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Citizen Data Audits in the Contemporary Sensorium

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Citizen data audits build on Jesús Martín-Barbero's (JMB) theorization of the contemporary sensorium to foreground citizens' situated, affective responses to datafication. We argue that social audits are necessarily historically situated, highlighting how the processes by which we evaluate reality or think about data power are inevitability contextually bound. With this in mind, JMB's maps of contemporary mediations ground local experiences with datafication; however, we argue that his work can be complemented by more nuanced appreciations of affect theory. Based on this, we discuss three citizen-centered data audits techniques that can be used to encourage personal assessments of engagements with the contemporary sensorium. Overall, this work offers individuals and communities methods to analyze, reflect on, and evaluate their unique, contextual engagements with datafied and algorithmic societies. These methods offer people pathways to visualize and redraw the map of the systems they inhabit—and possibly even to reposition themselves within it.

Keywords: citizen-centered data audits, datafication, sensorium, technicities, sensorialities, affect

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Datafication—that is, the transformation of social lives and identities into quantified data (van Dijck, 2014)—seems nowadays to be a ubiquitous process. It is evident in most facets of our daily lives: when we log on to a social media platform, buy medicine at our local pharmacy, or fill a government form to access a public service. These processes of datafication reorganize citizens' knowledge spheres and social lives—which are progressively commodified and embedded in economic relations (Mejia & Couldry, 2019; Ricaurte, 2019). In response, scholars and activists alike have highlighted the need for a new social contract for data that emphasizes (among other things) the agentic nature and lived realities of data subjects, as they are now considered a necessary step toward more inclusive, fair, and participatory information systems (Baack & Maxwell, 2020). Indeed, multiple authors have previously emphasized the relevance and urgency of such a situated approach to data through their work on data activism (Milan, 2016), data literacy (Pangrazio & Selwyn, 2019), and data colonialism (Couldry & Mejias, 2019). These calls underline the importance of reaching beyond instrumental and technical lenses for thinking about data and understanding datafication as sociocultural mediations that shape our situated experience (Micheli, Ponti, Craglia, & Berti Suman, 2020).

In this context, citizen-centered data audits offer a powerful historically situated and contextual approach to surface and make sense of cultural and economic participation patterns that result from datafication. Indeed, data audits respond to calls for citizen empowerment vis-a-vis data and information systems that come from both activism (e.g., Ada Lovelace Institute, 2021) and academic literature (Gurstein, 2011; Milan, 2019). Such calls are situated at a moment when civil society is mobilizing legal and technological competencies to audit state and corporate use of personal and big data. Nevertheless, calls to integrate new epistemologies (de Sousa Santos, 2015) and ontologies (Escobar, 2018) into studies of current information systems urge us to critically reflect on whether such approaches properly address and respond to people's actual experiences with media, data, and knowledge systems (Rincón & Marroquín, 2019a, 2019b). Such an approach involves moving away from functionalist interpretations that emphasize what people do with data, leaning instead on the interpretative possibilities with which citizens experience datafication—thus opening several critical questions for future auditors (whether academic or activists): How data audits enable individuals and communities to evaluate information systems from the perspective of their own experiences, feelings, values, needs, and desires. How are information systems shaping the knowledge sphere? How does this reorganize citizens' participation in the production of culture, heritage, tradition, and literacy, among other things?

Accordingly, in this study, we explore methodological approaches to data audits that emphasize citizens' points of view and affective responses to information systems. To achieve this, we draw from the work of Latin American scholar Jesús Martín-Barbero (henceforth JMB), whose reflections on the mediation of culture offer us a lens to better understand the interpretative possibilities with which citizens appropriate and transform the media ecosystem. We start by arguing that social audits are necessarily historically situated, highlighting how the processes by which we evaluate reality or think about data power are inevitability contextually bound. Next, we explore Martín-Barbero's (1993, 2019) maps of contemporary mediations to discuss how technicities and sensorialities provide insights into datafication, information systems, and algorithmic decision making. We expand on recent debates about how JMB is applied to the digital sphere by drawing on the work of Sarah Ahmed (2010); her work allows us to examine how affective responses to information systems articulate—and indeed, offer the transformative potential to—citizens' data audits. Finally, we illustrate how this approach toward data audits can be implemented by presenting

examples of techniques that were developed through field-work experiments with data justice organizations in five countries in Latin America. We conclude by explaining how our approach differs from existing forms of data audit through uptake of affective and performative perspectives, and then discuss the implications for local agency in the face of global processes of datafication.

Data Audits as Social Audits

As a form of oversight, social audits take place in a historical and social context; they contemplate the hegemonic processes at work in a particular setting, given the systems that perpetuate those processes. With this in mind, data audits will reflect, and reflect on, how data and information systems—or datafication more broadly—enact influence (or not) in a time and place.[2] Since data and information systems change over time, as does their uptake, audit goals and techniques will also need to shift to make sense of data's shifting role in organizing power, social relations, and resource distribution.

The history of social audits illustrates this point clearly. The social audit was originally conceived by Theodore J. Kreps in the United States in the 1930s to assess corporate contributions to U.S. society. He famously wrote, "The acid test of business is not the Profit-and-Loss Statement but Social Audits" (Kreps, 1940, p. 2). Kreps' work was taken up by a Temporary National Economic Committee (TNEC) struck by the U.S. Congress in 1938 to assess monopoly industrial power in the context of interwar Fordist struggles over the social compromise between labor, industry, and government. In his report to the TNEC, Kreps (1940) recognized that the American public would ultimately want to know if corporate actors contributed to broad social goals such as health, education, or international peace. However, for practical and political reasons, he chose to focus on measures of employment, production, consumer power, payrolls, and dividends in his audit of 22 industrial sectors, nine economic groups, and three major American firms. Using data that corporations were mandated to share with the federal government, he showed that economic concentration had a negative impact on employment and consumer power, and from this, he concluded that business was failing to achieve its social function in the United States (Kreps, 1940, p. 92; see also Carroll & Belier, 1975, p. 590; Domínguez Martín, 2008; de Lima Pinel, Cosenza, & Llena Macarulla, 2015).

From this example, we see that social audits respond to the societal conflicts that shape a particular time and are implemented against the backdrop of dominant means of production, modes of regulation, and class conflicts. Kreps' (1940) conclusions need to be understood in the context of the Fordist industrial paradigm, in which the state intervenes to secure full employment and labor accepts managerial control in exchange for rising wages, all in the context of mass industrial production and consumption. It is in this context that his conclusion, that businesses failed to realize their social function, should be read as a form of social audit, because the audit is testing the foundations of the political and social compromise of a particular time and place. In addition, social audits are suspended within relations of power. Without the backing of the TNEC, Kreps would have faced significant challenges to marshal the information necessary

[2] This way of describing audits may feel unfamiliar to those who are schooled in technical audits, such as financial audits or information system audits. In those cases, criteria and procedures are crystalized into widely accepted norms or practices, however, any technical audit is just that, the stabilization of historical tensions that originally arose around social concerns.

to carry out an audit of corporate actors, and the audit itself was a challenge to the power relations that produced the above mentioned political and social compromise.

We see similar dynamics playing out in contemporary examples of social audit, but against different backdrops. For example, in the late 1990s, in the context of growing neoliberalism, the Mazdoor Kisan Shakti Santhan (workers' and farmers' power organization) of Rajathan, India, launched a right-to-information movement that sought to give ordinary citizens access to government information as a means to audit government spending (Jenkins & Goetz, 1999). In this case, citizen audits took place against the backdrop of a larger shift from centralized planning to a regulatory state in India, giving rise to the demand for "legislative and regulatory reforms to provide a legal basis for local efforts to obtain official documents" (Jenkins & Goetz, 1999, p. 605). If neoliberalism is founded on a commitment to free-market activity, then the state would have a responsibility to create conditions for citizens to participate both in governance and economic processes. This would include reducing information asymmetries that undermined access to government contracts, allowed corruption to run unchecked, and led to poor infrastructure that undermined productive processes. Access to information would enable social audits of infrastructure spending, while also testing the state's actual commitment to the neoliberal "free flow" compromise.

If audits are historically specific and suffused with power, then what can be said of the current moment of surveillance capitalism and platform production? How does data auditing manifest in this context? For whom and by whom is the audit conducted, and to what ends?

Contemporary personal data-protection laws offer a legal basis for citizen-centered audits of corporate use of personal data. These laws use consent mechanisms to strike a balance between the right of individuals to control their data and the rights of corporations to leverage this data for productive activities. They typically include subject-access rights, which give individuals the ability to access the personal data that private companies hold about them, and these have formed the basis of several "audits" of the transparency of corporate datafication processes (Ausloos & Dewitte, 2018; Hilts & Parsons, 2014; Mahieu, Asghari, & van Eeten, 2018). It is technically possible for citizens to use access-to-information requests to carry out sophisticated social audits of corporate actors based on consent mechanisms. For example, they could use access-to-information requests to check whether their personal information is, say, shared across the branches of a conglomerate. However, Reilly (2020) argues that corporate transparency audits are technical in nature in that they monitor corporate legal compliance with the terms of consent. Data-protection frameworks focus on the materiality of data flows rather than on how data and information systems come to mediate our social world and knowledge sphere. Civil society actors or members of the public become extensions of the state apparatus for monitoring corporate compliance with privacy regulation when they do this type of work. In this way, they contribute to solidifying the social norms that create the regulatory foundations of datafication rather than subjecting them to a social audit.

An alternative approach departs from the observation that the construction of information systems determines how we as individuals or communities come to be "known" by hegemonic actors. Decisions are made based on that intelligence, and this has implications for how people access services and spaces (O'Neil, 2016). Rosenberg (2013) argues that this is precisely why data has become indispensable in our current age of datafication, since information systems can mobilize data to construct and manage whatever reality

they want to make. Similarly, Rowley (2007) argues that data takes on value insofar as it can be channeled toward a particular goal. With this in mind, Kennedy and Moss (2015) argue that data mining needs to be regulated in ways that make data's interpretation and mobilization more democratically available to all citizens. In this way, data can be used "in ways that enable members of the public to understand each other, reflect on matters of shared concern, and decide how to act collectively as publics, thereby allowing publics to constitute themselves as more reflexive and active agents" (p. 2).

In this regard, correspondence studies (Gaddis, 2018) and algorithm auditing (Courtland, 2018) offer more promising means to conduct social audits. These two approaches critically assess how reliance on biased, false, or incomplete data sets produces bias in decision making. Early forays into this field used analogue techniques, such as submitting false CVs to recruitment campaigns to detect and quantify bias in hiring processes (Gaddis, 2018). Recently, this area of study has produced stunning findings about the inherent biases of sensing technologies. For example, Buolamwini and Gebru (2019) discuss how automated facial analysis algorithms have significant disparities in their ability to classify different genders and races, thus questioning how these systems perpetuate and exacerbate discrimination against specific populations.

But while the results of algorithmic auditing are provocative, they tend to exist in the same unreachable technical stratosphere as the information systems that create technological bias in the first place. They are highly technical, resource intensive, and positivistic, placing them well out of reach of the people who are affected by such processes. In this way, algorithm audits in some ways reveal, but in other ways also reflect, the technocentrism that enacts the dominant social experience of our times.

There is also the troubling possibility that the problem might not be simply the use of biased, false or incomplete data sets, but also the unwillingness of a digitally mediated society to listen to its own members in the first place. Indeed, Gaddis (2018) himself points out that correspondence audits fall short on identifying the mechanisms that lead to discrimination. This is a particularly challenging problem for algorithmic auditing since today's socioinformational systems rely on mundane daily transactions to gather their massive data sets. To the extent that the bias in information systems reflects the bias that exists in society, the two will mirror and magnify or reinforce each other. What is more, given that attention itself is an economic resource within digital capitalism (van Krieken, 2018), power relations will emerge out of human processes within particular times and places rather than the algorithms themselves.

This would suggest that, for social audits to "get at" the hegemonic processes of the contemporary moment, their focus needs to shift away from either legal norms or technological processes, and take up how people experience and enact socioinformational systems in their everyday lives, and crucially, what this means for the mediation of their truths (Dencik, 2019; Rincón & Marroquín, 2019b). The goal of an audit in this case is to surface, reflect on, and evaluate experiences, generate spaces to discuss the localized "truths" of datafied realities, contemplate how uptake of data and information systems "order" society through their mediation of social and cultural processes, and also identify how the digitally mediated knowledge sphere escapes the parameters of dominant accounts. Mann, Nolan, and Wellman's (2002) study on sousveillance offers a starting point for this approach to social audits by foregrounding the relationship between data provider and data collector in the daily expression of sociotechnical relationships. The goal of the artistic work described in Mann and colleagues' (2002) study was to mirror patterns of control back at

bureaucracies, and in this way provoke reflection on how technology is used as a means to organize and discipline. For example, in one experiment, he walked around with a video camera on his body as a way of drawing attention to growing video surveillance in public or private spaces. He used these provocations to create dialogue about growing video surveillance.

What we take from Mann and colleagues' (2002) work is the need for self-reflection and self-appraisal about the experience of participating in, engaging with, resisting, or shifting our relationships within socioinformational systems. Self-appraisal allows us to assess information systems based on our feelings, values, and needs, and it can create authentic spaces for reflection about how our participation in datafication and information systems organizes power flows and articulates relations within a community. Drawing inspiration from JMB, doing this type of work requires auditing datafication "from the other side, that of the user's ways of seeing and hearing, ways of looking and reading, as exercised by receptors-as-social subjects, both individually and collectively" (Martín-Barbero, 2019, p. 194).[3]

Data Audits and the Contemporary Sensorium

In very general terms, Martín-Barbero (1993) theorizes how cultures are mediated by communicative practices in the context of specific media systems. His work centers the study of media around how audiences' experiences, senses, and perspectives mediate meaning-making, thus recognizing their agency in the production of culture. He approached this through maps of the sensory apparatus—or sensorium—that emerge through patterns of sharing in and around different media forms. This concept, which we elaborate and further develop in this section, offers a useful starting point for the social audits of datafication that we present in the next section. But before we can get to those techniques, we first address some concerns about how affect can be taken up in Martín-Barbero's work (1993, 2009).

Mobilizing JMB's work for social auditing requires a thoughtful application of what Vassallo de Lopes (2018) calls a Barberian theory of communication (p. 42–43). Doing so involves three key commitments: (1) using cartographic methods to abstract what is known and normalized so that we can see it with new eyes, (2) coming to know communications from the "place of enunciation," and (3) analyzing how social practices and articulations, plus dominant media or information and communications technologies, coconstitute the space of communicative mediations of culture. The goal, as Martín-Barbero (2008) puts it, is to:

> Discover the extent to which communication works as an interchange and interaction between subjects who are socially established and located in produced and productive conditions and scenarios that present asymmetrical differences and are, therefore, areas of power where disputes, shifts, and struggles for hegemony take place. (p. 6)

The first step involves establishing the scope of the terrain, as in the case of JMB's famous mapas nocturnos (nocturnal maps). Martín-Barbero (1993) uses this term to describe ways to

[3] All translations of Spanish or Portuguese texts included in this study were carried out by the authors.

> Study domination, production and labor from the other side of the picture, the side of the cracks in domination, the consumption dimensions of economy and the pleasures of life. It is not a map for escape but, rather, to help us recognize our situation from the perspective of mediations and the subjects of action. (p. 212)

These maps establish the main axis of social and cultural practices in a given time and place. He created several maps during his lifetime—for mass media and the rise of new media—and more recently he explored, along with his student Omar Rincón, a map dedicated to understanding fluid, digital, hypertextual processes (Martín-Barbero & Rincón, 2019, p. 17). This new map—called the contemporary sensorium—is bordered by two synchronic factors, temporality and spatiality, and two diachronic factors, technicity and sensoriality. These four dimensions are not to be read individually but rather as diffuse, ambiguous, and dense articulations that highlight how culture repoliticizes and embeds media (Rincón, 2019, p. 266).

Temporality and spatiality describe the territories we inhabit in contemporary mediations of culture. Following JMB, time and space are where "identity, memory and politics emerge; in other words, we are politically and culturally from a territory, politically and culturally we belong to a territory" (Rincón, 2019, p. 269). Because of this, the cartographer of mediations must confront such territories by embracing a process of unstable, constant, and active contextualization. Indeed, such efforts to actively contextualize our contemporary sensorium are essential, given the increasing colonization of our times and spaces by datafication (Couldry & Mejias, 2019). Meanwhile, the two diachronic factors offer the potential to transform our contemporary sensorium. As noted by Rincón (2019), it is through technicities and sensorialities that we acquire the language to better interpret—and possibly, transform—the contemporary sensorium.

JMB uses the word "technicities" to capture how new media and digital technologies meld technique, language, expression, and apparatus into one sociocultural-technical system. In earlier maps, technicity is positioned as a secondary dispositivo or mechanism[4] shaping the relationship between long-standing industrial systems (on a diachronic axis) and emergent modes of production (as the synchronic axis; Vassallo de Lopes, 2018; Rincón, 2019). In later works, JMB became preoccupied with how new media or information and communications technologies were coming to inform the possibility for meaning-making, knowledge production, and especially how we know and express ourselves. He argued that "If during centuries technology was considered a mere instrument, today it is already well on its way to becoming reason [itself]" (Martín-Barbero, 2011, p. 110). By 2017, he situated technicity as one of the primary "landmarks" in the contemporary sensorium (Martín-Barbero & Rincón, 2019). Indeed, JMB's work on technicities astutely presaged an avalanche of intellectual and public concern about the power of datafication and algorithmic decision making to shape our social and cultural experience (Eubanks, 2018; Noble, 2018; O'Neil, 2016).

Sensoriality refers to the act of signifying the world from our senses—the process of interpretation that contemplates both our biological perception and sociocultural standing (Valquiria, Regiane, & Gerson, 2019). In 2011, Martín-Barbero explored the crisis of identity that arose from the "Sensation of helplessness or, better yet, a mix of frustration, distrust and political paralysis" (2011, p. 106) created by labor flexibilization, or what

[4] Dispositivo can be translated either as mechanism or device. Some scholars of JMBs work use the word articulaciones (articulations) instead.

we might today call the gig economy. He went on to explain that with the collapse of the church and state as regulators of culture, "both individual and collective identities are subject to the fluid oscillation of guides and their interpretation, adjusting themselves to the image of a fragile network, without center and in continual movement" (Martín-Barbero, 2011, p. 116). In this context, he argued, subjectivity and sociability come to be formed through the networks and interfaces of communications technologies that create the conditions for our lifeworld, a situation that greatly concerned him. JMB and Rincón position "sensorialities" as existing in tension with technicities on the map of the contemporary moment (Rincón, 2018, 2019). Like technicities, the word "sensorialities" is carefully chosen to capture the interlacing of meaning-making, techniques, and apparatuses in the contemporary moment, however, in this case it focused on recovering what is human in processes of meaning-making. As Martín-Barbero and Rincón (2019) explain, "we need the human, cultural and emotional to counteract emotionless informational apparatuses" (p. 20).

All together, according to this view, the contemporary sensorium emerges from the articulations of the media apparatus, human processes of meaning-making, and specific temporal and spatial realities. The platformization and datafication (technicity) plus social isolation (sensoriality) that characterize the contemporary sensorium have raised many concerns among scholars. Rincón (2017, 2018) fears that it establishes the conditions for a zombie democracy, where citizens are guided by the logics of consumption. Couldry (2019) also documents a 2017 conversation in which he and Martín-Barbero discuss how digital platforms are reshaping "the very spaces where culture and social life are lived out" (p. 187). Both Rincón and Couldry identify a hegemony of consumerism that shuts down the possibility for human sympathy and connection. It is not that the apparatuses are emotionless but rather that their particular formulation contributes to a sensorium devoid of emotion—or, more to the point, of care. However, JMB did not quite share this view. As Couldry (2019) recounts:

> I felt from Jesús Martín-Barbero a certain caution towards the pessimism with which these developments undoubtedly leave me: there must, he seemed to be saying, surely be some paths towards resistance to this, the deepest commercialization imaginable of human life. (p. 187)

To locate these paths, we can turn to the second step in the Barberian theory of communication, which is to explore the contemporary sensorium at the point of enunciation. Here, Rincón (2019) argues that emotion offers an important means to "read the analytics and comprehension of contemporary modes of perception and feelings created by technicities" (p. 270).[5] This approach allows us to explore people's responses to technicities and sensorialities, such as the perverse relationship between the clickbait of an attention-based economy and the rituals of doom scrolling, trolling, cancellation, and flaming that accompany it. Or we can study surveillance or the transactional nature of information systems from the

[5] This material was written by Rincón based on an interview with JMB. The authorship is listed as "idea and argument: Jesús Martín-Barbero, free interpretation: Omar Rincón" (Rincón, 2019, p. 17). Affect is taken up by Rincón, who has addressed this theme elsewhere (for example, Rincón, 2018). JMB was agnostic about how one arrives at the point of enunciation, whether through studies of cognition, perception, practice, or affect. Rincón (2018) highlights affect as particularly helpful in the contemporary moment given particular effects of contemporary fluid, digital, hypertextual processes on identity formation, and social processes.

point of view of how it makes people feel because community members communicate their experiences and expertise through the fear, mistrust, frustration, vulnerability, insecurity, desire, agency, creativity, and resilience that they experience in their everyday lives (Lewis, Gangadharan, Saba, & Petty, 2018).

The third step is to work from the emotional responses of data subjects to understand how a specific cultural reality is articulated given the processes of datafication and ways of knowing that bound our analysis. If emotion drives our experience of the socially mediated attention economy, then affect is at the heart of the fragile and fractious assemblages that constitute the sensorium.

An example can be helpful to illustrate this point. For indigenous communities in the Pacific Northwest, sharing data holds particular cultural significance (Animikii, 2019). The act of sharing one's name, for example, engenders—is literally producing of—a relationship that carries the obligation of interpersonal and communal responsibilities and commitments that are part of a specific way of knowing. When government or private-sector information systems reduce names to transactional currencies that structure access to goods and services (technicity) based on Western cultural norms around naming (technicity), indigenous people may experience loss, relive the history of colonialism, feel exploited, and sense a lack of control over their own cultural identity and material well-being (sensoriality). The feelings of indigenous people in the face of this situation might include things like pride in naming traditions, resilience in the face of widespread misunderstanding or denigration of those traditions, and frustration at having to participate in exploitative information systems. The cumulative sharing of affective responses between indigenous people and with settler communities, given the media forms at work, will give rise to the "contemporary sensorium" that involves both the immediate reality of an information system, and larger ongoing processes of colonization and reconciliation.

As powerful as this approach is for conceptualizing how datafication mediates culture, it is unclear that affect will, on its own accord, "burst the mechanical and uniform modes that cultural capitalism wants to impose" (Rincón, 2019, p. 221). We are skeptical of how Rincón juxtaposes the sensuality of people with the emotionlessness of informational apparatuses. We require more nuanced consideration of how affect would mediate culture. Sara Ahmed (2010) offers valuable insights in this regard. She argues that social truths arise out of networks of affective relations, and we tend to go along with these processes of social construction because we rely on these networks for a sense of affinity. For example, Ahmed (2010) argues that to feel a sense of belonging, we accept the notion that family is a social good and participate in the reproduction of the family as a social construct. To reject "the family" is to also reject the solidarity of the family construct. Extending this notion to the media sphere, to reject datafication is also to reject the sociality of platformized processes, so our very participation in digital spaces is an act of prosuming consumerism's disconnected and uncaring affective relations. As sensed by Couldry (2019) and Martín-Barbero (2019), the challenge is that the very articulations that hold this map together are precisely the forces that disarticulate our communities and destabilize collective projects. The points of the map collapse into each other in ways that pervert human relationality.

In his original conceptualization, Martín-Barbero (1993) relied on audiences' inherent affective, cognitive, creative, and interpretive power as a boundary to or perversion of hegemonic media flows. However, given how information systems actively colonize spaces for perception, emotion, meaning-making,

and relationality, we cannot rely on affect as an automatic source of emancipatory potential. Knowing that affective responses articulate a cultural reality will not directly lead to transformation. It points only to transformative potential—potential that can be co-opted or mobilized. There need to be ways for subjects and communities to acknowledge and mobilize spaces to construct individual and collective identities and rebuild the institutions that orient cultural articulations toward local traditions, values, and goals. Taking up Ahmed's (2010) thinking, it is not just about embracing "the sensual, embodied, and affective dimensions" (JMB, as cited in Taylor, 2002, para. 3) of a culture but also about enacting affective relations in new ways that express a new version of "the good." In what follows, we explain how social audits within the contemporary sensorium can help individuals and communities to reconstitute their sense of affective relationality given the effects of datafication.

Citizen Data Audits as Affective Self-Appraisals

A Barberian approach to citizen data audits offers a way to carry out the community-engaged work necessary to uncover how datafication contributes to the sensorium. Each of the social audits we explored in the first section of this study was oriented around a central question that related the subject of analysis to a particular expression of hegemony. Are firms realizing their function within a Fordist social compromise? Are governments fulfilling the promise of a level playing field within neoliberalism? Are firms adhering to the consent mechanisms that uphold the regulatory compromise of privacy policy? Is algorithmic decision making made based on unbiased information?

But taking JMB as a starting point for a citizen data audit, the question would be: How does participation in datafication make me feel, and how do my experiences and responses to datafication mediate my social reality? This places the emphasis not only on seeing with the other, as JMB famously wrote about film and telenovelas, but also sensing with the other, which is more appropriate to our platformized reality. The context for analysis will be established by the individuals or communities undertaking the audit, which will also establish the temporality and spatiality of the map under consideration. The resulting self-appraisal explores affective mediations of technicities and sensorialities within a particular setting. The goal of the social audit, in this case, is to reflect on how the feelings produced through our participation in datafication organizes power flows and articulates relations within a community. Methods of citizen data audit include acts of orientation, validation and revindication, which we present on continuation.

Orientation techniques focus on revealing our experiences and relationality in the face of datafication's technicalities and sensorialities. Here, we might start with a rationalistic approach such as data journeys, which is inspired by the work of scholars such as Bates, Lin, and Goodale (2016), Akbari (2020), and Light, Burgess, and Duguay (2016). Participants are asked to reflect on specific moments when their data was collected and use what they know from that experience to analyze how it was collected, where it is stored, who is involved in the collection and analysis process, and what interests and logics of power are involved. For instance, in Colombia, Rappi food-delivery drivers could use this method to "map" what they know about the data collection and data management practices of the company.

However, since information about data journeys is limited, participants soon experience the opacity of datafied processes. The frustrations that arise from this realization are the actual point of the data

journeys exercise. For example, a recent California legal project sought to reveal the model used to surveil workers in Amazons' distribution warehouses (Paul, 2021). The panopticon-like surveillance of productivity was causing workers to feel such enormous pressure that they did not feel they could spare time to relieve themselves during their shift. Knowing what type of data is collected and how it is processed would allow workers to make sense of how they participate in the information systems that organize their labor relations. But acknowledging how datafication makes us feel and how it shapes the ways we relate to each other will reveal how datafication expresses power, and for whom, through the technicalities and sensorialities of a given setting. Through this exercise, participants orient themselves within a particular map of how affective responses mediate datafication's power.

Validation exercises acknowledge and affirm the point of enunciation within processes of datafication. For example, "what is a name?" asks participants to list the different names that they go by, the situations in which each of these names is used, how each of these name-situations makes them feel, and the values that they attach to each of these names. For example, a family nickname might be used only by siblings within family settings and could make a person feel both nostalgia and paternalism. Auditors are asked to reflect critically on how their participation in a specific moment of name sharing reproduces a particular vision of "the good" within its context. For example, the use of a nickname among siblings might reproduce the sense of belonging and inherent value of family as a social construct.

More concretely, in a recent case, an indigenous woman named Kakeka Thundersky from Manitoba, Canada, discovered that under the Vital Statistics Act of that province, "the given name and the surname must consist only of the letters 'a' to 'z' and accents from the English or French languages, but may include hyphens and apostrophes" (Manitoba's Vital Statistics Act, as cited in Monkman, 2022, para. 7). This meant that she was unable to register her daughter's name, Tokala Wači Wiŋ, which in Lakota means "dancing kit fox woman" (Monkman, 2022). In this case, the desire to feel any type of affinity to the Canadian nation state by participating in its processes of datafication would oblige Thundersky to accept the personal rejection at the heart of the colonial project. What is a name validates people's affective and relational responses to experiences like this one, while also highlighting how datafication expresses hegemonic power.

Finally, revindication helps auditors become self-aware of how their participation in technicities and sensorialities constitutes their cultural reality. For example, El Desborde (The Overflow) is inspired by the work of Villasante (1999), who studied how identities are expressed in response to the many possible demands that we face in daily life. This method asks participants to describe a specific instance in which they were asked to share data, and then reflect on (1) what was expected of them in that moment, (2) how this made them feel, (3) how they reacted, and (4) how they actually wanted to react. Auditors describe their actual participation in the information system, as well as how their identity, needs, desires, or emotions "overflowed" the requirements or provisions of that system.

Villasante (1999) argued that people can respond in various ways to an overflow situation. They might comply with social expectations despite their misgivings. They could reject social expectations outright but then must forgo the affinity offered by participation. They could engage in subterfuge by, for example, submitting false data. Or they could identify the gaps between their needs and expectations and search for ways to enact change. Of these, he advocated the fourth option because he saw it as the best opportunity

to redress injustices and improve the ability of systems to meet the needs of communities. This implies reconfiguring affective relations as they are expressed in processes of datafication such that they express the needs and desires of the community, or as Ahmed might put it, enacting affective relations in new ways that express a new version of "the good."

In total, a Barberian approach to citizen data audits creates opportunities for people to assess datafication from the perspective of their own experiences and how those experiences shape relationships within the community, including relations of power. The techniques outlined here allow participants to establish their own scope and criteria for assessment and question the goals of information systems, with a view to orienting, validating, and revindicating their participation in the constitution of the contemporary sensorium. Our hope is that they can enable communities to become more conscious of how they enact their cultural reality in the context of datafication and could help them value, imagine, or embrace forms or applications of datafication more in keeping with their ways of knowing, values, desires, and cultures.

Conclusions

Citizen-centered data audits offer a methodological lens to contemplate affective responses to datafication. Unlike other models of social audit, the approach outlined here leverages the multiple interpretative possibilities in which citizens evaluate datafication and information systems, focusing on the sources of power within the contemporary sensorium. Indeed, this proposal of data audits emphasizes a relational and contextualized—rather than an objective—reading of information systems, where the task is not to evaluate someone else (such as a state or a company) but how we engage in the reproduction of hegemonic power through participation in information systems. This argument can be contrasted with approaches that rely on legal and technical bases for the audit of information systems, instead emphasizing the need to explore how people experience socioinformational systems in their everyday lives, and crucially, what this means for the mediation of their truths.

We thus move away from positivistic lenses and promote trust in the experiences and intuitions of people. This repositions the discussion about participation in datafication or digital spheres. Rather than bodies visiting or acting on processes or spaces, citizen data audits take up participation as the contextualization of our involvement in systems, or, to put it another way, the performance of those systems. As Martín-Barbero (as cited in Taylor, 2002) put it, "performance studies has to be in charge of this multiplicity of metaphors through which today's body has become a catalyst both for the biggest nightmares and the biggest hopes of human creativity" (para. 7). With this in mind, data audits require careful reflection on how we feel in our body when we "participate" in processes that involve datafication.

Having said this, we acknowledge that affective responses—although essential articulations that construct a cultural reality—do not directly lead to a transformative response. Indeed, affect is itself mediated and can serve in the construction of positive or negative social constructs. We also recognize that media forms may skew affective responses in situated ways that require local examination—accepting technology as not inherently unfeeling or feeling but rather as a space of mediation among many others that shape our social relations. Accordingly, technology is understood as part of our enactment of affective relations, and we need to use it self-consciously in expressing versions of "the good" (Ahmed, 2010). To

this end, we stress efforts to create emancipatory spaces where participants can resignify their participation in datafied processes and revindicate their needs and those of their communities.

We locate this approach toward data audits at an historical moment where datafication has been noted to reproduce and expand capitalist and colonial dispossession (Couldry & Mejias, 2019; Ricaurte, 2019). Furthermore, and within this cultural and economic background, several academics have noted that scholarly production on datafication is most often centered on western epistemes and necessities (e.g., Silva, 2019), emphasizing a research agenda that fails to address unequal power distribution across the globe. Such omission results in a situation where, as noted by Milan and Treré (2019), the "conceptual and methodological toolbox available to datafication scholars is only partially able to grasp the obscure developments, the cultural richness, and the vibrant creativity emerging at the margins of the 'empire'" (p. 321). In this context, we argue that the methods outlined in this study offer ways to surface all the different ways citizens experience and think about data and what their participation in datafied systems brings to reality. Indeed, such an approach to citizen data audits can be a way to better understand and respect how datafication transforms local social processes, power relations, and enactments, to name a few.

Finally, we are aware that this type of work faces challenges, especially as a response to highly opaque and/or globalized processes of datafication that are beyond the reach of local spaces and processes. However, it is worth highlighting that many information systems are not globalized but rather function within local, subregional, and national contexts. These systems can and ought to be regulated by local patterns of participation and/or governance oversight, but as Mansell and Steinmueller (2020) point out, values associated with datafication "exist in tension both with each other and with the desirability of generating economic values. It is for this reason that the platform phenomenon is sparking intense policy debate about how their operations should be governed" (p. 2). Resolving these debates can be achieved only by people reflecting and rethinking how they experience datafication and what they want from digital platforms. Additionally, in cases where information systems are of global or regional scale and gather data in ways that aim to advance global agendas, understanding different local affective experiences offers a basis for constructing diverse local responses and alternatives (Constanza-Chock, 2020). Accordingly, this model of citizen-oriented data audits offers a tool for addressing local and globalized processes of datafication and offers transformative potential to frame and challenge informational capitalism from the voices of those whose data they incorporate.

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