

Digital Exclusion: A Politics of Refusal

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Over the past few decades, the term “digital exclusion” has been linked to debates about access to internet infrastructures, adoption of internet-enabled technologies, and conditions of social and economic marginalization and historical forms of oppression. Adding to these concerns are considerations of privacy and surveillance and their consequences for members of marginalized communities, as well as political and economic factors that shape technology companies’ relationship to processes of marginalization. Taken together, these exclusionary problems amount to what feminist political philosopher Iris Marion Young (2001) would refer to as a “plausible structural story” (16), or history of patterned inequality and structural injustice.

But do these accounts of harmful exclusion obscure the agentic possibilities of willful self-exclusion in technologically mediated society? Like Ananny’s examination of silence and absences in digital platforms as productive political communication (p. XXXX), I take the opportunity in this chapter to rethink exclusion as an important mechanism for transforming political discourse. Specifically, I reevaluate digital exclusion as a form of active refusal of technologies’ seemingly inevitable uses and ends. Refusal does not mean dropping out or rejecting wholesale involvement with digital devices, internet infrastructures, or internet-based technologies. Instead, grounding the discussion with attention to marginality, “informed refusal” (Benjamin 2016, 970), and tech abolitionism or abolishing digital technologies that punish and police marginalized people (Benjamin 2019; Roberts 2019), I argue that when marginalized people refuse

technologies, they imagine new ways of being and relating to one another in a technologically mediated society. Refusal serves as a means for individuals and groups, especially members of historically marginalized groups, to assert themselves and collectively determine a technologically mediated world in which they wish to belong.

To argue this, the chapter locates itself in a normative framework that updates Young's theory of communicative justice for an era of data-driven technologies. The framework marries Young's discussions of marginality, discourse, and the problem of "internal exclusion" with critical debates about technology, its politics, and the importance of refusal in the lives of members of marginalized communities. I then use this framework to evaluate and extend conventional debates about digital exclusion. Specifically, I present six kinds of digital exclusion. While the first five characterize exclusion as negative or harmful to marginalized groups, the sixth posits exclusion in affirmative terms, in which members of marginalized groups assert their agency in the face of structural injustice by refusing technology in different ways in order to develop and determine their own technologically mediated lives. By the end of the chapter, I hope to show the generative aspects of digital exclusion-as-refusal and its importance to communicative justice in the 21st century.

RETHINKING EXCLUSION IN COMMUNICATIVE JUSTICE: REFUSAL OF TECHNOLOGY

Young's theory of discursive inequalities, inclusion, and exclusion

With its conspicuous attention to equity and justice, feminist political theory provides a useful place to begin thinking about digital exclusion. Iris Marion Young's work is especially critical, because it examines the centrality of communication to a democratic

society through the discursive dimensions of being included and excluded. Young's work—broadly definable as a theory of communicative justice—challenges a longstanding liberal belief in distributive justice, namely the idea that a procedurally fair distribution of resources or material goods in society will suffice to address all objectionable forms of inequality. Much political theory of the past several generations has focused on distributive justice. Or, as John Rawls put it in *A Theory of Justice*, “A conception of social justice... is to be regarded as providing in the first instance a standard whereby the distributive aspects of the basic structure of society are to be assessed” (Rawls 1971: 9.) Young, by contrast, argues “justice should refer not only to distribution, but also to the institutional conditions necessary for the development and exercise of individual capacities and collective communication and cooperation” (Young 1990, 39).

For Young (1990; 2000), justice requires attention to institutionalized communicative practices and their transformation. It also requires attention to the way in which individuals are engaged in a process of recognition of each other's humanity. In a world where certain groups are marginalized, suffer from exploitation, are made to feel powerless or culturally inferior, or face violence in institutionalized, systematic ways, more inclusive forms of communication can provide the essential basis for alleviating entrenched systems of oppression.¹ Rather than focus on individualized processes of reflection or information gathering, as is the case with liberal democratic norms, Young argues that society needs norms of speaking that ensure recognition of all individuals in society, including and especially oppressed groups. With norms of communicative rather than only distributive justice, those who have suffered due to processes of

marginalization, exploitation, powerlessness, cultural imperialism, and violence will become visible, audible, and knowable. Their needs can more readily become part of what are considered legitimate political claims.

Young's attention to different forms of discursive inequalities provides a way to open up the idea of digital exclusion. When describing the importance of new conversational rules, she identifies problems of both external exclusion—failing to be included in a group—and internal exclusion in deliberative settings. Even when part of a deliberative group, it is possible for dynamics of exclusion to be at work. This delineation helps illuminate the conspicuous and inconspicuous ways in which exclusion takes place, even when one is formally included in a space of deliberation. Applied to online worlds or what is described elsewhere in this volume as the digital public sphere, Young's work allows us to scrutinize the tricky, multifarious ways in which marginalized groups experience exclusion in digital or technologically mediated terms.

To grasp Young's relevance to debates about the meaning and value of digital exclusion in society, a more detailed explanation of external exclusion and internal exclusion is in order. Young names the practice of external exclusion as a means by which power holders or elites who lead decision making processes keep members of marginalized groups out of deliberative fora in which critical decisions are being made about problems that affect them. The marginalized are simply not to be found in such spaces of political consequence. Barriers such as geographical (physical, spatial obstacles), informational (lack of means to learn about when a forum is taking place), or material (impediments due to cost) prevent certain groups from contributing to key discussions, which impact their well-being and violate commonly held standards of

fairness. In the case of external (discursive) exclusion, individuals' and groups' inability to participate in a key forum connects to other patterns or forms of social exclusion. Ghettos are disconnected from city centers by a lack of roads. Meeting announcements are communicated via channels that only a select kind of consumers have access to. Meetings take place in venues that require a costly transit ticket, incur extra costs of childcare, or involve some form of payment affordable only to some, not all.

In describing the concept of internal exclusion, Young (2000) argues that it is not enough to rectify the problem of external exclusion, important as that may be. Spaces for discussion and collective problem solving can become accessible, for example by building new roads, being announced in ways that reach all affected stakeholders, or lowering or eliminating the cost of participation. However, even with these changes, these fora are often structured in ways that are unwelcoming and impenetrable to participants who come from historically marginalized communities. These fora follow a particular set of rules or conventions that make sense and are familiar to some but not to all. As a result, some, more marginal participants are included but unwelcome and effectively silenced in the process.

Young's vision of inclusive communication matters because it reminds us that process needs substance as much as substance needs process for a communicative democracy to thrive and for democracy's promise of equality to be fulfilled. Access to spaces of political deliberation (which can be understood in procedural terms) and design of spaces of political deliberation (which Young insists is historically and contextually bound and thus concerns the substantive) both matter. Without paying attention to and inviting other forms of discursive practice, access alone will be an incomplete remedy to

the problem of exclusion. Conversely, without connecting members of marginalized groups, members of privileged groups, and everyone in between, to one another, dialogue and political decision making will remain enclaved and the domain of powerful elites.

Some clarifications: Why communicative justice needs an update

Before we apply the theory of communicative justice to digital and data-driven contexts, we need to acknowledge the limitations of Young's perspective and update it. In fact, while Young's communicative justice brings attention to those individuals made or kept invisible by status quo communicative practices, the theory is limited by two key factors. First, and completely independent of technology, Young did not give much consideration to the concept of self-exclusion and its democratic value to members of marginalized communities. Second, Young's work could not anticipate complex forms of technologically-mediated communication in democratic societies. To make use of her theory thus requires that we modify her understanding of exclusion to adequately take into account self-exclusion, diverse technologies that impact how we communicate and relate to one another, and refusal of technologies that mediate our modern communication today.

As regards the first limitation, Young's theory of communicative justice may be faulted for a type of conservatism, as opposed to transformative vision of politics (see also Fraser 1997). At its core, Young's analysis is concerned chiefly with sites of formal political decision making, such as town halls or legislative chambers, and the exclusion of the marginalized from such spaces as well as a lack of inclusive communication within them. If we extend Young's concern and envisage the agents of change who might bring about internal inclusion, she appears to place the onus of responsibility on people with

the power to set the terms of debate and discussion. In other words, discursive changes appear to depend on power holders or elites who design, manage, or maintain norms of communication within spaces of political deliberation. Powerful people, not necessarily the marginalized, must be motivated and persuaded to enact new communicative norms and bring about a more just and democratic society. The privileged shoulder responsibility for rectifying exclusion.

Yet, individuals and groups who suffer from exclusionary practices must also play a part in transforming social values, social structures, and democratic processes. As Fraser (1990) suggests, a collective awareness of a history of oppression and domination may motivate members of marginalized groups to self-exclude in order to formulate a political vision and make political demands. Marginalized groups might find justifiable preferences to enclave themselves for the purposes of self-creation and self-determination. They retreat in order to develop a sense of themselves, to recognize the oppression they have endured, to understand its structural features, to communicate their grievances to each other, and to develop political will to transform social conditions. As Fraser's work establishes, refusal does not necessarily imply a desire to withdraw or drop out of political deliberation but can be an essential component of a transformative politics that allows a diversity of political communication to bubble up from within marginalized communities.

Admittedly, refusal does not follow a linear path, from self-creation to self-determination. As discussed by Cannon (1995), people who confront hardship on a daily basis may not be able, even if they wish, to fully enclave or separate themselves from a dominant culture. As Cannon explains, Black women who contested the brutality of

slavery had to compromise or be accommodating (to slave owners) in order to survive, in part because they did not have the luxury of doing otherwise. Thus, acts of refusal may necessarily involve compromise, as opposed to some kind of principled disobedience or full-fledged opposition to dominant culture (Howe 2003). Yet, as Fraser (1990) demonstrates, refusal can also evolve into collective communicative action. Members of marginalized groups can exclude themselves together in counter public spheres. In these spaces, individuals engage in processes of collective self-creation, begin to represent themselves to external audiences, and learn thereby how to contest dominant political culture. Refusal, in Fraser's eyes, means broadening how we contest and transform political discourse (1990, 67).

To be clear, the role of refusal in generating transformative politics does not negate the role that privileged power holders need to play or the importance of institutional transformations that Young suggests.² The perpetrators of injustice do bear responsibility for repair and rectification. The path to justice need not wait for the organized response of the oppressed. Nevertheless, we cannot just rely upon the enlightened goodwill of privileged elites to recognize and rectify communicative injustices. Thus, following Fraser, a critical first amendment to Young's theory of communicative justice requires that we include refusal and value self-exclusion as one important means by which members of marginalized communities assert their agency and strive to achieve recognition as equals. Refusal by the marginalized, for example, to join conventional discourse, matters just as much as recognition of the marginalized by privileged people or institutions.

As pertains to the second criticism, Young's theory of communicative justice begs a more complex reading of communication that includes technologically mediated communication. Young focuses on face-to-face communication with respect to democratic deliberation and says very little about mediated communication, digital or otherwise. This omission is notable, given that Young's notion of communicative democracy tries to update Habermas' deliberative democratic theory, which includes a prominent critiques of mass media and, to a lesser extent, digital technology (Feenberg 1996; Habermas 1970; 1989; 2006). Whereas Habermas acknowledges the importance of institutions of public communication (Habermas 2006; Wessler 2018), Young avoids any sustained examination of complex communication systems or the extent to which they exclude or include members of historically marginalized groups. Arguably, those who are responsible for welcoming different kinds of speakers involve not just designers or hosts of town hall debates but also managers of media institutions and engineers of digitally-mediated communication in big tech companies, as well as regulators of each.

My aim here, therefore, is to supplement Young's theory of communicative justice with insights from critical theories of technology. Such theories help clarify the formative role that technologies play in determining the conditions for communicative justice. As Feenberg explains (1996; 2002), technologies serve as building blocks of our social world. They not only affect how we live our lives, but also change what we value in life. In this sense, technologies help to construct the very nature and structures of the social world, or what he refers to as social ontologies. This approach allows us to think beyond "good" or "bad" uses of technologies, on the one hand, or to assume technologies' neutral position in society, on the other. Instead, Feenberg states, when we

understand technologies as social practices, we acknowledge that they create particular possibilities of being with or relating to others while simultaneously diminishing or eliminating other possibilities.

Given the ubiquity of digital technologies and their use in communication, we should orient our attention there as well as to the kinds of face-to-face communication theorized by Young. The design of digital technologies and, in particular, the norms which inform their design will be as important as the (analog) discursive norms found in Young's original conceptualization. Thus, a second, critical amendment to the theory of communicative justice requires we acknowledge that communication is technologically mediated, not only face to face.

Technologies of communicative justice, refusal, and reinvention

If we combine these two criticisms, we arrive at the crux of this chapter: any serious rethinking of digital exclusion must consider the place of refusal—of refusing technologies and the ways they shape our being and relating to others. Doing this goes against the grain of many critical appraisals of technology and democracy. Historically, refusal does not represent the first object of analysis in the consideration of the impact of technology on democracy. Rather, these theories of technology tend to expose differences between technologies, democratic institutions, and processes of accountability and draw our attention to design and engineering requirements for making technologies democratic. We can see this most obviously in Feenberg's work. Feenberg (2002) focuses on design, not processes of dissent. He explains that once we recognize technologies as consequential in the creation of social possibilities, we need to focus on their construction or development. Hildebrandt (2015) also draws attention to engineering or design stages.

She argues that digital technologies and, in particular, automated technologies, unlike the law, lack a court of public opinion for evaluating the legitimacy of decisions they make. To ensure that these technologies do not undermine due process or supplant the rule of law, they must be engineered in ways that reflect democratic values (see also Yeung 2015).

While Feenberg, Hildebrandt, and others celebrate various forms of democratic design and engineering, this literature tends to neglect the role of refusal in transforming the “terms and conditions” of technologically mediated communication in democratic societies. But just as marginalized groups can play essential roles in mobilizing the terms of their inclusion in face-to-face communication, members of marginalized groups who face exclusion from elite processes of innovating, launching, and maintaining technologies and technology infrastructures have a role to play too in technological transformation.

However, while the engineering and design of technologies can be made more democratic by installing democratic values in design stages, we should not solely depend on the goodwill of privileged engineers or designers, or the elite institutions that support them. Rather, communicative justice in the 21st century requires that we acknowledge the importance of refusal by members of marginalized groups of the ways in which technologies—or the engineers, designers, and institutions that create them—want us to communicate, want us to be and relate to others. The upshot is clear: even when technologies have already been developed, marginalized groups can still assert themselves and play a role in transforming the terms and conditions of their—and our—technologically mediated lives.

Technological refusal is not about dropping out or wholesale rejection of all things digital. Members of marginalized communities may not have the luxury of refusing a technology or dropping out of technological infrastructures (Vaidhyathan 2019; Lanier 2018; Vertesi 2014). Instead, they might accommodate or be a part of sociotechnical systems, because they lack alternatives. But they can still assert themselves and communicate their views amid the oppression of the systems to which they must belong. In cases where individuals self-exclude together, their refusal can result in challenges to the dominant articulation of alternative political possibilities. Technological refusal can thus be understood as about self-creation and self-determination.

Benjamin's (2016, 2019) work further clarifies the idea of technological refusal by identifying instances of where individuals act alone and together. In an examination of individual and collective responses to biomedical research, Benjamin (2016) discovered that her study participants—African Americans, members of the San tribe in South Africa, and refugees in the United Kingdom—practice what she calls “informed refusal” (970). In their interactions with doctors, they opted out of medical research with acute awareness of their surroundings and, in many cases, presented alternative bases for understanding health and well-being to determine what was medically right for them. She notes the collective efforts of the San people, who disrupted meetings convened by medical authorities and challenged research representatives in their native language (without a translator).

The collective dimension of refusal is also evident in the concept of tech abolitionism. In more recent writing about digital “resisters,” Benjamin (2019) has

brought attention to marginalized communities working in the tradition of prison abolitionists. Although she emphasizes the “why” over the “how” of local efforts, she captures organizing efforts to block governments from adopting technologies that exacerbate racist and discriminatory treatment of Black and Brown communities. By bringing up community-led movements against surveillance technologies, her work shows how members of marginalized communities collectively develop and advocate alternative technological futures that seek to hold governments and technology companies to account. In a similar vein, Roberts (2019) outlines a tech abolitionist agenda that highlights ways in which racial justice movements use technology to facilitate social change, document rising inequalities, and propose policies to end state violence.

Applied to an expanded vision of communicative justice, the ideas of informed refusal and abolition are essential. They acknowledge both how people develop their own identities (self-creation) in spite of how they might be controlled or categorized by technology, as well as how members of marginalized groups can work together and identify on their own terms (self-determination) what they want from technological systems. In other words, engineers and computer scientists may have already designed and diffused a digital device or data-driven technology, with (or without) democratic values in the design and deployment. Important as designing with democratic values may be, those who are most vulnerable to technologies’ exclusionary power also have a critical role to play. They (too) must decide and articulate what technologies make and *should make* possible or impossible in their lives. People refuse technologies in order to put into motion the kinds of relationships that otherwise excluded individuals and groups

need to realize their full humanity and claim recognition as an equal in a technologically mediated world.

My goal here is to build upon and adapt Young's theory for a digital age. In essence, I have begun to conceptualize what amounts to a theory of *technologies of communicative justice*. I have done so in ways that put the agency of individuals and groups at the center and position technological refusal (by the marginalized) alongside design or engineering (by the elite or privileged). By proposing that refusal can involve both self-creation and self-determination, I am urging us to rethink digital exclusion in new and expanded ways. Doing so, I believe, is critical to confronting the challenges and opportunities of digital and data-driven infrastructures in modern democracies.

In the remainder of the chapter, I expand the argument that refusal can be understood as an affirmative form of digital exclusion by introducing several examples of refusal-in-action. To clarify the agentic qualities of digital exclusion, I walk through other, more conventional meanings of the term. That is, I first highlight ways in which this term evokes Young's ideas of external and internal exclusion, drawing attention to newer and under-acknowledged dimensions of such exclusion that result from inequalities in/of the information economy, surveillance capitalism, or data economy.³ I then turn towards the idea of refusal and the ways in which this idea of refusal allows us to reinterpret exclusion in a way that affirms the agency and political potency of the excluded. In the third section, I reflect on differences between conceptualizations of digital exclusion that prioritize or neglect the agency of the excluded and affirm the importance of technological refusal to a 21st century vision of communicative justice.

FIVE FACES OF DIGITAL EXCLUSION

Familiar arguments

Digital exclusion as external exclusion: The “digital divide”

In conventional policy debates, efforts to close the so-called “digital divide” echo a logic found in Young’s concepts of external exclusion. If we understand digital technology primarily in terms of internet infrastructure, when people lack the opportunity or means to go online, they fail to reach decision-making spaces that impact their everyday lives. This barrier to entry typically derives from some form of market failure, whereby broadband service providers (e.g., cable and telecommunications companies) lack the incentives to provide free or low-cost access to all people. This market failure, so the conventional argument goes, prevents individuals from joining the information economy and online spaces in which individuals can engage in democratic activities.

As aggressive efforts to construct a national information infrastructure moved forward at the turn of the 21st century, some began to acknowledge the unique ways in which members historically marginalized populations lagged behind other groups in getting online (Irving 1999). For example, Baynes’ (2004) legal analysis demonstrates the barriers in telecommunications markets faced by Native Americans, Latinos, and African Americans in 1990s and early 2000s, including legacy regulations that hindered these populations from first accessing basic telephony services. These (legacy) problems amount to a form of geographical de facto segregation based on race, leading to what Baynes refers to as electronic redlining: the experience of economic, racial, and social marginalization due to lack of telephone access repeats itself in the digital era, as telecommunication providers avoid these so-called under-performing markets.

Furthermore, as if members of marginalized groups lack a basic connection to the internet, including fast and continuous broadband service, their experience of social, racial, and economic marginalization is further compounded by exclusion from the information economy, civic activities, or cultural life, all of which are increasingly technologically mediated (Powell, Bryne, and Dailey 2010).

Digital exclusion as internal exclusion: Meaningful broadband use, digital illiteracy, and elite internet culture

While arguments about lack of connectivity evoke Young's concept of external exclusion, arguments about lack of digital literacy evoke her writings on internal exclusion. Even when connected, members of marginalized communities experience digital exclusion as internal exclusion. That is, marginalized people might be able to access the internet or successfully adopt broadband, but a combination of socioeconomic factors interferes with their ability to use broadband and participate meaningfully in internet culture.

Such questions are first and foremost an empirical undertaking that understands digital exclusion by asking “[t]he pressing question... [of] ‘what are people doing, and what are they able to do, when they go online’” (DiMaggio and Hargittai 2001, 28) and examining what factors or resources “allow people to use technology well” and “engage in meaningful social practices” (Warschauer 2002, n.p.). Since the publication of formative studies in the early 2000s, user studies on digital inequalities have mushroomed with an intense focus on how differences in digital skills, attitudes towards the internet, engagement on the internet, and well-being factors against other forms of social and economic advantage or disadvantage (Helsper 2012).

A corollary argument to this kind of digital exclusion focuses on elitism in internet culture. After more than a decade of optimistic characterizations of the internet and online civic action (Fromkin 2004; Norris 2008), Hindman (2009) examined “A-list” Netizens, their institutional affiliations or connections, and popular blogs, popularly portrayed at the time as internet democracy in action. While Hindman does not connect elitism with marginalization or other forms of oppression in online spaces, his work suggests that deliberative spaces encode the values of those who host or inhabit them (here, Harvard and other Ivy League graduates) and that the so-called democratic internet allows those with know-how and existing privilege to “speak” and dominate (in this case, the “blogosphere”). Other studies highlighting internet history point to the exclusive nature of those architecting the internet, be it the exclusive coterie of engineers making choices about internet design, security, or applications (Abbate 1999; Turner 2006; Zittrain 2009).

New digital exclusions in a data-driven era

Additional internal exclusion: Predation and privacy, or a lack thereof

In the context of surveillance capitalism or the data economy, additional hurdles for meaningful participation online exist. They stem from lack of or low digital privacy and amount to predation of marginalized people,

For members of marginalized communities, data-driven technologies pose threats to privacy, exposing them to new vulnerabilities previously un- or ill-addressed in conventional policy debates about the so-called digital divide or digital illiteracy (Gangadharan 2013; 2015). It is worth noting that by the 2000s, as efforts to tackle lack of connectivity and improve marginalized populations’ digital skills increased, internet

tracking and targeting and the internet advertising industry were expanding. With little regulatory oversight, companies advanced techniques of consumer data profiling and explored their predatory potential. In earlier work, I showed that internet tracking and targeting were integral to subprime lending throughout the 2000s, revealing how the lack of consumer internet privacy connects to marginalization. Lenders, online marketing companies, and data brokers all contributed to the compilation of data profiles, which were then used to effectively target buyers of “ghetto loans” (quoted in Fisher 2009). A significant majority of these risky consumers came from Black or Latino communities—i.e., neighborhoods with low socioeconomic indicators with urgent need for quick cash.

This case points to an emergent internal contradiction regarding efforts to bridge the so-called digital divide—and a striking one, given that the financial crisis led Congress to invest an historic \$4.7 billion for broadband adoption and infrastructure development (*American Recovery and Reinvestment Act* 2009). Connecting to the internet is as much about *being accessed* as it is gaining access to services, resources, and experiences to meet basic human needs or participate meaningfully in society. The terms of accessing the internet are profoundly lacking in reciprocity between user and corporate actor. As several scholars have written (Acquisti, Taylor, and Wagman 2016; Brown 2015; Pasquale 2015; Zuboff 2019), technology companies continually collect and process people’s personal information, and they thrive on information asymmetries, whereby value is extracted from tracked-and-targeted consumers who know least, rather than best.⁴

The threat of tracking and targeting adds nuance to the discussion of digital exclusion. From the perspective of internal exclusion and digital illiteracy, the

complexity of tracking and targeting adds to a hierarchy of privacy skilled versus unskilled users who experience very different kinds of content and services on the basis of data profiles (Gandy 2009). This threat of privacy deficits puts a premium on being privacy literate, not only digitally literate, and adds to a growing list of skills or knowledge that users need when online. The privacy deficit threatens to create new problems of access as well. As members of marginalized communities begin to realize that using the internet requires some measure of data protection, obfuscation, or encryption, they could very well be priced out of broadband markets. The cost of additional services to protect against the data mining and profiling might deter individuals from going online altogether (Wiley et al. 2018).

Be that as it may, the attendant solutions to privacy problems nevertheless suggest a type of (self-preserving) conservatism towards technologically mediated life. A lack of or low privacy leads to measures to increase privacy literacy for marginalized populations or the introduction of affordable privacy-by-design solutions. These measures imply that as long as these protections are in place, the promise of meaningful participation online can be fulfilled. But what if certain groups are forced to adopt technologies whether they like it or not?

Digital exclusion and coercion: Forced adoption of surveillance technologies

It is worth reminding the reader that the above sections began by equating digital technologies with the internet. However, clearly not all digital technologies are consumer-facing or consumer-oriented internet applications. Some technologies might be networked and use internet infrastructure, but they can operate as business-to-business products, invisible to the consumer and, most importantly, function for a prescribed

purpose that is not evident or open to challenge from users. For simplicity's sake, we might refer to these as data-driven technologies. Similarly, not all surveillance depends on internet use, and in this sense, we can distinguish between digital surveillance and internet surveillance. Internet-enabled tracking and targeting, as described above, depends on people voluntarily using broadband, or having to use it for a purpose. However, with digital surveillance, adoption of digital technology is not a choice. It is coerced.

Under the condition of forced adoption, individuals are, technically, digitally included, but the terms of their inclusion are not “consentful” (Lee 2017). Rather, in the case of involuntary adoption, the use of data-driven technologies are coercive and reflect sociotechnical systems of oppression that target groups marked by social difference. Monahan (2008) calls this “marginalizing surveillance” and explains that it contributes to the “creation or enforcement of conditions of marginality through the application of different surveillance systems for different populations” (220). So while all individuals in contemporary society might suffer from pervasive forms of information collection, classifying, and sorting, the kinds of surveillance practiced upon the marginalized involve distinctive techniques that intensify their marginality.

Such forms of digital surveillance have profound impacts on marginalized people's lives. From workplace performance technologies to computerized welfare to law enforcement monitoring systems, digital technologies permeate the lives of marginalized populations in ways that amplify their experience of everyday oppression. As Gilliom (2001) and Eubank (2011; 2018) show, digital technologies follow welfare recipients' behavior closely, requiring individuals to report intimate details of their lives in often

stigmatizing ways. The goal of computerized welfare assistance ties to a broader institutional goal: help welfare agencies reduce, if not eliminate, poor people's dependence on welfare altogether. In the process, the constant monitoring of intimate lives leaves poor people bereft of privacy and emotionally exhausted, if not materially deprived when classified as ineligible for public assistance. Similarly, Bridges (2017) offers insights into the lack of privacy for low-income mothers as they navigate public assistance, are "databased," and deemed responsible for their own indigence.

In each of these cases, digital technologies exact an emotional and material toll on marginalized people, in part because they cannot choose not to subject themselves to them. They must use—or more appropriately, be used by—these technologies or risk further consequences, such as loss of healthcare or reduction in unemployment insurance. Each of these projected outcomes lies as a threat that individuals must evaluate against other potential outcomes, the experience of intimidation, shame, and distress or even bodily violence. Far from creating so-called digital opportunities, such technologies present marginalized people with choices of lesser evils: privacy or healthcare, or dignity or unemployment insurance.

Marginalizing surveillance is not accidental or arbitrary. As legal history in Eubanks' (2018), and Roberts' (2019) scholarship shows, welfare reform over the past several decades has turned public benefits from an entitlements system to a punitive mechanism that attempts to control or modify welfare recipients' behavior. Privacy laws also disfavor poor, marginalized people, permitting exceptions that allow, for example, police or welfare workers to intrude into the lives in ways that would not be permissible for wealthier, more advantaged populations (Bridges 2017; Gilman 2012; Slogobin

2003). This legal history echoes the negative sentiment held by members of marginalized communities that data-driven systems are extractive, taking more than they give (Petty et al. 2018; Eubanks 2018; Bridges 2017). Given that under conditions of digital surveillance, marginalized people are digitally included, but not on consensual terms, the opportunity to refuse to participate or be included seems an understandably desirable preference or strategy.

Powerlessness: Economic and social divides and tech elites

Before returning to refusal as an agentic form of digital exclusion, I turn to one last consideration of exclusion: technology companies (or the elites that manage them) and social and economic divides which they exacerbate. I introduce this discussion as an important addendum to the previous reflections on digital exclusion. Some might call this unnecessary, since the form of exclusion I present here does not refer to an existing discourse on digital exclusion, nor is it a problem unique to the technology industry.⁵ Yet, as the example of marginalizing surveillance technologies suggests, there is more to understanding exclusion than exclusion from or within so-called “online” worlds. By talking about technology companies and marginality, I similarly bracket the notion of “online” and “offline” and the idea that digital and data technologies comprise a space where one must “go” or “visit.”

However, unlike the case of marginalizing surveillance, a critique of tech elites centers on the role of digital and data-driven technology companies in processes of economic and social marginalization. This critique implies that digital divides are not between “haves” and “have nots,” but rather between marginalized members of society and privileged tech elites or power holders whose elite status happens to derive from

economically powerful technology companies. In this rehashing of digital divide terminology, tech elites are viewed as directly hindering the ability of affected groups to determine their lives.

For example, in the United States, technology companies routinely move money offshore, write down corporate debt, or lobby for tax breaks. In 2016, Microsoft exemplified this process when it borrowed billions of dollars to fund the acquisition of LinkedIn, despite having \$100 billion in cash reserves. As Foroohar (2016) explains, Microsoft avoided having to move money from overseas to the United States and, thus, paying U.S. corporate tax at a rate of roughly 35 percent. Because debt is tax deductible, Microsoft claimed savings of approximately \$9 billion, monies that otherwise would have been tax revenue (see also Poon 2017). While tax avoidance affects all individuals, disinvestment in public infrastructure disproportionately impacts members of vulnerable groups who live precarious lives and depend on such support infrastructures.

As they contribute to the contraction of the welfare state at the national level, technology companies also impact the welfare of marginalized populations at the local level. Silicon Valley serves as the site of some of the country's highest homelessness rates (Campbell and Flores 2014; Levin 2016), and rents are skyrocketing, forcing lower-income residents out of the region (Urban Displacement Project 2015). In the wake of these crises, technology companies have moved into real estate and housing finance. In Palo Alto, Facebook is building mixed-income housing units, a small percentage of which is allotted for qualifying low- and middle-income residents (Nunez 2016). Meanwhile, in Seattle, one of the country's other major tech hubs, Microsoft pledged a half billion dollars to support low-income housing development, a move which marks a

new source of profitability for the company.⁶ Such a move (into the private sector) forecloses the policy work of antipoverty and housing advocates and the populations they represent and bodes of increased struggles by residents and advocates to navigate an increasingly complex financialized housing market (Fields 2017; Kim 2019).

Under these conditions, marginalized groups lack political opportunities to advocate for public policies aimed at eliminating inequality. This lack of political maneuverability is due to shifting governance strategies, whereby managing poverty and inequality moves from public decision making, which affords a measure of transparency, accountability, and democratic legitimacy, to private sectors, which typically lack all three. This form of digital exclusion is thus defined in terms of powerlessness, whereby the “powerless are those who lack authority or power... those over whom power is exercised without their exercising it” (Young 1990, 21).

With these last two arguments about exclusions and technology, the salience of refusal in marginalized communities should be evident. Questions of power, inevitability, and alternatives are begging for answers when surveillance systems coerce and the material impacts of network effects exacerbate social and economic inequalities. Are technologies of social control avoidable? Are wealth disparities incurred by rapid growth in data-driven economies desirable? In this next section, I address these questions by rethinking digital exclusion in the affirmative terms of refusal of digital technologies.

RETHINKING DIGITAL EXCLUSION IN AFFIRMATIVE TERMS

Digital exclusion, thus far, has referenced five different problems: unavailability of digital technologies; inability to meaningfully use digital technologies due to digital illiteracy; inability to meaningfully use technologies due to low or nonexistent digital

privacy; forced or coerced use of surveillant digital technologies; and inequalities between privileged tech elites and members of marginalized groups. The common theme across these arguments is that digital exclusion counts as a democratic negative or problem, impeding the ability of marginalized people to collectively self-determine and lead the lives they have reason to value (Sen 1999; Young 2000).

These distinct forms of exclusion interact in important ways. For example, as already alluded to above with the problem of predation and being “online,” solving the unavailability or access problem can be a boon to digital and data-driven technology companies, by allowing them to monetize customer data.⁷ The power of tech elites in local housing markets might also be a boon for digital surveillance of marginalized groups—both those who are welcome and those whom tech elites wish to keep out. The point here is not to draw a causal link between different kinds of digital exclusion but rather consider the ways in which they can complement and reinforce one another, align interests of the powerful, and accrue consequences for members of marginalized communities.

But as mentioned above, the negative impacts of such exclusions beg the question of alternatives versus inevitabilities. If we return to critiques of communicative justice and, in particular, Fraser’s argument about the potential *benefits* of self-exclusion, we can begin to consider how digital exclusion might represent a collective, agentic form of action. This type of refusal does not entail a simple rejection or translate to a person being *anti-technology*. Digital exclusion, when done as a form of informed refusal, implies agency, activeness, and willingness to confront and transform the terms and conditions of technology adoption and technological control.

In this final section, I explore digital exclusion in an affirmative, democratically valuable sixth sense by presenting a case from the city of Detroit. This case, I suggest, underscores the ways in which refusal appears in many different forms. Refusal is willfully chosen by both self-preserving individuals as well as collectivities—in the case of Detroit, efforts mobilized primarily by community-based organizations. Behind these diverse examples of refusal lies a common theme: refusal carries with it the potential for self-creation and self-determination. Refusal represents a critical deviation from the negative appraisals of digital exclusion and, instead, involves a reconfiguration of the conventional terms and conditions that private or government actors present to members of marginalized communities. Refusal reveals not a democratic problem but a democratically valuable mechanism to overcome oppression, resist structural injustice, and to pursue self-determination.

A sixth sense: Refusal on the path to “what we want”

My case puts Detroit residents and community-based organizations at the center of attention.⁸ The case provides an opportunity to reflect on the normative basis upon which to broaden the idea of digital exclusion and to further conceptualize technologies of communicative justice. The case is both complex and different from the examples I have offered above. It is complex because work in the community has a pre-history and continues to evolve. The case also differs in that it requires a deeper level of specificity to help explain the nuances of a politics of technological refusal.

Three points about Detroit’s history provide helpful context. First, Detroit—the fourth largest in the United States—has been a crucible of transformative politics and participatory democracy (J. Boggs and Boggs 2008), where residents routinely invoke the

saying that African-American folk have been making a way out of no way (Swann-Wright 2002). This “no way” has resulted from what community leaders identify as fissures in a capitalist political economy that declined throughout the 20th century (J. Boggs and Ward 2011), the Great Recession in 2008, and the city’s bankruptcy filing in 2013. Detroit’s strong culture of community organizing is reflected in its urban gardening movement, citizenship schools, Detroit summer, and prodigious arts and music community (G. L. Boggs and Kurashige 2012; Kurashige 2017).

Second, and related, Detroiters continually fight a narrative that excludes its residents, obscures their presence, or distorts their voice. For example, in 1967, following what’s known as the Detroit Rebellion, the city transitioned from majority white to majority black and soon after elected the city’s first Black mayor (Kurashige 2017). Amidst these historic changes, Detroit residents have been the subject of media stereotypes and a dominant narrative that portrays them as “dumb, lazy, happy, and rich” (Clifford 2017). In the wake of the Great Recession and the city’s bankruptcy, when the city convulsed from rapid foreclosures, evictions, and deterioration of public services and social support systems,⁹ community leaders noted that this disparaging narrative reached near global acceptance. Meanwhile, systematic disinvestment and discrimination against residents occurred with little notice from the rest of the world (Howell 2014).

Third, a more recent narrative around rebuilding Detroit touts the city’s “comeback” or “rebirth.” This narrative neglects the city’s most marginalized populations while celebrating corporate-led initiatives, especially those led by billionaire Dan Gilbert. A longtime Detroiters, Gilbert moved Quicken Loans, the country’s largest online mortgage lender, a data-driven technology company, to downtown Detroit. News media

and policymakers credit Gilbert with attracting businesses and preserving architectural landmarks in the downtown area, as well as generating much-needed tax revenue for the city (Felton 2014). But, as community leaders argue, this narrative omits important details about the dependency of redevelopment initiatives upon the extraction of public resources, Quicken Loans' fraudulent actions, and the rise of redlining practices (Creswell 2017; Felton 2014; Sugrue 2013). Gilbert has also spearheaded the deployment of a privately governed surveillance system called Project Green Light in the city's downtown (Hunter 2015; Kaffer 2015; see also Detroit Community Technology Project 2019c).

Against this backdrop, several community-based projects or organizations have emerged as agents of technological refusal. Launched in 2009, the Detroit Digital Justice Coalition served as a space for residents and organizational representatives to develop and enact strategies supporting communication as a human right. One of its signature initiatives involved a community visioning and education project focused on the future of Detroit, including Detroit Future Media, a digital literacy program (Allied Media Projects 2015). In time, Detroit Future Media evolved into the Detroit Community Technology Project, which focuses on using and developing "technology rooted in community needs that strengthens human connections to each other and the planet" (Detroit Community Technology Project 2019b). As the quote suggests, Detroit Community Technology Project embraces an affirmative view of the ways that technology can help individuals and communities be and relate to one another. It is an affirmation that comes with refusal of the terms and conditions of technological access, technology adoption (both forced and voluntary), and of technology companies' power.

Four kinds of refusal are evident in the history of these projects and groups. The first refers to refusal as contesting the dominant political discourse and redefining narratives about the city. Shortly after the financial crisis, the city's bankruptcy, and the hemorrhaging of the local real estate market due to foreclosures and evictions, Detroit Future Media launched a digital inclusion effort that combined access and literacy arguments with a distinctly counternarrative to the redevelopment narrative. With the coalition, Detroit Future Media engaged in a widespread social media campaign to help residents articulate their visions of Detroit's future online. Concurrently, Detroit Digital Justice Coalition members developed and promulgated a set of digital justice principles about the value of broadband infrastructure in their communities. Coming from education, environmental justice, and digital storytelling backgrounds, members injected intergenerational perspectives into the principles and infused them with an awareness of distorting narratives, economic deprivation, and residents' historic struggles in dealing with government and private industry. Together, they helped to generate neighborhood interest in community-built wireless networks, which would alleviate dependence on conventional internet service providers, and encouraged Detroiters to digitally narrate the kind of city they envisioned for the future.

A second kind of refusal focuses on community ownership of digital infrastructure. This refusal builds from efforts to challenge mainstream narratives and offer alternative visions of Detroit's future. In the years following the creation of "digital justice" principles, Detroit Community Technology Project advocated for and began to develop its own wireless infrastructure whose main aim is building community self-sufficiency and to bypass broadband service providers. Over time, they have evidenced a

commitment to building indigenous infrastructure on their own terms while refusing the imposed infrastructure of others. With philanthropic funding, the organization established the Equitable Internet Initiative, purchasing high-speed fiber with the aim of redistributing connectivity to digitally redlined neighborhoods. Expanding digital literacy efforts described above, Detroit Community Technology Project also developed a community stewardship model that trains residents in these same neighborhoods to build and maintain networks and teach and share digital literacy skills. While the Equitable Internet Initiative continues to evolve its infrastructure efforts, it remains committed to confronting the challenges of broadband unavailability and use, while adhering to principles of community health and sustainability as a path towards community self-reliance.

The third refusal refers to rejecting and resisting one's data profile. As part of Our Data Bodies, a collaborative research project (of which I am part), Detroit Community Technology Project interviewed people to understand how data and data-driven systems impact their daily lives. Several Detroiters talked about data errors and the way they refused to let those errors define them. Maria, a research participant, was traumatized and threatened with financial ruin after tax assessors misclassified the property she lives on. Eventually, she succeeded in penetrating city bureaucracy and found someone who would correct the error, but not without considerable stress and anxiety. For Detroiters like Maria, the asymmetrical power of data-driven systems is inescapable. These systems are physically occupying or tied up in the process of planning to occupy swatches of land where Detroiters live. These systems are interfering with material needs—access to shelter and, as mentioned earlier, access to water.

A fourth refusal refers to blocking technology deployment. As mentioned above, Dan Gilbert spearheaded Project Green Light, an extensive surveillance network throughout the downtown area. Recently, touting the success of this project, the city announced it would install five hundred surveillance cameras to monitor traffic. Along with allies and collaborators, and influenced by the insights of Our Data Bodies, Detroit Community Technology Project alongside the Detroit Digital Justice Coalition has mobilized to protest the deployment and resist the inevitability of a surveilled cityscape. While, at the time of writing, the case is still ongoing, it nevertheless demonstrates the early, if not ongoing, steps of refusing to adopt coercive surveillance technologies.

In the examples presented above, the mode of refusal is by no means an extreme, an act of pure disengagement or full-scale rejection of digital technology. Rather, the refusal that organizers and residents engage in rests on the idea of autonomy and agency. The projects of digital literacy, of infrastructure building, of contesting data errors, and of blocking technology deployment challenge an array of problems that tie to the logics of the broadband marketplace, the data economy, surveillance, and marginalization more generally. Detroit residents are refusing the terms and conditions by which technologies are introduced and operate in relation to processes of social and economic marginalization.

At the same time, the examples above suggest different styles of self-exclusion and self-determination. Refusal to accept dominant narratives evokes Fraser's idea of counterpublics, where members of marginalized groups create an enclave in order to develop and actualize a different vision of the world. Refusal-as-resisting-and-righting-data-profiles occurs at an individual level and represents a form of individual self-

creation. Meanwhile, refusing the mainstream (broadband) networks and rejection of (surveillance) technology attempts to interrupt dominant technological infrastructures, rather than narratives or histories. Overall, the differences seem to underscore a diversity and inventiveness in acts of refusal.

Consistent with other writings on refusal, we can also view these refusals as necessarily incomplete and sometimes accommodating, as opposed to all-encompassing. One could easily argue that building out one's own network or developing an awareness of tracking, targeting, and surveillance fail to tackle problems of misinformation and social media or does not dent the social, economic, or political power of companies like Facebook. One could also argue that blocking surveillance camera deployment will do little to eliminate surveillance technology used by other government and commercial-run services that marginalized people. But Detroit's story provides an opening. It inspires reflection about the political possibilities inspired by communities of users, rather than the inevitability of technology as dictated by elites. And it challenges arguments that claim civil disobedience is being engineered out of technological designs (Hildebrandt 2015). Detroit's story teaches us that there is more to discover in how we contest and challenge technologies and the institutions and people behind them.

In total, the sentiments and efforts of community-based groups and of individuals and communities in their orbit demonstrate the power of refusal. Their many acts of refusal present an opportunity to reflect upon what kinds of technologies and supportive infrastructures which ought to be created or what kinds of strategies individuals and groups can use to counter subordinating and controlling impacts of technologies in our lives. For members of marginalized communities who have experienced a variety of

digital exclusions over the past few decades, refusal implies creativeness or generativity and speaks to both immediate and more long-term visions about how the world can be and what needs to change in order to transform these visions into reality.

CONCLUSION

Digital exclusion remains a multifaceted problem in the 21st century. This is due in no small part to the fact that digital technologies have transformed, become more sophisticated, and intersect in complicated ways with how we communicate and relate to one another in society. Within this environment, the prospects for communicative justice have become more complex as well.

But while it is tempting to focus on the negative, by arguing that members of marginalized communities face greater hardship when they become embedded in the vast array of sociotechnical systems that crisscross our daily lives, or advocating that members of marginalized communities should drop out or stay away from digital technologies, I have proposed an alternative pathway to communicative justice in the 21st century. Specifically, I have attempted to show digital exclusion in a different light, where people willfully and knowingly exclude themselves and refuse technologies in the terms and conditions presented to them by governments or private actors. Such acts function as a generative force of self-creation and self-determination. By making refusal become a part of the lexicon of digital exclusion, we can begin to understand the ways in which exclusion can help us imagine other ways of being and relating to one another in a technologically mediated society.

Democratizing digital technologies is not only about policymakers figuring out how to broaden access to technology or increase people's skills to meaningfully use

technology. Neither is it only about benevolent designers, engineers, or data scientists capable of installing norms and values into technological systems. Those most affected by technologies' potentially negative and marginalizing impacts have a role to play too in intervening in the social, economic, and political contexts in which digital technologies are embedded. We should recognize, anticipate, and learn from messy and diverse acts of technological refusal. To ignore this is to deny marginalized people's agency and their capacity to reinvent the world around them.

REFERENCES

- Abbate, Janet. 1999. *Inventing the Internet*. Cambridge, MA: MIT Press.
- Acquisti, Alessandro, Curtis R. Taylor, and Liad Wagman. 2016. "The Economics of Privacy." *Journal of Economic Literature* 54 (2): 442–92.
<https://doi.org/10.1257/jel.54.2.442>.
- Allied Media Projects. n.d. "Detroit Digital Justice Coalition: A Vision for Digital Justice." n.d. <https://www.alliedmedia.org/ddjc/story>.
- . 2013. *The Detroit Future Media Story*. Detroit, MI.
https://www.youtube.com/watch?feature=player_embedded&v=E-POp-f2XHU.
- . 2015. "Detroit Future." Allied Media Projects. January 16, 2015.
<https://alliedmedia.org/detroit-future>.
- American Recovery and Reinvestment Act*. 2009. 111-5. Vol. H. Rept.
<https://www.congress.gov/bill/111th-congress/house-bill/1/text>.
- Baynes, Leonard M. 2004. "Deregulatory Injustice and Electronic Redlining: The Color of Access to Telecommunications." *Administrative Law Review* 56 (2): 263–352.
- Benjamin, Ruha. 2016. "Informed Refusal: Toward a Justice-Based Bioethics." *Science, Technology, & Human Values* 41 (6): 967–90.
<https://doi.org/10.1177/0162243916656059>.
- . 2019. *Race after Technology: Abolitionist Tools for the New Jim Code*. Cambridge, MA: Polity.
- Beydoun, Khaled A. 2014. "Detroit's Water: Behind the Crisis." *Al Jazeera*, July 27, 2014. <https://www.aljazeera.com/indepth/opinion/2014/07/detroit-water-behind-crisis-2014727123440725511.html>.
- Boggs, Grace Lee, and Scott Kurashige. 2012. *The next American Revolution: Sustainable Activism for the Twenty-First Century*. Berkeley: University of California Press.
- Boggs, James, and Grace Lee Boggs. 2008. *Revolution and Evolution in the Twentieth Century*. New York: Monthly Review Press.
- Boggs, James, and Stephen M. Ward. 2011. *Pages from a Black Radical's Notebook : A James Boggs Reader*. Detroit, MI: Wayne State University Press.
- Bridges, Khiara M. 2017. *The Poverty of Privacy Rights*. Stanford: Stanford Law Books.

- Brown, Ian. 2015. "The Economics of Privacy, Data Protection and Surveillance." In *Handbook on the Economics of the Internet*, edited by Johannes M. Bauer, 247–61. Cheltenham: Elgar.
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2358392.
- Campbell, Alexia Fernández, and Reena Flores. 2014. "How Silicon Valley Created America's Largest Homeless Camp." *The Atlantic*. November 25, 2014.
<https://www.theatlantic.com/politics/archive/2014/11/how-silicon-valley-created-americas-largest-homeless-camp/431739/>.
- Cannon, Katie G. 1995. *Katie's Canon: Womanism and the Soul of the Black Community*. New York: Continuum.
- Clifford, Carolyn. 2017. "White Flight and What It Meant to Detroit in the Wake of the 1967 Riots." *WXYZ*. Detroit, MI: WXYZ.
<https://www.wxyz.com/news/detroit1967/white-flight-and-what-it-meant-to-detroit-in-the-wake-of-the-1967-riots>.
- Creswell, Julie. 2017. "Quicken Loans, the New Mortgage Machine." *The New York Times*, January 21, 2017.
<https://www.nytimes.com/2017/01/21/business/dealbook/quicken-loans-dan-gilbert-mortgage-lender.html>.
- Detroit Community Technology Project. 2019a. "Equitable Internet Initiative." 2019.
<https://www.detroitcommunitytech.org/eii>.
- . 2019b. "Technology Rooted in Community Needs." Detroit Community Technology Project. 2019. <https://www.detroitcommunitytech.org>.
- . 2019c. "A Critical Summary of Detroit's Project Green Light and Its Greater Context." Detroit, MI: Detroit Community Technology Project.
- Detroit Digital Justice Coalition. 2010. "Principles." November 24, 2010.
<http://detroitdjc.org/principles/>.
- DiMaggio, Paul, and Eszter Hargittai. 2001. "From the 'digital Divide' to 'Digital Inequality': Studying Internet Use as Penetration Increases." No. 1. Princeton, NJ: Center for Arts and Cultural Policy Studies, Woodrow Wilson School, Princeton University.
- Eubanks, Virginia. 2011. *Digital Dead End: Fighting for Social Justice in the Information Age*. Cambridge, MA: MIT Press.
- . 2018. *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor*. New York: St Martin's Press.
- Feenberg, Andrew. 1996. "Marcuse or Habermas: Two Critiques of Technology." *Inquiry* 39: 45–70.
- . 2002. *Transforming Technology: A Critical Theory Revisited*. New York: Oxford University Press.
- Felton, Ryan. 2014. "What Kind of Track Record Does Quicken Loans Have in Detroit? Does Anyone Really Care?" *Detroit Metro Times*, November 12, 2014.
<https://www.metrotimes.com/detroit/what-kind-of-track-record-does-quicken-loans-have-in-detroit-does-anyone-really-care/Content?oid=2266383>.
- Fields, Desiree. 2017. "Urban Struggles with Financialization." *Geography Compass* 11 (11): e12334. <https://doi.org/10.1111/gec3.12334>.

- Fisher, Linda E. 2009. "Target Marketing of Subprime Loans: Racialized Consumer Fraud and Reverse Redlining." *Brooklyn Journal of Law and Policy* 18 (1): 101–35.
- Foroohar, Rana. 2016. "Microsoft's Massive LinkedIn Deal Is a Sign of Something Dangerous." *Time*, June 14, 2016. <http://time.com/4368047/microsoft-linkedin-deal-merger-debt/>.
- Fraser, Nancy. 1990. "Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy." *Social Text* 25/26: 56–80.
- . 1997. "A Rejoinder to Iris Young." *New Left Review* I (223): 126–29.
- Freire, Paulo. 1996. "Chapter 1." In *Pedagogy of the Oppressed*, 25–42. London: Penguin.
- Froomkin, A. Michael. 2004. "Technologies for Democracy." In *Democracy Online: The Prospects for Democratic Renewal Through the Internet*, 3–20. New York: Routledge.
- Gandy, Oscar H. 2009. *Coming to Terms with Chance: Engaging Rational Discrimination and Cumulative Disadvantage*. Burlington, VT: Ashgate.
- Gangadharan, Seeta Peña. 2013. "Joining the Surveillance Society?" Washington, DC: New America Foundation.
http://web.archive.org/web/20140312042501/http://newamerica.net/sites/newamerica.net/files/policydocs/JoiningtheSurveillanceSociety_1.pdf.
- . 2015. "The Downside of Digital Inclusion: Expectations and Experiences of Privacy and Surveillance among Marginal Internet Users." *New Media & Society*, November. <https://doi.org/10.1177/1461444815614053>.
- Gilliom, John. 2001. *Overseers of the Poor: Surveillance, Resistance, and the Limits of Privacy*. Chicago: University of Chicago Press.
- Gilman, Michele E. 2012. "The Class Differential in Privacy Law." *Brooklyn Law Review* 77 (4): 1389–1445.
- Goodman, Amy. 2014. "Detroit Faces 'Humanitarian Crisis' as City Shuts off Water Access for Thousands of Residents." *Democracy Now!* New York: Pacifica.
http://www.democracynow.org/2014/10/10/detroit_faces_humanitarian_crisis_as_city.
- Gottesdiener, Laura. 2014. "UN Officials 'Shocked' by Detroit's Mass Water Shutoffs." Al-Jazeera America. October 20, 2014.
<http://america.aljazeera.com/articles/2014/10/20/detroit-water-un.html>.
- Habermas, Jürgen. 1970. *Toward a Rational Society: Student Protest, Science, and Politics*. Boston: Beacon Press.
- . 1989. *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*. Translated by Thomas Burger and Frederick Lawrence. Boston: MIT Press.
- . 2006. "Political Communication in Media Society: Does Democracy Still Enjoy an Epistemic Dimension? The Impact of Normative Theory on Empirical Research." *Communication Theory* 16: 411–426.
- Hackman, Rose. 2014. "What Happens When Detroit Shuts off the Water of 100,000 People." *The Atlantic*, July 17, 2014.
- Helsper, Ellen Johanna. 2012. "A Corresponding Fields Model for the Links between Social and Digital Exclusion." *Communication Theory* 22 (4): 403–26.

- Hildebrandt, Mireille. 2015. *Smart Technologies and the End(s) of Law: Novel Entanglements of Law and Technology*. Cheltenham, UK: Elgar.
- Hindman, Matthew. 2009. *The Myth of Digital Democracy*. Princeton, NJ: Princeton University Press.
- Howe, Louis E. 2003. "Onotology and Refusal in Subaltern Ethics." *Administrative Theory & Praxis* 25 (2): 277–98.
- Howell, Shea. 2014. "Distorted Reality in Detroit." *Common Dreams* (blog). July 21, 2014. <https://www.commondreams.org/views/2014/07/21/distorted-reality-detroit>.
- Hunter, George. 2015. "Detroit Cops to Get Body, Dash Cams." *Detroit News*, August 18, 2015. <http://www.detroitnews.com/story/news/local/detroit-city/2015/08/18/detroit-police-body-cameras/31900641/>.
- Irving, Larry. 1999. "Falling Through the Net: Defining the Digital Divide." United States National Telecommunications and Information Administration. <http://www.ntia.doc.gov/ntiahome/fttn99/>.
- Kaffer, Nancy. 2015. "Who's Watching the Detroit Watchmen?" *Detroit Free Press*, March 21, 2015. <http://www.freep.com/story/opinion/columnists/nancy-kaffer/2015/03/21/private-downtown-security-quicken/25117481/>.
- Kim, E. Tammy. 2019. "Microsoft Cannot Fix Seattle's Housing Crisis." *The New York Times*, January 18, 2019, sec. Op-Ed. <https://www.nytimes.com/2019/01/18/opinion/microsoft-seattle-housing.html>.
- Koebler, Jason, and Joseph Cox. 2019. "Hundreds of Bounty Hunters Had Access to AT&T, T-Mobile, and Sprint Customer Location Data for Years." *Motherboard* (blog). February 6, 2019. https://motherboard.vice.com/en_us/article/43z3dn/hundreds-bounty-hunters-att-mobile-sprint-customer-location-data-years.
- Kurashige, Scott. 2017. *The Fifty-Year Rebellion: How the U.S. Political Crisis Began in Detroit*. Berkeley, CA: University of California Press.
- Lanier, Jaron. 2018. *Ten Arguments for Deleting Your Social Media Accounts Now*. New York: Henry Holt and Company.
- Lee, Una. 2017. "Building a Consentful Tech." *Building a Consentful Tech*, 2017. <https://www.andalsotoo.net/2017/10/24/the-building-consentful-tech-zine-is-out/>.
- Levin, Sam. 2016. "'Largest-Ever' Silicon Valley Eviction to Displace Hundreds of Tenants." *The Guardian*, July 7, 2016, sec. Technology. <http://www.theguardian.com/technology/2016/jul/07/silicon-valley-largest-eviction-rent-controlled-tenants-income-inequality>.
- Monahan, Torin. 2008. "Editorial: Surveillance and Inequality." *Surveillance & Society* 5 (3): 11. <https://doi.org/10.24908/ss.v5i3.3421>.
- Morozov, Evgeny. 2019. "Capitalism's New Clothes." *The Baffler*, February 4, 2019.
- Moy, Laura. 2017. *Algorithms: How Companies' Decisions about Data and Content Impact Consumers*. Washington, DC. <http://docs.house.gov/meetings/IF/IF17/20171129/106659/HHRG-115-IF17-Wstate-MoyL-20171129.pdf>.
- Norris, Pippa. 2008. *Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide*. Cambridge: Cambridge University Press.

- Nunez, Michael. 2016. "Facebook Is Building Apartments Anyone Can Rent—but There's a Huge Catch." *Gizmodo*, July 26, 2016. <https://gizmodo.com/facebook-is-building-apartments-anyone-can-rent-but-the-1784309208>.
- Pasquale, Frank. 2015. *The Black Box Society: The Secret Algorithms That Control Money and Information*. Cambridge, MA: Harvard University Press.
- Petty, Tawana, Mariella Saba, Tamika Lewis, Seeta Peña Gangadharan, and Virginia Eubanks. 2018. "Our Data Bodies: Reclaiming Our Data." Detroit, MI: Our Data Bodies Project.
- Poon, Martha. 2017. "Microsoft, The Cloud." In *Rethinking Big Data*. Brussels: Computers, Privacy, and Data Protection. <https://www.youtube.com/watch?v=bg39dliGINE>.
- Powell, Alison, Amelia Bryne, and Dharma Dailey. 2010. "The Essential Internet: Digital Exclusion in Low-Income American Communities." *Policy & Internet* 2: Article 7. <https://doi.org/10.2202/1944-2866.1058>.
- Roberts, Dorothy. 2019. "Digitizing the Carceral State." *Harvard Law Review* 132 (6): 1695–1732.
- Sen, Amartya. 1999. "Freedom and Foundations of Justice." In *Development as Freedom*, 54–86. New York: Knopf.
- Slogobin, Christopher. 2003. "The Poverty Exception to the Fourth Amendment." *Florida Law Review* 55 (1): 391–412.
- Sugrue, Thomas J. 2013. "The Rise and Fall of Detroit's Middle Class." *The New Yorker*, July 22, 2013. <https://www.newyorker.com/news/news-desk/the-rise-and-fall-of-detroits-middle-class>.
- Swann-Wright, Dianne. 2002. *A Way out of No Way: Claiming Family and Freedom in the New South*. Charlottesville: University of Virginia Press.
- Turner, Fred. 2006. *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism*. Chicago: University of Chicago Press.
- Urban Displacement Project. 2015. "Urban Displacement San Francisco Map." Urban Displacement Project. 2015. <http://www.urbandisplacement.org/map/sf>.
- Vaidhyanathan, Siva. 2019. *Antisocial Media: How Facebook Disconnects Us and Undermines Democracy*. New York: Oxford University Press.
- Vertesi, Janet. 2014. "Internet Privacy and What Happens When You Try to Opt Out." *Time*, May 1, 2014. <http://time.com/83200/privacy-internet-big-data-opt-out/>.
- Warschauer, Marc. 2002. "Reconceptualizing the Digital Divide." *First Monday* 7 (December). <https://doi.org/10.5210/fm.v7i7.967>.
- We the People of Detroit. 2016. "Mapping the Water Crisis." Detroit, MI: We the People of Detroit. <https://wethepeopleofdetroit.com/communityresearch/water/>.
- Wessler, Hartmut. 2018. *Habermas and the Media*. Medford, MA: Polity Press. <http://public.eblib.com/choice/PublicFullRecord.aspx?p=5630504>.
- Wiley, Maya, Greta Byrum, Michelle Ponce, and Oscar Romero. 2018. "Take It or Leave It: How NYC Residents Are Forced to Sacrifice Online Service for Internet Service." New York: Digital Equity Lab at The New School. <https://www.digitalequitylab.org/take-it-or-leave-it/>.
- Yeung, Karen. 2015. "Design for the Value of Regulation." In *Handbook of Ethics, Values, and Technological Design: Sources, Theory, Values and Application*

- Domains*, edited by Jeroen van den Hoven, Pieter E. Vermaas, and Ibo van de Poel, 447–72. Dordrecht, Netherlands: Springer.
- Young, Iris Marion. 1990. *Justice and the Politics of Difference*. Princeton: Princeton University Press.
- . 2000. *Inclusion and Democracy*. New York: Oxford University Press.
- . 2001. “Equality of Whom? Social Groups and Judgments of Injustice.” *Journal of Political Philosophy* 9 (1): 1–18. <https://doi.org/10.1111/1467-9760.00115>.
- Zittrain, Jonathan. 2009. *The Future of the Internet and How to Stop It*. London: Penguin.
- Zuboff, Shoshana. 2019. *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. New York: PublicAffairs.

¹ Young (1990) calls exploitation, marginalization, powerlessness, cultural imperialism, and violence “five faces of oppression” (39).

² See Freire (1996) for a larger discussion of how the privileged and the marginalized both play a part in rectifying historic inequities.

³ As Morozov (2019) points out, these terms draw from very different intellectual traditions. I present them together here only to acknowledge them over time.

⁴ While all consumers face the perils of being tracked and targeted, for marginal internet users, the risk of injury or harm due to such tracking and targeting runs high. For example, as Gangadharan (2015) writes, marginal internet users (e.g., first-time users coming from marginalized communities) have difficulty discerning the credibility of different services, following one click to the next, not realizing they do not or should not divulge personal information. A form purporting to be from a potential employer, online educational company, or resume-building service can serve as a pathway to identify theft (Petty et al. 2018). Given that the institutions which help to welcome members of marginalized communities to the internet and computers lack the means to address the downsides of being connected and online, the possibilities for rebounding and or recovering are daunting (Gangadharan 2015).

⁵ We have only to look to at previous eras and remember the ability of railroad, oil, or automobile companies to affect the distribution of wealth and privilege in society. Technology companies (internet or otherwise) bear resemblance to these older titans in that they routinely marshal resources and circulate industry narratives in ways that deeply impact conditions of marginality.

⁶ While approximately five percent of the \$500 million qualifies as charitable grant-giving, Microsoft stands to make a profit on the remaining \$475 million, earmarked both market-rate and below-market-rate loans for housing construction. Five percent equals \$25 million, which is approximately one quarter of one percent of the \$9 billion in corporate tax Microsoft could have paid during its acquisition of LinkedIn.

⁷ For example, investigative journalists found that AT&T, T-Mobile, and Sprint, companies which support bridging the so-called “digital divide,” engaged in practices that hit its more disadvantaged customers. Specifically, these companies sold cell phone tower data and global positioning (GPS) data to an intermediary company, which sold data to a reseller, who sold data to bounty hunters and bail agents (Koebler and Cox

2019). Additionally, and at the time of writing, federal regulations permit broadband providers to sell Web browsing history to third parties such as data aggregators and data brokers. Privacy advocates have claimed that such lax rules make it easier for companies to profit off poor and marginalized customers, whose data profiles are valuable to predatory businesses (Moy 2017).

⁸ For this case study, in addition to news reports, I examined documents produced by community organizations (see, for example, Detroit Community Technology Project 2019c; Allied Media Projects 2015; Detroit Community Technology Project 2019a; Allied Media Projects 2013; Detroit Digital Justice Coalition 2010; Allied Media Projects n.d.; We the People of Detroit 2016; Petty et al. 2018). For information about Our Data Bodies, including our methodology, please see: <https://www.odbproject.org>.

⁹ The city had already been in decline due to the slow collapse of the automobile industry. When the city filed for bankruptcy, its faced additional surmounting challenges. Public infrastructure fell into emergency management, forcing utility companies, for example, to pursue aggressive cost-saving measures, the burden of which fell on low-income residents (Beydoun 2014; Goodman 2014; Gottesdiener 2014; Hackman 2014).