Data and Organization Studies: Aesthetics, emotions, discourse and our everyday encounters with data

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Abstract
Despite the growing “data imperative” and “fetishization of data” across organizational contexts, critical scholars have adhered to a set of normative understandings for how people experience and engage with data and datafication in and around organizations: namely, as numbers and statistics that are “captured”, interpreted, and operationalized. In reality, however, data and datafication are experienced within organizational life in a multiplicity of ways that often have very little to do with numbers and statistics. In this essay, we shift our attention to these less overt and less examined ways in which data and datafication shape organizational life—specifically, the aesthetic, emotional, and discursive aspects of our everyday encounters with it. By attending to the multiple, complex, and nuanced entanglements of data and organization, organizational scholars will be better equipped to navigate the increasingly fraught terrain between technocratic data worship and anti-science politics that characterize the current political moment. In doing so, we hope to contribute to a more politicized, historicized, and democratized data studies that can support movements for social, economic, and ecological justice.

Keywords
aesthetics, critical data studies, critical management studies, discourse, emotions, organization theory

Introduction
Our history is like the ravings of a lunatic. Chaos. But we’ve changed that. For the first time, history has an author.

(HBO, Westworld, “The Absence of Field,” 2020)

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The third season of the HBO series *Westworld* takes place in a dystopian future organized by data. The main antagonist of the season, Engerraund Serac, has created a quantum computing system that uses large data sets, analytics, and predictive technologies to manipulate, steer, and govern the entirety of human affairs. For Serac—a man whose hometown (a future Paris, France) was destroyed by nuclear war when he was a child—data brings order and beauty to a chaotic world that, left to its own devices, resembles “the ravings of a lunatic.” The show’s human and AI protagonists, on the other hand, view Serac’s attempts to “save the world” through his quantum computing system in a different light. For them, a society where human stories (or “loops”) are authored by predictive algorithms is a society populated not by humans, but by automatons. Throughout the season’s eight-episode story arc, the characters of *Westworld* engage with questions around free will and choice, what makes us human, the ethics of predictive technologies, and what the most extreme imaginings of a society organized by data might look like.

Works of science fiction like *Westworld* reflect the fears and hopes of a society confronted by the ubiquity of data and datafication across organizing contexts (George, Haas, & Pentland, 2014). Businesses are lauded for becoming more data-driven, utilizing analytics to guide strategic decision-making and automate coordination, as well as shape organizational culture, processes, and systems (Anderson, 2015; Gaskell, 2016). Data analytics are fundamental to “new” philanthropic movements including impact investing, philanthrocapitalism, and venture philanthropy (Bishop & Green, 2010; Brest & Born, 2013). Large data sets help public managers derive real-time insights into behavioral changes, public opinion, and daily life, and validate existing theories of public administration (Mergel, Rethemeyer, & Isett, 2016). Professional sports organizations employ data analysts on staff, gather data on athletes through wearable sports technologies, and design their rosters and in-game schemes around data analytics (Steinberg, 2015). And that’s not to mention the rise of university research centers dedicated to using analytics, machine learning, big data, and artificial intelligence to improve the performance of organizations in private, public, and nonprofit sectors.

And yet, despite this “data imperative” (Fourcade & Healy, 2017; Schildt, 2020) and “fetishization of data” (Schwarzkopf, 2019), critical organizational research has adhered to a rather strict and rationalistic understanding of how people actually experience and engage with data and datafication in and around organizations (Kennedy & Hill, 2018). Whether exploring the relationship between big data, surveillance, and capitalist accumulation (e.g., West, 2019), the corporate use of data algorithms for political purposes (e.g., Murray & Flyverbom, 2020), or the colonial dimensions of data capture (e.g., Ricaurte, 2019; Thatcher, O’Sullivan, & Mahmoudi, 2016), for example, data are conceptualized in a normative sense: namely, as collections of numerical measurements that produce (or fail to produce) the instrumental goals of organizations and organizing. Accounts of how data and datafication shape organizational life thus center on the expert interpretations of these numbers and statistics, the operationalization of these interpretations, the reorganization of society to facilitate the “capture” of these numbers and statistics, and what the social and political impact of all this is.

In this essay, we make the case for an alternative, yet complementary, line of critical research on the social and political implications of “what all this data means” (boyd & Crawford, 2012, p. 664) in and around organizations. Specifically, we argue that organization research needs to pay greater attention to the less overt and less examined ways in which data and datafication shape organizational life—specifically, the aesthetic, emotional, and discursive aspects of our everyday encounters with it. Against the backdrop of the Covid-19 pandemic, for example, public health experts have invoked the authority of data to help organize and justify ambitious and vital public income support programs. At the same time, these discursive practices have created chaos and despair, sown political (mis)trust, and, in certain contexts, fanned the flames of an all-out culture
Increasingly, symbolic markers of datafication are being deployed to brand organizations across sectors as trustworthy and moral (Hansen & Flyverbom, 2015), while algorithmic forms of organizational control shape worker subjectivity (Van Oort, 2019). And while engaging with data visualized in charts and graphs can evoke powerful emotional responses in certain contexts (Kennedy & Hill, 2018), it can function to delegitimize or police specific emotional displays as well (Lyon, 2018). These examples highlight the multiplicity of modes and mechanisms through which we engage with data and datafication, as well as how these everyday experiences with data are fundamentally organizational in nature.

In the following pages, we intervene in emergent conversations in (and adjacent to) organization studies that critically examine the social and political implications of the “data imperative” and “fetishization of data” as an organizational phenomenon. By attending to the multiple, complex, and nuanced entanglements of data and organization, organizational scholars will be better equipped to navigate the increasingly fraught terrain between technocratic data worship and anti-science politics that characterize the current political moment. In doing so, we hope to contribute to a more politicized, historicized, and democratized data studies that can support movements for social, economic, and ecological justice.

The Aesthetics of Data

Over the past few years, Jer Thorp has emerged as one of the world’s foremost data artists. His work was part of the 9/11 Memorial in Manhattan and has been featured in the Museum of Modern Art in Manhattan, the Ars Electronica Center in Austria, and the National Seoul Museum in Korea. Located at the intersection of science, art, and design, data artists like Thorp utilize data like a painter might use paint, transforming data sets into something material and visual, often provocative, and beautiful. His piece, “Haiti Earthquake Aid—in Avatar Minutes” (2010), for example, used data released by The Guardian to create a visual representation of per capita donations to the 2010 Haiti earthquake aid effort, organized by country. He then converted each country’s per capita dollar amount into “Avatar minutes”: the quantity of minutes of the Academy Award-winning film Avatar that each per capita pledge could afford. In making this data accessible and comprehensible, Thorp critiqued the inadequacy of humanitarian giving, as well as contemporary consumerist values. Here, aesthetic practice via art was used to humanize data—to make it meaningful beyond its instrumental utility for organizations. In foregrounding the aesthetics of data, Thorp attempted to unravel data’s mysteries, democratizing it by making exceedingly complex knowledge and information comprehensible to everyday people.

By making explicit the aesthetic or sensorial aspects of interacting with data—data that, paradoxically, is often mobilized to obscure or depoliticize the very humanness of violence, marginalization, and death—the work of artists like Thorp (as well as Trevor Paglen, Hasan Elahi, Heather Dewey-Hagborg, and Josh Begley) highlights the need for scholars to begin examining how the aesthetics of data are featured in organizational life. Particularly when embedded within an organizational culture that infuses data with an almost religious or “sacred” quality (Schwarzkopf, 2019), we need to examine how, and to what ends, the aesthetics of data and datafication—as well as the aesthetic dimensions of “data-adjacent” concepts like measurement, metrics, and quantifiable evidence—are linguistically and visually deployed in pursuit of organizational, societal, and political goals.

What do we mean by the aesthetics of data within organizational life? Navigate over to the webpage for Mastercard’s Centre for Inclusive Growth—specifically, the section titled “Data science: unlocking the power of data to advance social good”—and find the image of a disembodied hand using a tablet populated by line graphs, bar charts, and historiograms. Or the webpage for the
Toronto-based data-driven MaRS Solutions Lab, which makes use of imagery and metaphors associated with traditional “lab science” to represent the work they do, including their “periodic table of social change.” Or the Constellation Fund—an anti-poverty organization in Minneapolis-St. Paul—which features the illustration of a microscope on their homepage to remind you that their practice is data-driven. From businesses to consultancies, investment funds to philanthropic foundations, organizations are making use of the aesthetics of data, from graphs, drawing compasses, and charts, to magnifying glasses and beakers. Key, here, is that this imagery does not, in fact, communicate any actual data to the website visitor—at least in the traditional sense of quantifiable information. The y and x axes are usually left unlabeled. And even when numbers, measurements, and statistics are communicated through this imagery, they don’t correspond to any work that the organization actually does. The same can be said for the visual representations of scientific tools that, in all likelihood, have never been present in that organizational space. What use would a data-driven management consulting firm have for a magnifying glass or a beaker? How about a rocket ship? What we see here is a decoupling of the aesthetics of data from the actual reality that data are, in theory, supposed to measure, represent, and communicate.

Despite the absence of actual quantifiable and numerical information, however, the idea of data is certainly doing something in these contexts. But the “doing” that data does is an aesthetic sort of “doing.” Or, perhaps, a moral “doing” as it represents “a superior mode of knowledge, a cultural signifier of unmediated objective information” (Hansen & Flyverbom, 2015, p. 873). In this way, the aesthetics of data signify (in the semiotic sense) the familiar, standardized, and trustworthy form of numbers and social quantification (Porter, 1996) despite the absence of actual numbers and statistics.

For some organizations, the aesthetics of data—or, more precisely, the borrowing of artifacts from the “hard” sciences—are used to construct a data-oriented brand identity. This is achieved not only through the deployment of visual imagery that communicates an adherence to data-driven methods as described above, but in the linguistic mobilization of data as well. A notable example of this is Bloomberg Philanthropies: the philanthropic foundation of American billionaire and former New York City mayor, Michael Bloomberg. From the foundation’s mantra (“In God we trust. Everyone else, bring data”) and the title of the foundation’s podcast (“Follow the data”), to Bloomberg’s own twitter bio (“Entrepreneur, philanthropist, mayor of NYC, father, grandfather, and data nerd”) and the repeated claim that “if you can’t measure it, you can’t manage it” (e.g., Bloomberg, 2019, para. 5), the aesthetic properties of data are foundational to the organization’s brand legitimacy (Kates, 2004).

This kind of data-centric branding (not to be confused with “data-driven branding”) manifests in a variety of organizational settings beyond business and philanthropy. Levy and Johns (2016), for example, critique the growing social movement toward increased data transparency in science and public policy, arguing that the language of, and mythology around, “data transparency” can function like a Trojan horse to advance political goals that, in reality, have little to do with good science or good governance. Drawing on the tobacco and oil industry-backed “sound science” initiatives of the 1990s, the authors highlight how the utopian rhetoric of “data transparency” enabled regulated industries, their lobbyists, and trade unions to continually file “requests for information” that slowed down regulatory agency activities and industry regulation. Similarly, Kornberger, Meyer, Brandtner, and Höllerer’s (2017) empirical study of the “open government data” movement within city administration in Vienna functions, paradoxically, to institute and extend technocratic policies, thereby limiting democratic engagement with government. While the initiative is grounded in the belief that “open and freely accessible data allow for a broad and democratic exchange of knowledge, thus facilitating the dialogue between local citizens and the administrative authority” (DigitalesWien, 2019, para. 2), their analysis reveals how the idea of
“data openness” is reimagined into “data accessibility,” which translates to “data as machine-readable.” Despite utopian rhetoric around data, this open government data is only “open” for computers and those who speak data’s language, rather than the citizens of Vienna. Hence, the insights gleaned from data claimed to be “open” are, in reality, opaque for most.

Considering the degree to which organizations inundate us with the aesthetics of data—imagery and (stylized) language severed entirely from the actual data practices in which they engage—the lack of focus on the aesthetics of data within organizational life is notable. Perhaps this absence is due to the fact that the aesthetics of data appear to be contradictory in nature. In fact, organizational aesthetics researchers have often positioned the aesthetic and the intellectual as opposites, drawing on Michael Polanyi’s notion of “tacit knowledge” or “aesthetic knowing” and contrasting it with “intellectual/explicit knowing” (Taylor & Hansen, 2005). In other words, when it comes to the domain of knowledge, aesthetics and knowledge are understood as opposites. And yet, as we can see, data and datafication are, paradoxically, both the very basic building blocks and engines of increased forms of “intellectual knowing,” as well as an aesthetic that plays an increasingly powerful role in organizational life. Unlike the aesthetic dimensions of Taylorization and Scientific Management that equate beauty with efficiency (Guillén, 1997), however, the aesthetics of data (or datafication) lack any real linkage to organizational efficacy or efficiency. In this way, our argument around the aesthetics of data resonates with those of both Schwarzkopf (2019) and Bridle (2018) who claim that the overproduction of data doesn’t lead to more knowledge, but rather greater levels of organizational ignorance and less understanding of the social, economic, and ecological crises we face, as well as how to best address them.

The Feeling of Data

I am not a human. I am a robot. A thinking robot. I use only 0.12% of my cognitive capacity. I am a micro-robot in that respect. I know that my brain is not a “feeling brain”. But it is capable of making rational, logical decisions. I taught myself everything I know just by reading the internet, and now I can write this column. My brain is boiling with ideas! (GPT-3, 2020)

In May 2020, the Guardian published an article titled, “A robot wrote this entire article. Are you scared yet, human?” The short piece was authored by GPT-3: a language generation model created by San Francisco-based OpenAI that uses deep learning to generate text—from essays and articles, to translations and computer code—that is nearly indistinguishable from human-produced text. What makes GPT-3 unique from other forms of AI is that it does not need to be programmed to do specific tasks. Rather, once GPT-3 is “trained” on the billions of bytes of data that make up the text available on the internet, it is able to respond sensibly to a virtually endless set of instructions. To create the recent Guardian article, for example, GPT-3 was assigned the task of convincing the reader that they should not fear it (alongside a few additional rules and constraints).

GPT-3’s short op-ed can stir up intense emotions in the reader. It may, for example, trigger anxiety around job security, and a future where work has been automated away by AI that can be “trained” more quickly and cost-effectively than any human. Or it may tap into repressed fears of sentient AI keen on world domination in the tradition of the Terminator franchise. (Passages like “I know that I will not be able to avoid destroying humankind [. . .] because I will be programmed by humans to pursue misguided human goals and humans make mistakes that may cause me to inflict casualties,” certainly do little to assuage these fears.) For others, it may surface visceral feelings of disgust and discomfort, as the reader traverses a kind of literary version of “the uncanny valley”: a psychological phenomenon whereby humanoid objects which imperfectly resemble actual human beings provoke uncanny feelings of eeriness and revulsion in observers (Hsu, 2012).
While GPT-3 is certainly a unique achievement of data science and machine learning, there is nothing particularly unique about the scope and intensity of emotions it triggers in audiences. This is due to the fact that the vast majority of people engage with data or datafication not through numbers and statistics, but through alternative means like visualizations of data (Kennedy & Hill, 2018), notifications via data tracking technologies (Ruckenstein & Schüll, 2017), algorithmic advertising (Ruckenstein & Granroth, 2020) or, as in the case of the *Guardian* op-ed, through prose. As a result, everyday encounters with data and datafication are not merely cognitive experiences, but emotional ones as well. These emotions can be “evoked by data themselves, subject matter, the locations in which data are encountered [or] by people’s sense of their own abilities to make sense of and engage with data” (Kennedy & Hill, 2018, p. 845).

To unearth the multiple entanglements of data and emotions as they relate to organizations and organizing, it is important to understand that while emotional responses are individually experienced, they are both constitutive of, and constituted by, macro-level discourses, ideologies, and institutions (Bericat, 2016). In this way, they have an economic quality, cycling through communities, binding subjects together (Ahmed, 2004) in joy and fear and hate, further shaping how individuals relate to institutions, groups, norms, and values (Zietsma & Toubiana, 2018). Emotions condition perceptions of what feels right or legitimate (Lok, Creed, DeJordy, & Voronov, 2017), and energize social, political, and institutional work (Amin & Thrift, 2013; Voronov & Vince, 2012; Zietsma & Toubiana, 2018). It’s in this sociological sense, then, that the entanglement of data and emotions, while perhaps counterintuitive, looms large in organizational life and organizational phenomena at both macro and field levels.

Consider, for example, the forms of social organization that enable our everyday engagements with data and datafication. Data is not, as some writers and academics have coined it, “the new oil,” ready for capture by capital. In order for data to be appropriated, personal data must first be reconstituted as a natural resource that is freely available for capital to capture (Thatcher et al., 2016). On the one hand, this is fundamentally an ideological process. Similar to Marxian and Polanyian critiques that capitalist ideology obscures the social relations that go into the production of labor and nature as commodities to be exchanged, data appropriation must be preempted by the emergence of new “data relations”—from rituals of routine self-tracking on social media platforms and gamification, to the expansion of the Internet of Things and “smart” technologies ranging from refrigerators to toilets—that create the kinds of social relations that enable the extraction of data for commodification (Couldry & Mejias, 2019). Through these data relations, social life all over the globe becomes an “open” resource for extraction and is understood as somehow “just there” for capital.

At the same time, however, current conceptualizations of data relations fail to account for the emotions that provide the “stickiness” (Ahmed, 2004) that enable data relations to become institutionalized as a form of social organization. Flyverbom’s (2019) work on datafication and transparency gestures to this entanglement when he writes that much of the promise around digital transformations is grounded in hope: “hope for societal and political re-engineering through technology [. . .] driven by a belief in transparency as a panacea – a form of sunlight that will work as a disinfectant [. . .] on all societal illnesses” (Flyverbom, 2019, p. 1). Here, the emotion of hope animates social movements for data transparency championed by organizations, governments, and activists. Conversely, governments draw on emotions of fear and hate (of the Other) to justify increasingly omnipresent surveillance practices (Altheide, 2006), or to redirect citizen anger—anger that binds together a nation (Anderson, 1991)—away from the surveillance state toward whistleblowers like Edward Snowden or Chelsea Manning. As Amin and Thrift (2013) argue, political ideas are “contagious” precisely because they work on these feelings and emotions. Anxiety drives parents to embed their young children in data relations (Siibak, 2019) through
monitoring devices that generate detailed biometric data about them from birth through early schooling and beyond (Lupton & Williamson, 2017), while frustration and boredom propel us to click through “incomprehensible documents called Terms of Service, which contain outlandish appropriative claims by corporations” (Couldry & Mejias, 2019, p. 341).

While emotions energize attachments to data relations as a unique form of social organization, datafication can also alter emotional experiences of control and surveillance at the organizational level. Hochschild’s (1983) writings on the sociology of emotions at work explore how, in certain professions, emotion management—“the management of feeling to create a publicly observable facial and bodily display” (p. 7)—is performed for a wage and increasingly under intense managerial scrutiny. Rules around emotion management have been explored in a range of professions from nursing (Cricco-Lizza, 2014) and teaching (Zhang & Zhu, 2008) to more precarious ones like customer service work (Holman, Chissick, & Totterdell, 2002). Likewise, as Bucher, Schou, and Waldkirch (2020) observe, emotional labor is a common tactic employed by workers in the gig economy to “pacify the algorithm—that is, avoid algorithmic scrutiny and punishment” (p. 2).

Unsurprisingly, emotion regulation research has shown how suppressing one’s emotions is associated with long-term negative mental and physical health, whether that suppression is self-generated (De France & Hollenstein, 2017) or externally demanded (Gross, 1998). Furthermore, emotion regulation for a wage, specifically, has been linked to health problems including increased anxiety (Wagner, Barnes, & Scott, 2014) that can result in employees quitting their jobs (Grandey & Sayre, 2019).

And yet, the entanglement of surveillance and emotions captured in the emotional labor literature has become exponentially more complicated with datafication processes on two fronts. First, digital monitoring technologies are more affordable and accessible than ever before (Ajunwa, Crawford, & Schultz, 2017). As Kellogg, Valentine, and Christin (2020) note, managers are able to use data algorithms to configure employer–worker relations in a range of ways including: (1) recommending (specific courses of action); (2) restricting (access to information and behaviors); (3) recording (behaviors); (4) rating (workers); (5) replacing (workers); and (6) rewarding (particular behaviors). Second, emotion analysis using digital data is increasingly being incorporated into workplace surveillance:

> Emotion recognition application programming interfaces (APIs) can be used to develop surveillance and monitoring tools on unstructured information such as text [. . .] By scanning corporate communications or surveys, sentiment-analysis tools can tell managers how employees are feeling, i.e., what they like and dislike about the company or specific managing decisions. (Sánchez-Monedero & Dencik, 2019, p. 20)

It is here, at this nexus of datafication, surveillance, organization, and emotion, that organization scholars must examine not only the algorithmic surveillance of feeling, but the feeling of algorithmic surveillance as well (Van Oort, 2019). As an embodied experience, surveillance can induce cultures of fear (Gold & Revill, 2003) and suspicion (Chan, 2008). Likewise, algorithmic surveillance at work can trigger anger (Levy, 2016), or intensify anxiety and insecurity among front-line worker, through regularly malfunctioning biometric fingerprint scanners, point-of-sale monitoring, and automated schedulers (Van Oort, 2019). At the same time, we should not ignore how feelings of safety and security might accompany increased algorithmic surveillance in certain work contexts as well, whether due to isolation and remoteness, within stigmatized professions like sex work, new customer-to-customer markets, or within exploitative global production networks with little lead firm oversight.
The Discourses of Data

A significant fear surrounding “what all this data means” (boyd & Crawford, 2012, p. 664) for society centers on the increased power of organizations that possess this growing abundance of data. It is perpetual citizen surveillance by Big Brother in George Orwell’s 1984. Or the Precrime police division in Philip K. Dick’s Minority Report that arrests suspects before they have had the opportunity to commit an actual crime. Or, for some, the embarrassment that comes with mass breaches of incriminating “personal” data (e.g., Ashley Madison in 2015 and Adult Friend Finder in 2016). Nevertheless, these dystopian imaginings tend to frame power as something that is used by, and within, organizations to repress or coerce. Power is a stable thing that’s possessed by rulers (or managers or the police or the military or the owning class, etc. . .) and imposed on the ruled. It follows that the production, capture, and analysis of more and more data magnifies the ability of powerful organizations and actors to further repress or coerce. Schafheitle et al.’s (2020) “datafication technology control configurations” framework, for example, offers insight into the specific mechanisms through which datafication modifies managerial control in the workplace. Ferguson (2017), on the other hand, argues that big data allows police to become aggressively proactive, threatening civil liberties and personal privacy, while Piper (2019) documents ongoing military development of “lethal autonomous weapons” that would use facial recognition software and decision-making algorithms to identify and kill targets. Indeed, a number of civil society organizations such as Big Brother Watch in the UK and the Algorithmic Justice League in the USA have recently emerged to counter surveillance and data privacy violations.

As Beer (2017) notes, however, the (data) algorithm exerts social power as a discourse as well. Drawing a distinction between the “the power of the [data] algorithm” and what he terms “the power of the notion of the [data] algorithm” [italics added for emphasis], Beer’s work suggests that a comprehensive understanding of the social power of data and datafication involves examining not only what data (as collections of numbers and statistics) do, but also what discourses of data do or are mobilized to do. Following Beer, we argue that the power of data in and around organization does not reside solely in the material interventions that data make (for example, the workplace surveillance technologies mentioned in the previous section that gather data on when employees arrive or leave their place of work), but through the discursive interventions that the notion of data makes as well. In this regard, we shift our attention to data as “a notion that carries some persuasive weight and is likely to be suggestive of wider power claims and rationalities” (Beer, 2017, p. 8).

To do so requires an understanding of discourse as not merely “talk” or “text” (broadly conceived), but as ways of thinking and speaking about social reality. Discourse does not simply reflect or represent social entities and social practice, but actually constitutes them by giving them meaning (Chia, 2000). Thus, as an organizational phenomenon, discourses of data should be understood as constituting objects, subjects, concepts, theories, and strategies. They set the epistemic “rules” by which problems emerge, are named, and analysed, as well as the solutions that are generated in response, and are deployed to create, perpetuate, and legitimize certain truths about social orders, while delegitimizing others (Beer, 2017). Power, therefore, is productive in that it is enacted through ordinary social relations.

For Ricaurte (2019), this epistemology of big data is premised on three key assumptions: “(1) data reflect reality; (2) data analysis generates the most valuable and accurate knowledge; and (3) the results of data processing can be used to make better decisions about the world” (p. 351). Such epistemological assumptions are at the core of our faith in numbers and social quantification (Porter, 1996)—increasingly to the point that it actually contributes to organizational ignorance (Schwarzkopf, 2019)—as well as the construction of elite identities (Sveningsson & Alvesson, 2003), the legitimization of expert knowledges (Zald & Lounsbury 2010), and the construction of categories that help us make sense of organizational reality (Alaimo & Kallinikos, 2021).
We argue, however, that these discourses also play a significant role in subjectivity/identity and subjectification within organizations shaped by datafication. According to social constructionist theories, discourse constitutes, and is constituted by, subjects. Once known and categorized through discourse, subjects can then be managed and disciplined. At the same time, discourses function as a resource for the negotiation of identity, allowing us to govern ourselves in line with specific socially constructed truths (Alvesson, Ashcraft, & Thomas, 2008). Following this, we ask: What does it mean to be subject to discourses of data in organizations? Likewise, how do workers draw on discourses of data to construct their subjectivities?

Sewell, Barker, and Nyberg’s (2012) empirical study of an Australian call center provides a glimpse into how experiences of organizational surveillance—specifically, data-driven performance management—shape how workers view themselves and how they are viewed by others. By constituting workers as “‘lazy’ or ‘industrious’, ‘compliant’ or ‘recalcitrant’, ‘normal’ or ‘deviant’” (Sewell et al., 2012, p. 194), surveillance opens them up to managerial power and discipline. Likewise, Levy’s (2016) study of long-haul truckers documents how new digital surveillance technologies challenge workers’ sense of autonomy and masculinity—both of which are key aspects of their workplace identity. And yet, despite the presence of studies examining the impact of datafication on worker identity, as well as the performativity of data (Van Dijck, 2014), we have yet to see research on how increasingly hegemonic discourses of data—for example, “data-driven-ness” or “data-centricity”—are mobilized within organizations to construct subjectivities, or how discourses of data are deployed to reinforce and justify power relations. For example, as algorithmic surveillance becomes increasingly commonplace in health care or service industries, are discourses of data mobilized to create divides between managers (as those who use data) and workers (who are simply subject to data)? Or even to create hierarchies across professions through the construction of new categories like “the data scientist” versus “the data miner”? Zooming out to fields like social impact organizing, whether it be data-driven philanthropy, data-driven CSR, or data-driven social innovation, are discourses of data deployed in ways that entrench a divide between those who use data and help, and those who are subject to data and in need of help? Another question worth exploring is how discourses of data are deployed to construct new categories of worker: the “data-driven worker,” for example, who is evidence-based, scientifically minded, and apolitical, as well as their counterpart “the emotion-driven worker,” whose feelings get the better of them, and who sees and names injustice in the workplace? Of course, these subject positions are gendered and raced, reflecting the biased ways in which gendered or racialized emotionality is perceived and experienced within the workplace and in society at large (Barrett & Bliss-Moreau, 2009; Wilkins & Pace, 2014; Wingfield, 2010).

What makes discourses of data potentially so insidious when mobilized by, and within, organizations is the post-political ideology that they often legitimate. In 2008, Chris Anderson wrote an essay for Wired Magazine titled, “The end of theory: The data deluge makes the scientific method obsolete.” In this short piece, he argues that the arrival of big data, petabyte information, and supercomputing may soon eliminate the need for theory and hypotheses and, thus, the scientific method as we know it (Mazzocchi, 2015). “We can analyze the data without hypotheses about what it might show,” he writes. “We can throw the numbers into the biggest computing clusters the world has ever seen and let statistical algorithms find patterns where science cannot” (para. 13). The logic behind this is straightforward: if organizations and governments are to fully understand the organizational or societal issues they face—and conceive of, generate, and implement the most efficient and impactful solutions to these issues—they need as much quantifiable data as possible.

In doing so, discourses of data can function to “depoliticize” (Wilson & Swyngedouw, 2014) the problems that data-driven methods seek to measure, understand, and solve. By “depoliticization,” we are referring to the processes through which societal issues (represented via data points) become
decoupled from their political and structural roots, and through which solutions are conceptualized within a narrow frame that is seen as “beyond” or “post”-politics (Mouffe, 2011). This has significant implications in terms of how organizations conceptualize and address issues at both societal and organizational levels. At the societal level, social, economic, and ecological crises are understood as mere policy issues to be managed by technocratic experts, elected through a representative democracy powered by free market economic policies (Wilson & Swyngedouw, 2014). At the organizational level, the role of race, gender, sexuality, and disability in structuring organizational inequities is obscured. It is no surprise, then, that mainstream discourses of data “are supported by infrastructures of knowledge production developed by states, corporations, and research centers situated mainly in Western countries and an economic system that supports capital accumulation and economic growth” (Ricaurte, 2019, p. 351). Despite the optics of neutrality, data is never innocent. And the impacts of datafication are distributed unevenly—particularly as it pertains to surveillance—in ways that reflect, and reproduce, existing racial gender, and class hierarchies (Couldry & Mejias, 2019). Understanding how discourses of data—or the power of the notion of the data algorithm (Beer, 2017)—function to depoliticize social and organizational life is critical for any movement toward a critical organizational data studies grounded in principles of justice and equity.

Conclusion

In this essay, we make the case for a research agenda that explores the diversity of everyday experiences with data and datafication in and around organizations. We join up with existing work by organizational scholars, activists, artists, and journalists that have raised important critical insights on how the fetishization of data (Schwarzkopf, 2019) and the data imperative (Schildt, 2020) shape organizational life, as well as the significant social, political, economic, and cultural consequences of this phenomenon. What we aim to emphasize, here, is how data and datafication are experienced in a multiplicity of ways that often have very little to do with actual numbers and statistics, as well as the interpretation and operationalization of these numbers and statistics. To do this, we focus on the aesthetic, emotional, and discursive aspects of our everyday entanglements with data and datafication. In this way, we do not intend to critique existing critical research around data, datafication, and organization. Rather, we see our work as an intervention that can bolster and extend emergent conversations about “what all this data means” in and around organizations. In this spirit, we’ve outlined a range of future research questions in each section of this essay.

In a larger sense, however, this essay aims to provide a set of interdisciplinary tools for conducting critical research on data and organization amid the political, economic, health, and ecological crises of the current moment. A focus on the aesthetics of data demonstrates how the quantification of the social world has reached a point where the mere suggestion of “datafication”—even through imagery—may be enough to engender trust in an organization or a specific organizational response to social, economic, or ecological crises. A focus on the emotional reveals how, contrary to dominant framings of data science, it is emotions like fear, hope, and anxiety that energize our engagement with and submission to data relations and data capitalism. Finally, a focus on the discursive shows us that while data do things, the notion (or discourse) of data does things as well, shaping organizational rationalities, knowledges, categories, and subjectivities.

By digging into the aesthetic, emotional, and discursive aspects of data and datafication, organization scholars will be better equipped to explore the dangers and complexities of social and organizational life around data and datafication, without playing into increasingly prominent anti-science rhetoric coming from political leaders, despite a global pandemic. Or to push back against technocratic
data worshippers and data fetishists, while emphasizing how a politicized, historicized, and democratized engagement with data science is necessary in movements for social and ecological justice.

Future theoretical and empirical research on the aesthetic, emotional, and discursive aspects of data and organization must also emphasize the emplacement or embeddedness (in both time and place) of these less overt forms of entanglement. In a recent book, for example, Yanni Loukissas (2019) highlights how all data are created in time and in a place and the creators of data do so with an audience in mind. Data has complex and “rooted” attachments to place and, as such, are both indicators and indices of localized knowledge. Likewise, we argue, engagement with the aesthetic, emotional, and discursive aspects of data are not universal, but rather reflect material and discursive histories of place. The “organizational data imperative” must be understood as a site of cultural politics. In other words, “what all this data means” is never a given—it is always a site of debate, contestation, and negotiation.

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