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Data disaffection: Toward a relational and affective understanding of datafication

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Abstract

Research on user experiences with datafication, the transformation of social life into data, identifies "digital resignation" and "privacy cynicism" as rational responses to feeling overwhelmed and disempowered. But how, exactly, do shared feelings and emotions mediate relationships between datafication and disengaged responses – both individually and institutionally? We develop a relational analysis of datafication, deploying an infrastructural perspective and drawing on affect theory to develop the concept of *data disaffection*, which we define as the structural cultivation of accepting data accumulation as inevitable. Data disaffection is a structure of feeling that conditions processes across scales of analysis: it manifests in resignation and cynicism on an individual level while simultaneously structuring commercial practices. We illustrate how data disaffection highlights alternative sites and methods for understanding datafication, and we conclude by discussing the implications for understanding datafication as a cultural dynamic as well as a corporate practice.

Keywords

Affect, critical data studies, datafication, infrastructure, privacy, structures of feeling

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Introduction

There is a new iteration of the privacy paradox: across the world, people in more than 90 countries—from the European Union (EU) to Brazil to India to the Philippines—are gaining new rights to stop companies from collecting their personal data, but these newfound rights are rarely exercised (DataGuidance, n.d.; Specht-Riemenschneider, 2021). These rights are enshrined in data privacy laws and regulations that govern the collection, management, and sharing of personal data. These laws generally respond to anxieties about companies' inescapable data collection practices, or *datafication*, by restricting data collection and enshrining new entitlements for individuals to assert agency over their personal data. For example, the EU's General Data Protection Regulation (GDPR) grants individual "data subjects" the right to know what personal information has been collected about them, the right to object to processing that information, and the right to be forgotten by deleting that information. Some of these rights have produced material manifestations, including consent banners that allow users to customize their cookie settings, web forms to request access to or deletion of personal information, and files and data sets that are delivered to users in response to data access requests. Given ample opportunities to curb data collection practices, one may expect that users would exercise their rights to learn more about and limit datafication.

The paradox is that, in practice, users rarely exercise these newfound rights. For example, businesses subject to California's data privacy law reportedly received only 266 requests for access per 1 million accounts in 2022, which represents less than 0.03% of users (DataGrail, 2023). Meanwhile, businesses subject to the EU's data privacy law reported an average of less than 50 requests in 2021–2022 (Shivarattan et al., 2023). Similar findings about users' low uptake of other affordances of data privacy regulations have been characterized as evidence of individuals' incapacity to understand and thus exercise their privacy rights (Turow et al., 2023).

These figures evoke a familiar conundrum about user responses to datafication: why do users continue to submit to the perceived inevitability of datafication even when they have explicit opportunities to monitor and restrict such practices—including unavoidable interfaces such as cookie banners that prompt a response? On one hand, users' lack of engagement can be characterized as another instance of the privacy paradox (see Barth and de Jong, 2017), wherein individuals exhibit privacy behaviors that do not align with their privacy values. On the other hand, scholars argue that the lack of engagement observed in user responses should, in fact, be recharacterized as a rational response to users feeling frustrated, irritated, and overwhelmed by datafication. Specifically, they have argued that the privacy paradox can instead be reconceptualized as online apathy (Hargittai and Marwick, 2016), privacy fatigue (Choi et al., 2018), privacy cynicism (Hoffmann et al., 2016), surveillance realism (Dencik and Cable, 2017), or digital resignation (Draper and Turow, 2019).[1]

These alternative conceptualizations of the privacy paradox describe individual behaviors as responses to collectively experienced emotions. They generally identify user non-engagement as a rational response to *feelings* about datafication, such as overwhelm, frustration, and irritation, that are not experienced individually but rather shared across groups or communities of people. This has led scholars to call for understanding

how and why resignation and cynicism occur (Draper and Turow, 2019) and for shifting collective emotions from disengagement to anger (Turow et al., 2023). Despite alluding to a crucial affective component, the relationship between collective affect and individual disengagement behaviors remains underexplored. How do emotions mediate relationships between datafication and disengagement? How can we conceptualize this mediation across scales, including individual behavior, institutions' commercial practices, and collective affect?

We address these questions by proposing a conceptual framework to clarify the role of affect in mediating datafication and user disengagement. Our premise is that understanding datafication and its implications calls for an analytic framework that accounts for both the role of feelings and for the relationality of user behavior. This leads us to an interdisciplinary conceptual framework that draws from both science and technology studies and cultural studies. First, we interpret disengagement not simply as a social response to technological processes but rather as a sociotechnical phenomenon that is coproduced by users, data, technical interfaces, and other actors connected through relational infrastructures. Second, we draw on affect theory to trace how feelings operate as infrastructures of datafication to produce disengagement that has been described as apathy, fatigue, cynicism, and resignation. We then develop *data disaffection* as a structure of feeling to account for the cultural conditions that manifest in resignation and cynicism on an individual level while also structuring commercial practices. Finally, we deploy the idea of data disaffection by describing three potential shifts across a broader range of actors, examining interactions across individual and institutional scales, and exploring moments of breakdown in the affective infrastructure of datafication. We conclude by discussing the implications for understanding datafication as a cultural dynamic, and not only a corporate practice.

Unpacking datafication

Scholars often invoke the concept of datafication without agreeing to a common definition. Its origin can be traced to Mayer-Schönberger and Cukier (2014 [2013]), who defined it as the limitless transformation of social life into quantified data. Since then, however, scholars have argued that datafication is not a neutral process. Accepting datafication as given or inevitable can submit to presuming the ontological purity of data as a "raw" resource that is "found" and that produces neatly measurable effects (Gitelman, 2013). Moreover, datafication propagates a problematic ideology of "dataism" in which the objectivity of quantified data is considered inherently trustworthy, especially with the emergence of "big data" (boyd and Crawford, 2012; Van Dijck, 2014). In addition, datafication serves as an engine for the political-economic regime of informational capitalism in which data figures centrally as both commodity and capital (Couldry and Mejias, 2019; Sadowski, 2019; West, 2019; Zuboff, 2019).

Thus, scholars have conceptualized datafication broadly in order to understand its relationships to individual and institutional processes. In an interdisciplinary literature review, Flensburg and Lomborg (2023) identified an emergent research field of datafication scholarship. They found that, in general, scholars either focus on the technical processes *behind* datafication or the social implications *caused by* datafication, including

user perceptions, practices, and technological processes. The latter, social approach to understanding datafication has largely focused on understanding people's experiences with datafication, including the implications of wearable technology and self-quantification (e.g. Bucher, 2018; Gerhard and Hepp, 2018; Kennedy and Hill, 2018; Lupton, 2016, 2018, 2019; Schüll, 2016). For example, a dominant method has been to examine *user imaginaries* of datafication and other sociotechnical processes and systems. This is exemplified by Bucher's (2017) research on algorithmic imaginaries, in which she analyzed user interviews and digital trace data to understand how "people imagine, perceive and experience algorithms and what these imaginations make possible" (p. 31). A related method in human–computer interaction scholarship has been to study *folk theories*—non-authoritative, intuitive explanatory theories developed by users that circulate informally despite their accuracy (Eslami et al., 2016; Rader and Gray, 2015). This approach has been extended recently to understand experiences with datafication (Ytre-Arne and Moe, 2021).

We are interested in pursuing a sociotechnical analysis of datafication that brings technical and social modes of inquiry closer together. This takes up Flensburg and Lomborg's (2023) call to develop "a conceptual repertoire that bridges the infrastructural and user-centric dimensions" (p. 1466). They concluded that

> A comprehensive communicative conceptualization of datafication, one that considers both the material technology, the meanings generated through data and the socio-cultural consequences of the ubiquitous datafication of our everyday lives, might offer a promising next step in integrating and advancing current research on datafication, as well as grounding datafication more systematically in a historical trajectory of the mutual shaping of communication technology and society. (p. 1466)

The "mutual shaping" of technology and society evokes a familiar call in science and technology studies (STS) to adopt a sociotechnical approach to understanding complexity. For example, rather than trying to increase the visibility of complex sociotechnical systems by looking inside their constituent components and processes, it can be more powerful to transcend sensory and experiential descriptions of systems and instead understand them as assemblages of human and non-human actors that *enact* complexity rather than simply *contain* it (Ananny and Crawford, 2018).

The case described earlier of user non-engagement with newfound privacy rights illustrates what a sociotechnical approach can offer. Isolating social responses to datafication leaves intact interactions across individual, institutional, and structural scales, which matters for both scholarship about datafication and policy that hopes to intervene in it. Analytically, focusing on social responses to datafication as an empirical object risks perpetuating the inevitability of data and overlooking how individuals do, in fact, exercise agency in interacting (or not) with commercial logics and political-economic conditions. For example, Draper and Turow (2019) have argued that individuals responding to datafication with disengagement, which is often classified under the privacy paradox, can actually be a strategic, rational response given corporate practices of placation, diversion, jargon, and misnaming that obfuscate what Flensburg and Lomborg (2023) described as "infrastructural dimensions." From a policy perspective, focusing on social

responses to curb or regulate datafication leads to ineffective interventions. The dominant paradigm relies on a "notice and choice" framework in which individuals are held responsible for privacy self-management (Solove, 2013), which burdens individuals with unrealistic expectations that they overcome structural barriers to understanding what happens to data collected about them and then engage in substantial "privacy work" (Marwick, 2023) to meet their expectations.

Thus, we are interested in understanding the sociotechnical *relations* enacted through datafication. This means that we are less interested in dissecting datafication as a two-step linear process by identifying either its discrete technical *causes* or social *implications*. Instead, we understand datafication as a relational phenomenon that convenes multiple actors, including individuals, commercial institutions such as platforms, interfaces such as consent popups, and data itself. This relational network calls for an infrastructural perspective. In other words, we suggest that individual disengagement is not simply a product of commercial data collection practices but that both individual and institutional practices are mutually reinforcing conditions. In the following, we offer an approach that could help facilitate such an analysis.

Developing data disaffection

In this section, we operationalize relationality by drawing on two fields. From science and technology studies, we adopt an infrastructural perspective, and from cultural studies, we engage with affect theory, and specifically disaffect. We then synthesize these approaches by engaging with Raymond Williams' structures of feeling, which allows us to reinterpret individual disengagement to datafication as a (dis)affective response, draw connections between individual and collective experiences, and locate agency in individual responses. Thus, this section establishes the foundation to develop data disaffection as a conceptual framework to make sense of the role of emotions in datafication.

An infrastructural perspective

Our relational paradigm calls for scaling up from discrete experiences with interfaces and visualizations and turning instead to infrastructural relations. We follow Star and Ruhleder (1996) in understanding infrastructures not (only) as material objects, but rather as relations that are embedded, invisible, mundane, networked, and often taken for granted. This perspective pivots our attention from tracing specific causes and effects to understanding relations maintained on a systemic level. To be sure, this is not to minimize the crucial importance of understanding discrete individual experiences of datafication. After all, infrastructures emerge to particular actors at particular times while simultaneously manifesting as discrete, material objects to others, or, in other words, "one person's invisible infrastructure is another person's job, to be faced materially and directly every day" (Slota and Bowker, 2017 [2016]: 531). Thus, infrastructure is best understood as a *perspective* that explicitly reckons with relations.

We mobilize an infrastructural perspective to create an alternative way of understanding datafication that holds individuals, platforms, and data systems in tenuous relation to each other. According to Larkin (2013), infrastructure is not a specific methodology but

rather an "ontology": "they are things and also the relation between things" (p. 329). Instead, he has argued that the choice of methodology is itself a theoretical question. Indeed, that is part of the point—an infrastructural perspective can illuminate different kinds of relations without claiming exclusivity. For example, an infrastructural perspective can open up different modes of perceiving and understanding relationality, including temporality (Edwards, 2021), radiancy (Mukherjee, 2020), and sensorial experiences (Larkin, 2013).

In this article, we focus on affect as an infrastructural relation based on a need to theorize the role of emotions and feelings in producing user responses to datafication. An exemplar of this premise is in Draper and Turow's (2019) formulation of *digital resignation* as a rational individual response of fatigue, frustration, and helplessness in the face of mass surveillance and data collection. They argue that corporate techniques such as privacy practices and transparency initiatives often advance rhetorical strategies—including "placation, diversion, jargon, and misnaming" (p. 11)—that not only cultivate digital resignation but also impede collective action by "turn[ing] individual concerns about surveillance and privacy inward" (p. 10). Thus, digital resignation points to the crucial role of feelings such as futility within a broader sociopolitical context to account for uneven power dynamics between individuals and corporate actors. At the same time, however, Draper and Turow themselves note that understanding resignation is an important yet distinct project from investigating the discrepancy between "individual frustration" and "collective anger" (p. 11), which merits its own analysis of how affect traverses individual and collective scales.

Affect as infrastructure

We thus turn to affect as a way to understand personal emotions as products of social conditions (Clough and Halley, 2007). While there are long-standing debates about the precise definition of affect (Sharma and Tygstrup, 2015: 7–8), many scholars are less interested in the ontological question of what affect *is* than the pragmatic question of what it *does* (Ahmed, 2004a: 119). Following this approach, we draw on affect theory to understand how and why people experience and participate in collective affects related to datafication, such as overwhelm, frustration, and irritation. These affective responses manifest individually as emotions, which then lead to disengaged behavior, but we follow Ahmed (2004b, 26) in understanding that emotional responses are part of collective affective orientations.

This approach to affect makes it a suitable lens for relational analysis. We understand affect to be produced through social—or sociotechnical—circulation of emotional states (Ahmed, 2004a), and thus employ affect to analyze how an individual's context shapes their capacities to sense and act (Bissell, 2022). This context can include relations among a variety of actors, including humans and non-humans alike, including interfaces and data sets (Anderson and Harrison, 2016: 16–17). Following this contextual approach means that individual responses are not predetermined but relationally cultivated (Ruckenstein, 2023: 182) and crucial elements of the system's production as a whole, since the power of one's response also makes a qualitative difference on its environment (Ruckenstein, 2023: 88). In understanding the various capacities to affect and be affected

that are afforded to, maintained, produced, and negotiated in processes of datafication, we affirm an ontology of datafication as a complex system, and an unfolding process. As such, affect can contribute to a conceptual framework well equipped to the need of understanding algorithmic systems relationally (Ananny, 2016).

In fact, various scholars use affect to understand experiences with datafication and algorithmic culture. They do so to explore questions such as "what does the lived reality of big data feel like" (Crawford, 2014) or "how and why [is data] valuable to us and what forms of hope and trust enable this value" (Pink et al., 2018). These analyses demonstrate that focusing on affect can help explain how people experience datafied spaces they inhabit, even if they do so unwillingly (Karppi, 2018). Sumartojo et al. (2016), for example, use affect to link bodily capacities and the practice of self-tracking in the case of cycling commuters to draw out how digital data are relational and processual. Insights like these reveal the relationships users form with their data, including "the desire to discern (be aware of) and direct (determine the disclosure of) personal spatial big data flows about oneself" (Leszczynski, 2015: 965). With specific attention to practices of geolocation within platforms, Leszczynski (2019) offers the term *platform affects* "as the material-discursive orientations through which individuals and collectives become attuned, predisposed, and/or incentivized towards using, contributing to, remaining within, and/or returning to platforms" (p. 208). Such approaches help to explain not only the emotional dimensions of datafication, but also its relational nature, as it accounts for the "changing capacities of the bodies themselves" (Bissell, 2020: 104).

Affect theory can also enrich our understanding of the role of emotion in mediating datafication through emerging scholarship on *disaffect*, or unfeeling. This subfield is interested in moments when feelings are avoided rather than embraced. This means that actions of disengagement can be understood as intentional acts of political resistance in the face of cultivated feelings of helplessness. In certain instances, emotional responses may be underperformed as a person's reticent action in response to their environment. Berlant (2015) suggests the term "unfeeling" for moments when someone "is unforthcoming" (p. 199) in their capacities to affect and be affected. Similarly, Yao (2021) suggests that disaffection should be understood not only "as oppression from above but as a tactic from below" (p. 3), when people intentionally try to guard themselves from atmospheres that expect a particular kind of emotional labor. Bissell (2022) explains how digital platform workers employ concealment, projection, and resignation as "anaesthetic responses" (p. 101) in their attempts to be unaffected by their work. By attending to affect, critical theorists have demonstrated that disaffect, which may manifest in disengagement, is not necessarily apolitical or even inactive, but rather an affirmative expression of one's capacity to affect and be affected, which materializes in response to immediate and/or cultural conditions. Thus, choosing disaffection can serve an instrumental purpose by remaining or becoming "disaffected."

Structures of feeling

We draw on *structures of feeling* to describe how shared affects are shaped or produced by cultural conditions. Providing a language for the shared atmospheres and intensities that regulate how people experience the world, Williams (1977) describes structures of

feeling as those forces that "exert palpable pressures and set effective limits on experience and on action" (p. 132). Williams' concept shows how macro-level cultural dynamics can shape affective responses by producing, maintaining, challenging, or containing capacities to sense and act. These capacities, for Williams (1977), are the result of a collective horizon, of living in a shared present shaped by "institutions, formations, positions" (p. 128) and individually experienced and grasped on a subjective level. Thus, structures of feeling are ways to understand how cultural conditions manifest in shared and collective affects.

Scholars have demonstrated the explanatory value of structures of feeling by applying the concept to historic and contemporary cultural phenomena. Berlant's (2011) work, for example, builds on structures of feeling to describe what she calls "cruel optimism" to explain affective attachments to objects of desire that can be detrimental to one's flourishing. Berlant (2011: 3) is interested in people's attachments to fantasies and promises of a good life that are no longer present in today's economic and social structures. Berlant (2011: 15) stresses that each iteration of cruel optimism may be felt individually but ultimately emerges from a collectively shared historical present. This insight is key to understanding how an affective lens allows for a shift from the micro- to the macro-level, as individualized emotional responses come into focus as expressions of a shared structure of feeling. It also emphasizes how structures of feeling are temporally specific; they reflect cultural conditions of a particular period of time.

At the same time, structures of feeling do not produce particular affective responses deterministically; rather, they produce capacities to affect and to be affected. Various distinct affective trajectories can exist at once, and structures of feeling are malleable, changing forms, as Williams (1977) himself stressed. As such, a conceptual framework informed by affect and cultural studies holds room for other kinds of responses, whereby oppositional expressions or even complete transformations of the dominant affect are possible (see Hall, 1991 [1980]). The structures of feeling of datafication are constantly produced, stabilized, maintained, and challenged by all actors who participate in the process. Thus, they do not fully predetermine individual or collective responses. Instead, any structure of feeling leaves space for one's capacities to affect and be affected in a number of ways, including disaffection. Consequently, even a dominant—and actively cultivated—structure of feeling related to contemporary datafication is not fixed or absolute. Other forms of relating to datafication exist and can be imagined, which result in variegated responses from resistance to celebration (see Ruckenstein, 2023).

Data disaffection

In this section, we offer the concept of *data disaffection* to conceptualize affect's role in mediating datafication and producing disengaged responses such as resignation and cynicism. We define data disaffection as the structural cultivation of accepting data accumulation as inevitable. Thus, data disaffection describes a structure of feeling that mediates affective, behavioral, and institutional responses and processes. This operationalizes the conceptual foundation described in the previous section by adopting an infrastructural perspective and attending to affect (and disaffect). We argue that data disaffection helps make sense of prior research on social responses to datafication in three ways. First, it

reinterprets user disengagement as responses to the affective capacities of cultural conditions rather than commercial or technological processes. Second, it locates user agency in individual and collective responses to those affective capacities. Third, it brings individual affective and behavioral responses and commercial institutions' processes together as manifestations of a common cultural condition operating across micro- and meso-scales. We demonstrate these implications by engaging with datafication scholarship, illustrating how data disaffection adds conceptual clarity to this research area.

First, data disaffection reconceptualizes user disengagement with datafication as an affective response to cultural conditions. This contrasts with responses observed in prior research, which have been described as online apathy (Hargittai and Marwick, 2016), privacy fatigue (Choi et al., 2018), privacy cynicism (Hoffmann et al., 2016), surveillance realism (Dencik and Cable, 2017), or digital resignation (Draper and Turow, 2019). We argue that employing an affective understanding of datafication, and in particular a lens informed by disaffect, empirical cases such as the "privacy paradox" can be better understood as coproduced, which locates responsibility not in the individual or the commercial institution but rather in the cultural structures that shape both. As research on digital resignation shows, users who become resigned express "a rational emotional response in the face of undesirable situations" (Draper and Turow, 2019: 1828). In this context, employing data disaffection can offer some conceptual clarity that underlines how these emotional responses are not simply individualized psychological expressions but grounded in shared social affects. The framework of data disaffection, in other words, foregrounds the *systemic* dimension of various personal relationships to datafication. It makes it possible to see how patterns of individual acts of resignation or cynicism are behavioral manifestations within wider structures of feeling. As such, the framework can help move beyond the necessary interpretation of particular modes of engagement by certain participants in datafication processes, toward describing and naming "identifiable patterns in algorithmic culture" (Ruckenstein, 2023: 40). With many of the diagnoses of emotional responses to datafication revolving around terms such as resignation, cynicism, or apathy, data disaffection strikes us as an appropriate term for the dominant structure of feeling of datafication. All these various responses can thus be understood as expressions of a larger affect.

Second, data disaffection allows for cultural change by affirming agency in responding with disaffection. Williams (1977) himself believed that sociocultural structures always entail dominant, residual, and emergent elements (p. 122), and as a result invites us to think beyond any given system of relations as static. As Ruckenstein (2023) puts it, when she applies the concept to algorithmic culture, "Engaging with the dominant structure of feeling underlines the importance of staying attentive to the emergent" (p. 96). As both Draper and Turow (2019) and Berlant (2011) point out, we might need to transform our current emotions into collective anger in order to move from a resignation to resistance. Data disaffection, which helps understand such individual responses as cultural, echoes this need while simultaneously affirming the possibility of cultural transformation. Where a change in emotional register might otherwise be simply another intervention on the individual level, highlighting data disaffection as a currently dominant structure of feeling about data accumulation implies the continued possibility of new relations in the future.

Third and finally, data disaffection offers conceptual clarity around how particular positions materialize in both individuals and institutions in response to structural atmospheres. Diagnoses that range from apathy to cynicism and resignation all describe how various actors practice disaffection with regard to data accumulation. The higher-order lens allows to look *across* systems of datafication, rather than only at user-level instances of datafication and as such follows a wider demand for relational thinking on data and algorithmic processes (see Ananny and Crawford, 2018: 974). This has implications not only for the unit of analysis and ways of interpreting these phenomena but also for the kinds of recommendations research on the topic might yield. For example, an analysis that understands the "privacy paradox" (Barth and de Jong, 2017) as a condition produced by a particular structure of feeling about datafication will not be satisfied with demands for more transparency or a more educated public. Since the problem is not caused by an inconsistent user or an irresponsible company, solutions must be found beyond the micro- and mezzo-level. This can help make sense of findings that, just like users, companies also feel "resigned" to the inevitability of data collection, despite complying with policy interventions and adopting privacy-enhancing technologies to curb such practices (McGuigan et al., 2023; Waldman, 2021).

Deploying data disaffection

What can we do with the concept of data disaffection? What are the implications for scholarship and policy? In this section, we describe how data disaffection's infrastructural approach and focus on affect suggests three potential directions toward sites and methods for understanding datafication, its context, and its implications.

One direction for research is to explore affective relations across a broader set of actors, including people and institutions, but also interfaces, data sets, and intermediaries. For example, how do individual users feel when interacting with the affordances of data privacy laws, such as consent pop-ups and data set disclosures? One study by Bowyer et al. (2022) coined the term "human-GDPR interaction" to explore people's experiences of requesting and reading archives of their personal data by exercising the GDPR's right to access. They found that participants felt dissatisfied with their experiences, causing them to feel distrustful and disempowered overall. This study illustrates the importance of studying people's experiences not only by inquiring about their attitudes toward and experiences with data collection, but also their experiences trying to counter or mitigate such practices. After all, data disaffection centers embodied and intuitive understandings of datafication, so transparency and disclosure models of research and policy intervention cannot be assumed to be sufficient. Such an assumption upholds a valorization of disclosure and the notion that individuals will make rational choices about their relationship to data and online privacy if only they had access to additional information. Such privilege of revelatory disclosure presumes that data systems are stable, knowable objects that simply need to be uncovered through representational processes. This is especially true because data set disclosures are often provided in barely legible formats, with personal data sprawled across arrays, vectors, and spreadsheets that are technically intelligible but hardly as inviting as the dark patterns that coax individuals into signing up for an account or agreeing to permissions and

data sharing. Thus, further research on embodied, affective experiences of interacting with datafication and its interfaces can help clarify where and when the endpoints of data disaffection occur.

A second direction is to examine how data disaffection manifests across multiple scales simultaneously. This builds on the previous suggestion by not only expanding the range of actors brought into relation by data disaffection but also examining their sites and modes of interaction across individual and institutional levels. One example is to study employees and other workers within companies that participate in datafication, whose experiences mark the intersection of multiple manifestations of data disaffection occurring simultaneously. As individuals, they are induced to capitulate to the inevitability of datafication, and as agents of corporate institutions, they are pressured to facilitate the impulse data accumulation without obstruction (McGuigan et al., 2023; Waldman, 2021). But these experiences do not have to be interpreted merely as the triumph of data capitalism over personal values. Instead, affect theory locates agency in the space between affects in circulation and affective responses, which may intimate emergent structures of feeling. In a study on digital platform workers, Bissell (2022) shows how subjects harness data disaffection in response to their working conditions, cultivating mechanisms for resilience that salvage their agency in an otherwise unfavorable relationship. Thus, data disaffection directs attention to unpacking how individual and institutional responses to data disaffection collide and reconcile within institutions, and especially across time. This is not only true of commercial companies, but also regulatory and policymaking institutions, which are themselves composed of people reconciling individual and institutional implications of data disaffection. In this case, rather than perpetuating data accumulation, the strongest institutional logic may be the lag narrative, or the idea that technological development and practices will always outpace regulation (Marchant et al., 2011). This can be understood as a form of disengagement produced by data disaffection that directs regulatory and policymaking institutions to accept the inevitability of datafication and to simply manage it rather than intervene.

A final direction is to explore moments of breakdown in datafication. A common theme in infrastructure studies is to study moments of breakdown in which infrastructures become more visible (Star, 1999). This is applicable in at least two ways. First, transparency and disclosure can be interpreted as a kind of breakdown in the system of datafication itself. While it is important not to privilege transparency as a revelatory act, we can interpret apertures in the affective infrastructure of datafication as moments of system failure that betray its presumed invisibility and mundanity. After all, the various processes of datafication—data collection, processing, storage, and computation—are meant to be obscured behind a glossy, unassuming user experience (Crain, 2018; Monahan, 2016). Thus, when the glossy veil is pierced—perhaps by a malfunctioning integration with an intermediary vendor entrusted with responsibility for customer data (Waldman, 2021)—it is an opportunity to examine how datafication, and data disaffection, are mediated across relations that exceed either the user or the company collecting their data. Furthermore, data disaffection leads us to inquire not only about how these moments change individuals' relationships with specific companies, but rather to think about how the cultural conditions that produce disaffection might be interrupted in these interactions.

Data disaffection also leads us to identify cultural moments of breakdown. In what moments is the inevitability of data accumulation interrupted—and how do various actors, including users, companies, mediating actors, and others—respond? This approach can be useful to unpack how controversies over data privacy may not, in fact, disrupt datafication because they are employed in service of data disaffection by reproducing disaffect and perpetuating the inevitability of datafication. For example, studies have found that individuals responded to the Cambridge Analytica scandal by recognizing that datafication is "inherent to the digital world" (Afriat et al., 2021) but also by claiming to be immune from its consequences (Hinds et al., 2020). Data disaffection provides a lens to interpret these beliefs as symptoms of data disaffection being laid bare and manifesting in anesthetic claims to not care.

Conclusion

We have proposed a conceptual framework that clarifies the role of affect in mediating datafication. Specifically, we have engaged scholarship on datafication, especially that which focuses on user-centric analyses of disengagement as a social implication of datafication. This includes diagnoses of, for example, online apathy (Hargittai and Marwick, 2016), privacy fatigue (Choi et al., 2018), privacy cynicism (Hoffmann et al., 2016), surveillance realism (Dencik and Cable, 2017), and digital resignation (Draper and Turow, 2019). In conversation with this body of research, we have centered a relational perspective, which we operationalized by analytically centering infrastructure and affect—including disaffect.

We offered the concept of *data disaffection*, which describes the structural cultivation of accepting data accumulation as inevitable. It can be understood as a structure of feeling that mediates affective, behavioral, and institutional responses and processes. Data disaffection thus helps reinterpret user disengagement as responses to the affective capacities of cultural conditions rather than commercial or technological processes; it locates user agency in individual and collective responses to those affective capacities; and it brings individual affective and behavioral responses and institutional processes together as manifestations of a common cultural condition operating across micro- and meso-scales.

Our goal was to put forth a conceptual intervention in analyses of datafication at this critical juncture when various jurisdictions around the world are adopting data governance regulations. There are widespread experiments with regulatory approaches to data governance that are quickly standardizing and stabilizing particular understandings of the problem(s) that datafication poses. Is it an institutional mechanism of data capitalism? A widespread sense of apathy and submission? Our framework of data disaffection interprets both individual and institutional disengagement and resignation as a cultural phenomenon—albeit a temporally specific one—that relies on an affective economy manifested in relations across a variety of actors, including individuals and commercial companies, but also regulatory bodies, intermediary actors, interfaces, and data sets themselves. We thus suggest examining relationality itself by studying interactions among actors, especially when individual and institutional manifestations of data disaffection intersect, and by exploiting breakdowns of datafication as moments where its

affective infrastructure is laid bare. Thus, we hope that the lens of data disaffection offers both a conceptual and a pragmatic view of what datafication is and why it matters.

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Note

1. These arguments bear resemblance to the concept of *rational ignorance*, in which a person may make a reasoned choice to refrain from learning about an issue before voting if they decide that the potential benefit of obtaining such information would not exceed the cost of doing so (see Downs, 1957).

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