, as if the winning hand in capitalism is about blowing things up with new technologies. Schumpeter's analysis was, in fact, far more nuanced

Although Schumpeter regarded capitalism as an "evolutionary" process, he also considered that relatively few of its continuous innovations actually rise to the level of evolutionary significance. These rare events are what he called "mutations." These are enduring, sustainable, qualitative shifts in the logic, understanding, and practice of capitalist accumulation, not random, temporary, or opportunistic reactions to circumstances. Schumpeter insisted that this evolutionary mechanism is triggered by new consumer needs, and alignment with those needs is the discipline that drives sustainable mutation: "The capitalist process, not by coincidence but by virtue of its mechanism, progressively raises the standard of life of the masses."⁷⁸

If a mutation is to be reliably sustained, its new aims and practices must be translated into new institutional forms: "The fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers' goods, the new methods of production or transportation, the new markets, the new forms of industrial organization that capitalist enterprise creates." Note that Schumpeter says "creates," not "destroys." As an example of mutation, Schumpeter cites "the stages of organizational development from the craft shop to the factory to a complex corporation like U.S. Steel..."⁷⁹

Schumpeter understood creative destruction as one unfortunate by-product of a long and complex process of creative sustainable change. "Capitalism," he wrote, "creates and destroys." Schumpeter was adamant on this point: "Creative response shapes the whole course of subsequent events and their 'long-run' outcome.... Creative response changes social and economic situations for good.... This is why creative response is an essential element in the historical process: No deterministic credo avails against this."⁸⁰ Finally, and contrary to the rhetoric of Silicon Valley and its worship of speed, Schumpeter argued that genuine mutation demands patience: "We are dealing with a process whose every element takes considerable time in revealing its true features and ultimate effects.... We must judge its performance over time, as it unfolds through decades or centuries."⁸¹

The significance of a "mutation" in Schumpeter's reckoning implies a high threshold, one that is crossed in time through the serious work of inventing new institutional forms embedded in the new needs of new people. Relatively little destruction is creative, especially in the absence of a robust

double movement. This is illustrated in Schumpeter's example of US Steel, founded by some of the Gilded Age's most notorious "robber barons," including Andrew Carnegie and J. P. Morgan. Under pressure from an increasingly insistent double movement, US Steel eventually institutionalized fair labor practices through unions and collective bargaining as well as internal labor markets, career ladders, professional hierarchies, employment security, training, and development, all while implementing its technological advances in mass production.

Mutation is not a fairy tale; it is rational capitalism, bound in reciprocities with its populations through democratic institutions. Mutations fundamentally change the nature of capitalism by shifting it in the direction of those it is supposed to serve. This sort of thinking is not nearly as sexy or exciting as the "boys and their toys" gambit would have us think, but this is what it will take to move the dial of economic history beyond the collision and toward modernity.

VI. *Surveillance Capitalism Fills the Void*

A new breed of economic power swiftly filled the void in which every casual search, like, and click was claimed as an asset to be tracked, parsed, and monetized by some company, all within a decade of the iPod's debut. It was as if a shark had been silently circling the depths all along, just below the surface of the action, only to occasionally leap glistening from the water in pursuit of a fresh bite of flesh. Eventually, companies began to explain these violations as the necessary *quid pro quo* for "free" internet services. Privacy, they said, was the price one must pay for the abundant rewards of information, connection, and other digital goods when, where, and how you want them. These explanations distracted us from the sea change that would rewrite the rules of capitalism and the digital world.

In retrospect, we can see that the many discordant challenges to users' expectations were actually tiny peepholes into a rapidly emerging institutional form that was learning to exploit second-modernity needs and the established norms of "growth through exclusion" as the means to an utterly novel market project. Over time, the shark revealed itself as a rapidly

multiplying, systemic, internally consistent new variant of information capitalism that had set its sights on domination. An unprecedented formulation of capitalism was elbowing its way into history: surveillance capitalism.

This new market form is a unique logic of accumulation in which surveillance is a foundational mechanism in the transformation of investment into profit. Its rapid rise, institutional elaboration, and significant expansion challenged the tentative promise of the inversion and its advocacy-oriented values. More generally, the rise of surveillance capitalism betrayed the hopes and expectations of many "netizens" who cherished the emancipatory promise of the networked milieu.⁸²

Surveillance capitalism commandeered the wonders of the digital world to meet our needs for effective life, promising the magic of unlimited information and a thousand ways to anticipate our needs and ease the complexities of our harried lives. We welcomed it into our hearts and homes with our own rituals of hospitality. As we shall explore in detail throughout the coming chapters, thanks to surveillance capitalism the resources for effective life that we seek in the digital realm now come encumbered with a new breed of menace. Under this new regime, the precise moment at which our needs are met is also the precise moment at which our lives are plundered for behavioral data, and all for the sake of others' gain. The result is a perverse amalgam of empowerment inextricably layered with diminishment. In the absence of a decisive societal response that constrains or outlaws this logic of accumulation, surveillance capitalism appears poised to become the dominant form of capitalism in our time.

How did this happen? It is a question that we shall return to throughout this book as we accumulate new insights and answers. For now we can recognize that over the centuries we have imagined threat in the form of state power. This left us wholly unprepared to defend ourselves from new companies with imaginative names run by young geniuses that seemed able to provide us with exactly what we yearn for at little or no cost. This new regime's most poignant harms, now and later, have been difficult to grasp or theorize, blurred by extreme velocity and camouflaged by expensive and illegible machine operations, secretive corporate practices, masterful rhetorical misdirection, and purposeful cultural misappropriation. On this road, terms whose meanings we take to be positive or at least banal—"the open internet," "interoperability" and "connectivity"—have been initially harnessed to a market

process in which individuals are definitively cast as the means to others' market ends.

Surveillance capitalism has taken root so quickly that, with the exception of a courageous cadre of legal scholars and technology-savvy activists, it has cunningly managed to evade our understanding and agreement. As we will discuss in more depth in Chapter 4, surveillance capitalism is inconceivable outside the digital milieu, but neoliberal ideology and policy also provided the habitat in which surveillance capitalism could flourish. This ideology and its practical implementation bends second-modernity individuals to the draconian *quid pro quo* at the heart of surveillance capitalism's logic of accumulation, in which information and connection are ransomed for the lucrative behavioral data that fund its immense growth and profits. Any effort to interrupt or dismantle surveillance capitalism will have to contend with this larger institutional landscape that protects and sustains its operations.

History offers no control groups, and we cannot say whether with different leadership, more time, or other altered circumstances Apple might have perceived, elaborated, and institutionalized the jewel in its crown as Henry Ford and Alfred Sloan had done in another era. Nor is that opportunity forever lost—far from it. We may yet see the founding of a new synthesis for a third modernity in which a genuine inversion and its social compact are institutionalized as principles of a new rational digital capitalism aligned with a society of individuals and supported by democratic institutions. The fact that Schumpeter reckoned the time line for such institutionalization in decades or even centuries lingers as a critical commentary on our larger story.

These developments are all the more dangerous because they cannot be reduced to known harms—monopoly, privacy—and therefore do not easily yield to known forms of combat. The new harms we face entail challenges to the sanctity of the individual, and chief among these challenges I count the elemental rights that bear on individual sovereignty, including the *right to the future tense* and the *right to sanctuary*. Each of these rights invokes claims to individual agency and personal autonomy as essential prerequisites to freedom of will and to the very concept of democratic order.

Right now, however, the extreme asymmetries of knowledge and power that have accrued to surveillance capitalism abrogate these elemental rights

in new forms of social control, all of it in the service of others' interests and in the absence of our awareness or means of combat. We have yet to invent the politics and new forms of collaborative action—this century's equivalent of the social movements of the late nineteenth and twentieth centuries that aimed to tether raw capitalism to society—that effectively assert the people's right to a human future. And while the work of these inventions awaits us, this mobilization and the resistance it engenders will define a key battleground upon which the fight for a human future unfolds.

On August 9, 2011, events ricocheted between two wildly different visions of a third modernity. One was based on the digital promise of democratized information in the context of individualized economic and social relations. The other reflected the harsh truths of mass exclusion and elite rule. But the lessons of that day had not yet been fully tallied when fresh answers—or, more modestly, the tenuous glimmers of answers as fragile as a newborn's translucent skin—rose to the surface of the world's attention gliding on scented ribbons of Spanish lavender and vanilla.

VII. For a Human Future

In the wee hours of August 9, 2011, eighteen-year-old Maria Elena Montes sat on the cool marble floor of her family's century-old pastry shop in the El Raval section of Barcelona, nursing her cup of sweet café con leche, lulled by the sunrise scuffling of the pigeons in the plaza as she waited for her trays of rum-soaked gypsy cakes to set.

Pastereria La Dulce occupied a cramped medieval building tucked into a tiny square on one of the few streets that had escaped both the wrecking ball and the influx of yuppie chic. The Montes family took care that the passing decades had no visible effect on their cherished bakery. Each morning they lovingly filled sparkling glass cases with crispy sugar-studded churros, delicate *buñuelos* fat with vanilla custard, tiny paper ramekins of strawberry flan, buttery *mantecados*, coiled *ensaimadas* drenched in powdered sugar, fluffy *magdalenas*, crunchy *pestiños*, and Great-Grandmother Montes's special *flaó*, a cake made with fresh milk cheese laced with Spanish lavender, fennel,

and mint. There were almond and blood-orange tarte prepared according

to Señora Montes, exactly as they had once been served to Queen Isabella. Olive-oil ice cream flavored with anise filled the tubs in the gleaming white freezer along the wall. An old ceiling fan cycled slowly, nudging the perfume of honey and yeast into every corner of the ageless room.

Only one thing had changed. Any other August would have found Maria Elena and her family at their summer cottage nestled into a pine grove near the seaside town of Palafrugell that had been the family's refuge for generations. In 2011, however, neither the Montes nor their customers and friends would take their August holidays. The economic crisis had ripped through the country like the black plague, shrinking consumption and driving unemployment to 21 percent, the highest in the EU, and to an astonishing 46 percent among people under twenty-four years old. In Catalonia, the region that includes Barcelona, 18 percent of its 7.5 million people had fallen below the poverty line.⁸³ In the summer of 2011, few could afford the simple pleasure of an August spent by the sea or in the mountains.

There was new pressure to sell the building and let the future finally swallow La Dulce. The family could live comfortably on the proceeds of such a sale, even at the bargain rates they would be forced to accept. Business was slow, but Señor Fito Montes refused to lay off any members of a staff that was like an extended family after years of steady employment. Just about everyone they knew said that the end was inevitable and that the Montes should leap at the opportunity for a dignified exit. But the family was determined to make every sacrifice to safeguard Pastelería La Dulce for the future.

Just three months earlier, Juan Pablo and Maria had made the pilgrimage to Madrid to join thousands of protesters at the Puerta del Sol, where a month-long encampment established Los Indignados, the 15M, as the new voice of a people who had finally been pushed to the breaking point by the economics of contempt. All that was left to say was "Ya. No más!" Enough already! The convergence of so many citizens in Madrid led to a wave of protests across the nation, and eventually those protests would give way to new political parties, including Podemos. Neighborhood assemblies had begun to convene in many cities, and the Montes had attended such a meeting in El Raval just the night before.

With the evening's conversations still fresh, they gathered in the apart-

meal and discuss the fate of La Dulce, not quite certain what Papa Montes was thinking.

"The bankers may not know it," Fito Montes reflected, "but the future will need the past. It will need these marble floors and the sweet taste of my gypsy cakes. They treat us like figures in a ledger, like they are reading the number of casualties in a plane crash. They believe the future belongs only to them. But we each have our story. We each have our life. It is up to us to proclaim our right to the future. The future is our home too."

Maria and Juan Pablo breathed a shared sigh of relief as they outlined their plan. Juan Pablo would withdraw temporarily from his university studies, and Maria Elena would postpone her matriculation. They would work on expanding La Dulce's sales with new home-delivery and catering options. Everyone would take a pay cut, but no one would have to leave. Everyone would tighten their belts, except the fat buñuelos and their perfect comrades steady fast in neat, delicious rows.

We know how to challenge the inevitable, they said. We've survived wars; we've survived the Fascists. We'll survive again. For Fito Montes, his family's right to anticipate the future as their home demanded continuity for some things that are elusive, beautiful, surprising, mysterious, inexpressible, and immaterial but without which, they all agreed, life would be mechanical and soulless. He was determined, for example, to ensure that another generation of Spanish children would recognize the bouquet of his blood-orange tarts flecked with rose petals and thus be awakened to the mystery of medieval life in the fragrant gardens of the Alhambra.

On August 9 the heat rose steadily in the shady square, and the sun emptied the avenues where Huns, Moors, Castilians, and Bourbons had each in their turn marched to triumph. Those silent streets bore little evidence of the historic deliberations in Madrid that would be featured in the *New York Times* that very day.⁸⁴ But I imagine the two cities linked by invisible ribbons of scent rising from La Dulce high into the bleached Barcelona sky and drifting slowly south and west to settle along the austere facade of the building that housed the Agencia Española de Protección de Datos, where another struggle for the right to the future tense was underway.

The Spanish Data Protection Agency had chosen to champion the claims

preserve inherited meaning for a world bent on change at the speed of light.⁸⁵ In the name of “the right to be forgotten,” the Spaniards had stepped into the bullring brandishing red capes, resolved to master the fiercest bull of all: Google, the juggernaut of surveillance capitalism. When the agency ordered the internet firm to stop indexing the contested links of these ninety individuals, the bull received one of its first and most significant blows.

This official confrontation drew upon the same tenacity, determination, and sentiment that sustained the Montes family and millions of other Spaniards compelled to claw back the future from the self-proclaimed inevitability of indifferent capital. In the assertion of a right to be forgotten, the complexity of human existence, with its thousand million shades of gray, was pitted against surveillance capitalism’s economic imperatives that produced the relentless drive to extract and retain information. It was there, in Spain, that the right to the future tense was on the move, insisting that the operations of surveillance capitalism and its digital architecture are not, never were, and never would be inevitable. Instead, the opposition asserted that even Google’s capitalism was made by humans to be unmade and remade by democratic processes, not commercial decree. Google’s was not to be the last word on the human or the digital future.

Each of the ninety citizens had a unique claim. One had been terrorized by her former husband and didn’t want him to find her address online. Informational privacy was essential to her peace of mind and her physical safety. A middle-aged woman was embarrassed by an old arrest from her days as a university student. Informational privacy was essential to her identity and sense of dignity. One was an attorney, Mario Costeja González, who years earlier had suffered the foreclosure of his home. Although the matter had long been resolved, a Google search of his name continued to deliver links to the foreclosure notice, which, he argued, damaged his reputation. While the Spanish Data Protection Agency rejected the idea of requiring newspapers and other originating sites to remove legitimate information—such information, they reasoned, would exist somewhere under any circumstances—it endorsed the notion that Google had responsibility and should be held to account. After all, Google had unilaterally undertaken to change the rules of the information life cycle when it decided to crawl, index, and make ac-

permission. The agency concluded that citizens had the right to request the removal of links and ordered Google to stop indexing the information and to remove existing links to its original sources.

Google’s mission to “organize the world’s information and make it universally accessible and useful”—starting with the web—changed all of our lives. There have been enormous benefits, to be sure. But for individuals it has meant that information that would normally age and be forgotten now remains forever young, highlighted in the foreground of each person’s digital identity. The Spanish Data Protection Agency recognized that not all information is worthy of immortality. Some information should be forgotten because that is only human. Unsurprisingly, Google challenged the agency’s order before the Spanish High Court, which selected one of the ninety cases, that of attorney Mario Costeja González, for referral to the Court of Justice of the European Union. There, after lengthy and dramatic deliberations, the Court of Justice announced its decision to assert the right to be forgotten as a fundamental principle of EU law in May of 2014.⁸⁶

The Court of Justice’s decision, so often reduced to the legal and technical considerations related to the deletion or de-linking of personal data, was in fact a key inflection point at which democracy began to claw back rights to the future tense from the powerful forces of a new surveillance capitalism determined to claim unilateral authority over the digital future. Instead, the court’s analysis claimed the future for the human way, rejecting the inevitability of Google’s search-engine technology and recognizing instead that search results are the contingent products of the specific economic interests that drive the action from within the belly of the machine: “The operator of a search engine is liable to affect significantly the fundamental rights to privacy and to the protection of personal data. In the light of the potential seriousness of the interference” with those interests, “it cannot be justified by merely the economic interest which the operator of such an engine has in that processing.”⁸⁷ As legal scholars Paul M. Schwartz and Karl-Nikolaus Peifer summarized it, “The Luxembourg Court felt that free flow of information matters, but not as much, ultimately, as the safeguarding of dignity, privacy, and data protection in the European rights regime.”⁸⁸ The court conferred upon EU citizens the right to combat, requiring Google to establish a process for

recourse in democratic institutions, including “the supervisory authority or the judicial authority, so that it carries out the necessary checks and orders the controller to take specific measures accordingly.”³⁸⁹

In reasserting the right to be forgotten, the court declared that decisive authority over the digital future rests with the people, their laws, and their democratic institutions. It affirmed that individuals and democratic societies can fight for their rights to the future tense and can win, even in the face of a great private power. As the human rights scholar Federico Fabbrini observed, with this vital case the European Court of Justice evolved more assertively into the role of a human rights court, stepping into “the mine-field of human rights in the digital age....”³⁹⁰

When the Court of Justice’s decision was announced, the “smart money” said that it could never happen in the US, where the internet companies typically seek cover behind the First Amendment as justification for their “permissionless innovation.”³⁹¹ Some technology observers called the ruling “nuts.”³⁹² Google’s leaders sneered at the decision. Reporters characterized Google cofounder Sergey Brin as “joking” and “dismissive.” When asked about the ruling during a Q&A at a prominent tech conference, he said, “I wish we could just forget the ruling.”³⁹³

In response to the ruling, Google CEO and cofounder Larry Page recited the catechism of the firm’s mission statement, assuring the *Financial Times* that the company “still aims to ‘organise the world’s information and make it universally accessible and useful.’” Page defended Google’s unprecedented information power with an extraordinary statement suggesting that people should trust Google more than democratic institutions: “In general, having the data present in companies like Google is better than having it in the government with no due process to get that data, because we obviously care about our reputation. I’m not sure the government cares about that as much.”³⁹⁴ Speaking to the company’s shareholders the day after the court’s ruling, Eric Schmidt characterized the decision as a “Balance that was struck wrong” in the “collision between a right to be forgotten and a right to know.”³⁹⁵

The comments of Google’s leaders reflected their determination to retain privileged control over the future and their indignation at being chal-

not concede the corporation’s unilateral power. In fact, the smart money appeared not to be all that smart. In the year following the EU decision, a national poll of US adults found that 88 percent supported a law similar to the right to be forgotten. That year, Pew Research found that 93 percent of Americans believed that it was important to have control of “who can get information about you.” A series of polls echoed these findings.³⁹⁶

On January 1, 2015, California’s “Online Eraser” law took effect, requiring the operator of a website, online service, online application, or mobile application to permit a minor who is a registered user of the operator’s service to remove, or to request and obtain removal of, content or information posted by the minor. The California law breached a critical surveillance embattlement, attenuating Google’s role as the self-proclaimed champion of an unbounded right to know and suggesting that we are still at the beginning, not the end, of a long and fitful drama.

The Spanish Data Protection Agency and later the European Court of Justice demonstrated the unbearable lightness of the inevitable, as both institutions declared what is at stake for a human future, beginning with the primacy of democratic institutions in shaping a healthy and just digital future. The smart money says that US law will never abandon its allegiance to the surveillance capitalists over the people. But the next decades may once again prove that the smart money can be wrong. As for the Spanish people, their Data Protection Agency, and the European Court of Justice, the passage of time is likely to reveal their achievements as a stirring early chapter in the longer story of our fight for a third modern that is first and foremost a human future, rooted in an inclusive democracy and committed to the individual’s right to effective life. Their message is carefully inscribed for our children to ponder: *technological inevitability is as light as democracy is heavy, as temporary as the scent of rose petals and the taste of honey are enduring.*

VIII. Naming and Taming

Taming surveillance capitalism must begin with careful naming, a symbiosis that was vividly illustrated in the recent history of HIV research, and I offer it as an analogy. For three decades, scientists aimed to create a vaccine that

followed the logic of earlier cures, training the immune system to produce neutralizing antibodies, but mounting data revealed unanticipated behaviors of the HIV virus that defy the patterns of other infectious diseases.⁹⁷

The tide began to turn at the International AIDS Conference in 2012, when new strategies were presented that rely on a close understanding of the biology of rare HIV carriers whose blood produces natural antibodies. Research began to shift toward methods that reproduce this self-vaccinating response.⁹⁸ As a leading researcher announced, “We know the face of the enemy now, and so we have some real clues about how to approach the problem.”⁹⁹

The point for us is that every successful vaccine begins with a close understanding of the enemy disease. The mental models, vocabularies, and tools distilled from past catastrophes obstruct progress. We smell smoke and rush to close doors to rooms that are already fated to vanish. The result is like hurling snowballs at a smooth marble wall only to watch them slide down its facade, leaving nothing but a wet smear: a fine paid here, an operational detour there, a new encryption package there.

What is crucial now is that we identify this new form of capitalism on its own terms and in its own words. This pursuit necessarily returns us to Silicon Valley, where things move so fast that few people know what just happened. It is the habitat for progress “at the speed of dreams,” as one Google engineer vividly describes it.¹⁰⁰ My aim here is to slow down the action in order to enlarge the space for such debate and unmask the tendencies of these new creations as they amplify inequality, intensify social hierarchy, exacerbate exclusion, usurp rights, and strip personal life of whatever it is that makes it personal for you or for me. If the digital future is to be our home, then it is we who must make it so. We will need to know. We will need to decide. We will need to decide who decides. This is our fight for a human future.

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CONVENTS FROM CHINA, VI

I. Google: The Pioneer of Surveillance Capitalism

Google is to surveillance capitalism what the Ford Motor Company and General Motors were to mass-production-based managerial capitalism. New economic logics and their commercial models are discovered by people in a time and place and then perfected through trial and error. In our time Google became the pioneer, discoverer, elaborator, experimenter, lead practitioner, role model, and diffusion hub of *surveillance capitalism*. GM and Ford’s iconic status as pioneers of twentieth-century capitalism made them enduring objects of scholarly research and public fascination because the lessons they had to teach resonated far beyond the individual companies. Google’s practices deserve the same kind of examination, not merely as a critique of a single company but rather as the starting point for the codification of a powerful new form of capitalism.

With the triumph of mass production at Ford and for decades thereafter, hundreds of researchers, businesspeople, engineers, journalists, and scholars would excavate the circumstances of its invention. Origins, and