I DON’T TWEET. I don’t share and I don’t like. I don’t friend and I am not a fan. I don’t post to walls, tag, follow, hashtag, or regram. I am not an iger or a snapper. Siri barely registers on my iPhone, and my home is not home to Alexa, Amazon Echo, or Google Home. In short, I don’t take advantage of a myriad of technical platforms and devices that have become a daily fixture of twenty-first-century life. Yet despite this avowed refusal to participate or adopt (for reasons this book explores), I nonetheless inhabit a digital world: one where digitization is not a technology, confined to the hardware or software of the computer, but represents an operative ideology, a powerful metaphor, and a transformative force of everyday life itself. Digital tools, devices, and platforms are not mere technical things or mediums; rather, they feed into and are shaped by existing belief structures that are, in turn, reinforced and changed through their mediation, increasingly modifying us as subjects, subjectivities, and social beings. In the process, not only individual habits but also broader systems, institutions, and norms—political, economic, cultural, social—are
being transformed, and often in ways that both conceal their reach and mask the resulting downsides, as they deliver tangible benefits to some (but not all, as this book contends) of their users. Contemporary Art and the Digitization of Everyday Life seeks to analyze the role, meanings, and changing nature of contemporary art within this digital media ecology. A book neither about technology nor about a specific type of art that uses the computer, digital applications, or the internet as a medium, its interests are more all-encompassing: examining the changing status of the political public sphere and, ultimately, the withering of democracy under what it describes as the digitization of everyday life. The focus of this book is how art—with its historically oppositional role of critique and resistance—operates within this set of conditions, and how particular changes in the nature of art since the 1990s anticipate and embody broader societal conditions.

My book argues that these developments are paradoxically related to the emergence of postwar digital utopianism, or the firm belief in the emancipatory possibilities of computers and information technologies, whose proponents have long promoted the creation of a more egalitarian society. With the invention of electronic networks, this social model of computing—which dramatically reimagines computers away from their original functioning as calculating machines—became more widespread, with a semiotic rewriting of the computer (and the digital) as symbolic modes. In light of subsequent history—not to mention very recent events and revelations, as well as a host of writing that challenges longstanding tenets—this cyberutopian rhetoric is being sorely tested, as the cultural realities of digitization have unfolded in strikingly counter terms, with increased political marginalization, exclusion, division, and political injustice, particularly in terms of race, gender, sexuality, and ethnicity. As a result, society increasingly is threatening to slide dangerously toward a form of illiberalism and anti-democracy, while unleashing an unremitting expropriation of bodies and minds in the service of capital.

While there is certainly truth to particular cyberutopic claims (if there were not, these platforms would not be so successful and widespread), because of the romantic hold that digital technologies enjoy, certain capacities—for example, connecting like-minded subcommunities or facilitating rapid, if not instantaneous, and widespread communication—have been viewed (until recently) as largely or wholly positive in nature, to the point that negative and even dangerous potentialities, as well as subtle, oft invisible, forms of manipulation that they simultaneously represent, have been downplayed and in some cases disregarded altogether. Contemporary Art and the Digitization of Everyday Life seeks to shed light on this alternative history, weaving a narrative of art and society that makes the counterintuitive argument that digitization, as a social process—or a process that mines the social, as explained below—is anti-democratizing rather than democratizing. Here digitization is both the story of new forms of pleasure, ease, and satisfaction and also that of the production of inequality and hidden conduits of power and manipulation.
How art, which historically has served as an important counterpoint to the excesses of dominant culture, shaping ideas and discourse while generating a counterpublic sphere, fits into this scenario is a central question explored in this book. The argument developed here is that since the 1990s, tenets of social computing and the ideology of digital utopianism have become absorbed into and have fed into changes in the practices and institutions of contemporary art in ways that are both apparent and unapparent—and that are well beyond the artistic use of digital mediums. In the following chapters, I examine a set of paradigmatic developments in recent art that have taken hold during this time: the proliferation of participatory and interactive practices and institutional rearrangements; the rise of collaboration and new forms of “shared” production and circulation; the “networked” condition of artists, exhibitions, artworks, and institutions; the elevation of sociality in socially driven artistic and exhibition modes; the mandate of community building in artworks and exhibitions; and the personalization of protest and resistance, among other issues. If art and the museum are symbolic fields rather than just material practices and sites, then one of their most significant roles traditionally has been to operate as a public sphere—or, more accurately in relation to what was once called the avant-garde, as counter public spheres. Across several chapters, I look at the restructuring of the museum: moving from an Enlightenment, modernist, and then postmodernist model to one that, I contend, is increasingly modeled after the internet. In contrast to scholars and writers who propose or investigate the internet as a countersite to official cultural institutions, providing alternative distribution possibilities, here I examine how the institution (from the museum to the exhibition to expansive ideas of “the curatorial”) is increasingly being reimagined under a user-oriented ethos, which incorporates the interactive and social tactics of online worlds and digital interfaces. In important ways, the museum is increasingly becoming the site for the production of the digital subject and its modes of attentiveness and behaviorism, with the incorporation of bodies and affect as key elements in exhibitions and programming. In this and in other ways, the book seeks to trace the entwinements of technological and artistic change.

While the above are hardly developments that have escaped art historical scrutiny (far from it), they are frequently situated genealogically, in relation to a reception and modification of the modernist or postmodernist avant-gardes. As a result, the latter's progressivism, if not counter-hegemonic status, is largely preserved. This tendency, moreover, is further amplified when coupled with the putatively “democratizing” capacities of digital technologies that have been espoused by technologists and that became widespread cultural principles during the 1990s. Such modes and the principles attached to them, however, betray complex and contradictory meanings in contemporary culture and society: the “interactive,” for example, also belongs within the (re)structurings of dominant, neoliberal society, infiltrating new modes of work and leisure, the redefinition of the workplace, and new forms of communication in the mediasphere. Thus, rather than theorizing recent developments and their metaphoric
valences and meanings in terms of an art historical or art-specific critical discourse, my approach is to introduce competing readings and histories specific to computerization, histories of social computing, and philosophical critiques of technical society.

It should be emphasized from the outset that the argument being put forth here is not a technodeterminist one (i.e., that digital technologies are creating these outcomes) or one that maintains that recent developments surfaced all at once. A word on terminology thus is in order: *digitization* has no singular meaning, but in its colloquial understanding, it refers to the actual technologies and machines of digital computers and their related mediums and programs (i.e., hardware and software). From this perspective, the historical origins of digitization thus might be connected to any number of developments in electronic computing, from the invention of early, post-analogue machines during the 1930s and 1940s to the first programmable devices and the launch of the personal computer in the 1980s. In turn, *digitization* as a process would suggest a translation of material into digital code or a deployment of digital tools. It follows that to discuss digitization and contemporary art seems to imply an interest in the mediums of “digital art,” net (or post-internet) art, or art that specifically uses the computer and digital interfaces, hardware, and software to generate artwork; and it implies a format or system that is defined through processes of making and distribution (sharing, searching, uploading, browsing, dispersing), emphasizing structure over content, in keeping with the semiotic orientation of poststructuralism. From artist Seth Price’s notion of dispersion to the “pro-surfer” artwork in which meaning is tied to the structure of circulation—where, as artist and writer Marisa Olson describes it, “the act of finding is elevated to a performance in its own right”—much of the most thoughtful commentary in recent years has emphasized the unique technical capacities and formal characteristics of digital media, in order to extrapolate larger meanings. Other numerous excellent histories and exhibitions have explored these forms and their emergence in relation to computer technologies, which propose new categories or mediums of art. In art history, these discourses have been well developed, so that digitization is now largely synonymous with digital media. The result is that these new forms are easily positioned within existing artistic and art historical genealogies, models, and strategies (from appropriation to the readymade), as well as theories of medium/media.

This book’s approach, however, stands apart from these studies in significant ways. Most importantly, rather than defining digitization in relation to the material technologies, it instead proposes that digitization is a *social form*, with a focus upon the politics of technological society. As such, for purposes of my investigation, I theorize digitization as a process of social (and thus societal) and historical transformation, in which particular meanings and ideals regarding the computational have been and continue to be produced, securing wide-scale cultural purchase in all domains of life. Digitization, I argue, represents a sociocultural phenomenon and a system of belief, as well as a media ecosystem in which subjects (and subjectivities) are made, lives are lived,
and societal (and ultimately political) norms and institutions are modified, made, and (re)produced. Thus rather than address “the digital” as a distinct or an autonomous technical sphere, or digitization as a technology qua technology, my book analyzes what I call the digitization of everyday life: a model that refers to a process unfolding over time that is still evolving or becoming, where technologies are understood to be “embedded,” to cite Saskia Sassen, in material life. Through this process, new social, economic, and political rearrangements present putatively positive outcomes while reshaping the political public sphere in ways that are troubling for democracy. As such, the digitization of everyday life poses unique challenges for contemporary art.

The book's concerns are thus in the nontechnological expressions of computerization, information technologies, and digitization, as they are manifest in both material and more abstract ways. I am neither a technical expert in the minutiae and systems of digital technologies nor a media archaeologist or media theorist who studies material technologies, the formal nature of computers, and the historical evolution of particular media forms. Excellent studies in German media theory, media archaeology, and other media theory—by Alexander Galloway, Friedrich Kittler, and Jussi Parikka, among others—expertly delve into such issues, developing various media-based perspectives. In contrast, my book’s interests are in the political and social significance or meanings that accrue outside technology’s material forms and that are part of the technical substrate itself. “Technologies . . . are socially constructed,” Thomas Streeter writes. “They are deeply embedded in and shaped by social processes and choices and so should not be thought of as something outside or autonomous from society.” Likewise, the following study examines these interrelations, thereby locating expressions of digitization in potentially unanticipated places, including those that seemingly have no relation to the technologies themselves.

To arrive at the above thesis, I have delved into the history of computing—or, more accurately, of the now prevailing social ideal thereof, and the roots of digital utopianism—unpacking the transmogrification of technology as a cultural signifier and an ideological set of beliefs, as they have unfolded during the postwar era. A brief recounting of some of the salient aspects of this history is thus in order. As is now common knowledge, following World War II, computers, as part of military and governmental research circles, were perceived as bureaucratic and depersonalized machines of faceless control, with the threat of transforming people into robotic subjects. With the burgeoning antiwar sentiments during the Vietnam era of the 1960s, youthful resistance was in part organized around an antitechnocratic platform, with technology and the technocratic political class held responsible for the excesses and violations of the conflict, as Theodore Roszak’s influential 1969 study The Making of a Counter Culture: Reflections on the Technocratic Society and Its Youthful Opposition contends. A central target of the sixties youth movement, he writes, is “the scientific world-view.”
Numerous studies have demonstrated, however, that this history is more complex, with competing narratives of a technical utopianism that unfolded over a period of several decades, taking firm cultural hold during the 1990s. As Fred Turner argues in his groundbreaking study, from the late 1960s through the 1990s, a “network of people and publications”—notably Stewart Brand, the founder of the Whole Earth Catalog (WEC) in 1968 and later the Whole Earth ’Lectronic Link (WELL)—worked to negotiate “a series of encounters between bohemian San Francisco and the emerging technology hub of Silicon Valley to the south.” Turner describes this faction of West Coast counterculture as “New Communalists” (whom he distinguishes in approach and philosophy from the political activists of the New Left) that actively sought to merge technology, postwar technocratic research culture, and sixties counterculture into what will later be described as cyberculture. These technologists, rather than rejecting technology, as Roszak and other popular histories relay, instead reimagined it, locating in it potentialities for social (in place of political) change through a heightening of individual consciousness, personal fulfillment, and spiritual communion. “Together,” Turner adds, “the creators and readers of the WEC helped to synthesize a vision of technology as a countercultural force that would shape public understandings of computing and other machines long after the social movements of the 1960s faded from view.”

As Janet Abbate demonstrates in her comprehensive history of the invention of the internet and its predecessor, the ARPANET (the electronic network developed in the 1960s by the US Department of Defense’s Advanced Research Projects Agency), the rise of this social conception of computing was, in part, a matter of design. Computers were organized around the idea of individual agency, in which there was no distinction between producers and users—“since ARPA’s computer experts were building the system for their own use”—hence the (now common) concepts of collaboration and collaborative modes of working were, to some degree, built into their systems and outlook. But as Abbate explains, scientists and other specialists unexpectedly found themselves deploying computers as a means less of connecting to other machines or to access hardware than to access people, thus nurturing social networks. In 1990 the ARPANET was retired and replaced by the NSFNET (National Science Foundation Network), a significant development that “marked the end of military operation of the Internet.” With oversight shifted to the civilian sector, the modern-day internet was born, and it would soon be fully privatized in the early 1990s, moving outside the governmental domain.

As a result, as the technology evolved, despite the consolidation of power that would ensue with the privatization of the fully monetized internet during the 1990s, this formerly “new paradigm” of decentralizing “design authority,” to paraphrase Abbate, fed the still prevailing narrative that the internet—and, by association, “the network” as structure and model of thought—is intrinsically antihierarchical and decentralizing, which remains a profoundly influential symbolic ideal, including in
contemporary art and its institutional reorganizations. As Streeter notes, these meanings stem from multiple sources and have coalesced over time: “[W]hile economic and technological forces of course have played a role, the internet’s construction is peppered with profoundly cultural forces: the deep weight of the remembered past and the related, collectively organized pressures of human passions made articulate.” The “network” becomes not only a thing or a sign but a powerful model of the political, broadly speaking: to be “networked,” a person or a company (or an exhibition) must have the ability to operate outside dominant structures, seize political power, or “disrupt” norms. As this book relays, these ideas have informed contemporary art in dramatic and oft hidden ways, given that they simultaneously tap into existing avant-garde paradigms that were developed under radically different cultural conditions. In short, changes in art come about not at the behest of technologists’ thinking, but in tandem with them.

During the 1990s, the model of techno-utopianism was further consolidated, disseminated popularly in the pages of *Wired*, among other venues; the magazine was founded in 1993 by former associates of the WELL, including Kevin Kelly, Howard Rheingold, and John Perry Barlow. As one of the founders, in 1990, of the Electronic Frontier Foundation, Barlow is a key spokesperson for this cyberdoctrine. He and his fellow technologists forged a thematic link between cyberspace and antigovernment sentiments: espousing a libertarian ideology that was simultaneously built upon cybercultural sentiments while (paradoxically) finding sympathies with the neoconservative turn of the Reaganite 1980s. As Abbate explains, there is an intimate connection between the technologist belief in the “new frontier” and the neoconservative rejection of “big government.” She writes, “The issues the NSF faced in trying to privatize the Internet were in some ways characteristic of US attitudes towards the role of the federal government.” She continues, “Americans tend to disapprove of government involvement in providing commercial goods or services, as the heated debates in the 1990s over the establishment of a national health care system or federal subsidies for high-tech research and development illustrate. Therefore, the NSF managers believed that the only politically feasible way to accommodate commercial users on the Internet would be to remove it entirely from government operation.”

The antiregulatory platform that is (to this day) a defining feature of tech neoliberalism is a consistent theme in the writings and tech advocacy of the 1980s and 1990s. In 1983 Ithiel de Sola Pool, a professor of political science at MIT and lead researcher on communications technologies and their social effects, published *Technologies of Freedom*, a manifesto for an electronic age, establishing a framework that distinguishes (economic) deregulation from First Amendment protections. For Richard Barbrook, de Sola Pool’s book marks an important intellectual turning point: what he calls the “neoliberal appropriation of McLuhanism”—referring to Marshall McLuhan, the sixties guru of the global village whose writings still maintain a profound influence, in particular on art historical scholarship that delves into the histories of electronic
computing and network theory, albeit from an originalist perspective. During the 1980s, the “meaning of this master theory,” however, was radically changed, “moving [it] rightwards,” as Barbrook explains.25 He adds that this emergent tech neoliberalism, while betraying conservative roots, cultivated a cultural image that was decidedly the opposite. “Despite this shift in political position, these new converts emphasized that they had nothing in common with old-style conservatives who mourned the loss of the traditional way of life.” Barbrook continues, “On the contrary, they identified their new laissez-faire ideology...with the imaginary future of the information society... Far from being a return to the past, free market ideologies were the fastest route to the hi-tech future. Jefferson, not Mao, was the prophet of the cybernetic revolution.”26 As his invocation of Jeffersonian democracy implies, coursing through the statements, writings, and appeals of these “new converts” is an ethos of freedom, extending uneasily the language of a democratic unity to individual liberty, despite the longstanding tension between doctrines of equality and freedom in political theory. A powerful set of cultural metaphors contribute to the nascent “hi-tech utopia” (to cite Barbrook’s term) of this period, where the computational is translated into a source of active resistance and the computerized subject elevated into a countercultural figure that operates outside the bounds of any authority.27 The internet comes to assume these symbolic meanings as a free space of limitless individualism that operates beyond state control or other forms of authority, creating powerful forms of individual agency.

At the same time, the symbolic value of information technologies is tied to larger geopolitical events, in particular globalization, where theoretical models forged in other disciplinary contexts (e.g., Deleuze and Guattari’s deterritorialization, which becomes highly influential in contemporary artistic discourse of the 1990s) find conceptual affinities with network theory. As self-professed cyberskeptic Evgeny Morozov explores, the ideological battles of the Cold War fostered a connection between information and liberty, so that information technologies easily assumed political meanings. As Morozov argues, the “Google doctrine”—a cultural belief in information as both key to and manifestation of emancipation—revealed in “the giddy sense of superiority that many in the West felt in 1989 as the Soviet system collapsed almost overnight.” Morozov writes, “As history was supposed to be ending, democracy was quickly pronounced the only game in town. Technology, with its unique ability to fuel consumerist zeal—itself seen as a threat to any authoritarian regime—as well as its prowess to awaken and mobilize the masses against their rulers, was thought to be the ultimate liberator.”28

In the public imagination, these collective claims took hold, leading to the notion that computational technologies can facilitate an increase in social harmony, individual autonomy, and political and economic inclusiveness. Digitization is perceived as an ideologically ecumenical process—or, more accurately, one that facilitates progressive goals (as evidenced by the common misunderstanding of Silicon Valley as a politically liberal, if not leftist culture, despite the highly compromised history of its major
players and its neoliberal leanings, and despite the actual outcomes in the arena of politics that have ensued, in particular in recent years). Part of this perception has to do with symbolism: these technologies originated in the counterculture mind-set of free access and information and the progressive ideal of decentralization, ideals that were carried through to later developments. When the internet became fully privatized in the mid-1990s, proponents of these new modes were wildly successful in propagating this ideology and exporting it as a cultural set of values, one that largely deflected critique while proving highly resistant to any form of governmental intervention or regulation. As a result, despite the commensuration between neoliberal, digital capitalism and libertarianism—systems of belief, I might add, that operate against democratization—not only were forces of resistance less organized, but the actuality of the conditions being created were submerged in favor of what Thomas Streeter identifies as a profound “romanticism” that accompanies network computing.\textsuperscript{29} Concepts such as sociality, connectivity, and interactivity become intimately connected to the digital while moving out of the technical realm altogether. It is not their inherent machinic capacities but their metaphoric status as a mode of thought or even being that is most powerful: a way of knowing and perceiving the world and a means of reorganizing society.

These beliefs, when it comes to issues of political marginality and identity (a central theme of this book), are particularly significant and also more obtuse, as many “marks” of racial, gender, sexual, and ethnic discrimination hide in the shadows of computational structures and systems—as well as in their putative neutrality. As John Perry Barlow, among other writers and technology thinkers, declared, by liberating information (and thereby people) from hierarchical structures, electronic networks erode differences based upon race, class, and gender. Given the manifest immateriality of the “electronic frontier,” bodily identity as a whole ceases to be an issue.\textsuperscript{30} Thus, for Barlow and many of his fellow technologists, computers—and, in particular, networked computing—are avatars of and idyllic forms of social harmony: a proposition that is reinforced by the (putatively) leaderless and anonymous spaces of the internet and the World Wide Web and, more recently, by the advent of social media and new modes of technological mobility. Across these developments and ideas, a consistent theme emerges that power is inevitably relocated to the “user” (a nomenclature unpacked in this book), whoever they may be.

The idea that computer-based communications can, by design, erode social divisions is a proposition that recurs in the writings of Kelly, Rheingold, and Barlow, among others. As Rheingold declares in his tome \textit{The Virtual Communities of Cyberspace}, the “Net” bears unlimited and universal political potential and is accessible to “all” regardless of social station. His description is worth quoting at length: “Access to alternate forms of information and, most important, the power to reach others with your own alternatives to the official view of events, are, by their nature, political phenomena.” Rheingold writes:
Changes in forms and degrees of access to information are indicators of changes in forms and degrees of power among different groups. The reach of the Net, like the reach of television, extends to the urbanized parts of the entire world (and, increasingly, to far-flung but telecom-linked rural outposts). Not only can each node rebroadcast or originate content to the rest of the Net, but even the puniest computers can process that content in a variety of ways after it comes in to the home node from the Net and before it goes out again. Inexpensive computers can copy and process and communicate information, and when you make PCs independent processing nodes in the already existing telecommunications network, a new kind of system emerges.  

Such claims of unfettered access mean that within “the virtual communities of cyber-space,” as Barbrook summarizes, “old hierarchies of race, class, and gender mattered much less.” The collective body of these beliefs—of individual, online freedom, antiregulation, and egalitarian, virtual community—represents “a New Left utopia,” or what Barbrook and his coauthor, Andy Cameron, describe as the “neoliberal cause: the California ideology,” underscoring the contradictory attachment of these sentiments to informational capitalism—and the degree to which difference, and thus the political more generally speaking, is occluded. The universalism of “everyone” being online, as Streeter points out, “systematically ignores cultural barriers to access and differences in use,” an assertion that directly contradicts the commonly held belief that the internet is a great equalizer when it comes to cultural or social capital and influence. Sassen underscores the “digital divide,” in regard not only to access but also to how the physical infrastructure upon which “immaterial” technologies depend largely negatively impacts the poor or those with limited economic and social power: the “spatialization of inequality” is endemic to what she describes as “electronic space,” a term she distinguishes from the internet or electronic networks per se, in that it encompasses social space.  

Beyond such material barriers, however, is how the subject and subjectivity are implicitly theorized where technology is a tool and a form of life equally available to anyone for any goal. As noted above, this (inadvertently) entails a denial of difference—or a universalist philosophical outlook that harks back to conceptions of an Enlightenment subject. Not only is technology imbricated with and productive of social meanings, but as Abbate underscores in her historical treatment, and as expressed in the gerund in her book’s title (“inventing the internet”), the technology was not the only thing that had to be invented; so did its meanings, or what it stood for symbolically and otherwise. Among the most influential of these is neutrality: not only with regard to the distribution network as simply a tool or a platform but also extending to the “subject” of a digital universe who bears no markers of identity and who can thus take advantage of unlimited possibility. In the 1990s famed “[c]yberpundit Esther Dyson,” writes Streeter, was “a strong libertarian,” an identity that, he adds, was far more significant than her gender. “[S]he was a key figure in promoting and making