



Article

From data fetishism to quantifying selves: Self-tracking practices and the other values of data

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Tamar Sharon

Maastricht University, The Netherlands

Dorien Zandbergen

University of Amsterdam, The Netherlands

Abstract

This article foregrounds the ways in which members of the Quantified Self ascribe value and meaning to the data they generate in self-tracking practices. We argue that the widespread idea that what draws self-trackers to numerical data is its perceived power of truth and objectivity—a so-called “data fetishism”—is limiting. Using an ethnographic approach, we describe three ways in which self-trackers attribute meaning to their data-gathering practices which escape this data fetishist critique: self-tracking as a practice of mindfulness, as a means of resistance against social norms, and as a communicative and narrative aid. In light of this active engagement with data, we suggest that it makes more sense to view these practitioners as “*quantifying selves*.” We also suggest that such fine-grained accounts of the appeal that data can have, beyond its allure of objectivity, are necessary if we are to achieve a fuller understanding of Big Data culture.

Keywords

Big Data, data fetishism, ethnography, mindfulness, practice-based approach, Quantified Self, Quantifying Self, self-tracking, technological subversion, value

Corresponding author:

Tamar Sharon, Department of Philosophy, Faculty of Arts and Social Sciences, Maastricht University, P.O. Box 616, 6200 MD Maastricht, The Netherlands.

Email: tamar.sharon@maastrichtuniversity.nl

Introduction

“Data is the new oil” is a phrase that has come to express the growing value of data in an era where Big Data promises to generate new insights and solutions for everything from healthcare to city planning. In response to enthusiastic accounts of the advent of Big Data and datafication (Mayer-Schönberger and Cukier, 2013), critical studies have begun to emerge that point out that the data sets that make up Big Data are always creations of human design, and thus are always implicated in social relations and power dynamics (Andrejevic, 2014; boyd and Crawford, 2012; Crawford et al., 2014; Van Dijk, 2014). In these critical analyses, the “real” value of (big) data lies not so much in its incarnation of a new scientific method or paradigm; rather, its value is framed in terms of political power, insofar as it enhances various forms of government surveillance (Bauman and Lyon, 2013), and in terms of monetary resource, as it benefits corporate profit (Fuchs, 2010). What these studies tend to foreground, then, are the hidden mechanisms and darker sides of the political economy of Big Data. They generally have little to say concerning the value that data has for those individuals who actually generate it, and who are positioned on the “losing side” of Big Data profits.

Where the question of the value of data for those who generate it *is* addressed, this value is typically understood as residing in the aura of neutrality and objectivity that numbers convey, and their role in a will to (quantified) truth (Lupton, 2013a, 2013b; Morozov, 2013). The critical claims against the political economy of Big Data are in this way reproduced at the level of the individual and of “small data.” Avid self-trackers, such as members of what is known as the Quantified Self (QS) movement, are thus typically portrayed as “data fetishists,” enamored by the authority of numerical data and motivated by a desire to control and optimize the overwhelming complexity and uncertainty of life (Dormehl, 2014; Morozov, 2013; Rettner, 2014). Data, in such accounts, are framed as inherently reductionist, and practices of quantification are seen as a tool in the quest to reduce all phenomena, no matter how complex, to numbers while displacing other forms of meaningful expression (Lupton, 2015).

While we subscribe to a critical approach to celebrations of data as neutral and objective, it is our contention that in order to understand what we might call the culture of Big Data—not just its political economy—and in order to understand why so many people willingly participate in it, the explanatory framework of data fetishism is insufficient. Instead, more effort needs to be made to understand the myriad ways in which data are deemed valuable and meaningful for self-trackers themselves. Focusing our analysis on the self-tracking practices of members of the QS community, we argue that an ethnographic focus on self-tracking practices (Mol, 2002) offers a perspective that moves beyond the limiting frameworks in which self-tracking is conventionally understood. Our research is thus in line with several recent ethnographically informed studies of QS (Fiore-Gartland and Neff, 2015; Nafus and Sherman, 2014; Neff and Nafus, 2016; Ruckenstein, 2014, 2015), and with appeals to counterbalance stereotypic portrayals of QSers with empirical investigations into their practices (Schüll, 2013).¹ Rather than assuming that the ultimate purpose of self-tracking is the collection of data in which self-trackers perceive an objective truth, foregrounding data-gathering practices reveals a wider variety of ways in which data become meaningful in the context of everyday life.

In other words, we suggest that rather than seeking to achieve a perfectly optimized, calculable and controlling “*quantified* self,” it makes more sense to look at members of this movement as “*quantifying* selves,” who actively engage with data and render it meaningful in and through self-tracking practices.

We acknowledge the limitations inherent to a study of QSers, who are atypical in terms of the degree of reflexivity, intensity and discipline they instill in their tracking practices in comparison to trackers outside of QS. But insofar as the QS movement is often portrayed as embodying data fetishism in its most extreme form, it is on QS “turf” that it is most interesting to evaluate this critique. Furthermore, just as critics of QS do, we take QS practices to be illustrative of what may transpire on a broader scale in the future in light of the growing popularity of self-tracking and its backing by public bodies in areas like healthcare.

In the following, we unpack the main analytical components of the data fetishist critique that is widely held in academic and popular accounts of QS. Next, we describe how QSers attribute meaning to their self-tracking practices in ways that escape the fetishist critique. Our overall aim is to contribute to the growing critical conversation on the culture of Big Data, but by means of a broad, ethnographically grounded understanding of the variegated ways in which people interact with and become involved with their data in everyday life.

The data fetishist critique

Since the QS movement was founded in 2007 by Gary Wolf and Kevin Kelly in San Francisco, it has grown to encompass a worldwide network of 43,000 self-trackers, involving regular gatherings and conferences. Wolf’s 2010 *New York Times* cover article, “The Data-Driven Life,” acts as somewhat of a manifesto for the movement and its aims. Wolf begins with a simple problem statement, followed by a superbly simple solution:

Humans make errors. We make errors of fact and errors of judgment. [...] If you want to replace the vagaries of intuition with something more reliable, you first need to gather data.

In light of Wolf’s words, self-tracking holds the promise of identifying signals and patterns that remain hidden when one relies solely on the limited toolbox of human senses. Measurement, quantification, graphs and spreadsheets do not lie; their emotional detachment and arithmetic precision, both painful and trustworthy, can render these patterns visible, knowable and, hopefully, manageable. Numbers, in this sense, with their particular appeal of scientific objectivity, seem to provide a privileged access to the truth, and generating and tracking them may, as the movement’s self-proclaimed motto upholds, lead to “self-knowledge through numbers.”

The QS movement’s enthusiasm for data and data-gathering is frequently seen as embodying an extreme form of datafication, or “data fetishism,”² which has attracted significant criticism in the media and academic literature (Basulto, 2012; Dormehl, 2014; Feiler, 2014; Lupton, 2012, 2013a, 2013b, 2015; Morozov, 2013; Rettner, 2014). First among these objections is the claim that quantification is, in itself, inherently reductionist. Apple’s HealthKit app, for example, promises to give users a clear real-time

overview of their health, based on variables like weight, heart rate and cholesterol. In the process, critics argue, these data come to represent the definitive truth about “health.” Similarly, weight loss apps like “MyFitnessPal” allow users to track calorie, cholesterol and fat intake. But the relationship of each of these variables to weight, and to fitness in general, is not something that can be reduced to a simple algorithm (Paquet et al., 2007; Scrinis, 2013). Self-tracking works on the basis of categories or indicators that act as proxies for what are commonly very messy and rich phenomena, from “mood” to “health” to “productivity.” In the process, critics protest, an entire world of human, social and environmental complexity may get lost.

Self-tracking enabled data fetishism is thus seen as having a double effect. As it seeks to *reduce* all phenomena and means of accounting for phenomena to numbers, it simultaneously *displaces* other less easily quantifiable albeit insightful ways of expressing phenomena. Discussing the use of reproductive apps that track ovulation and menstrual cycles, for example, Deborah Lupton (2015) argues that such apps suggest that women can achieve more accurate knowledge about their bodies than they did with non-digital means of tracking such as experiencing and observing their bodies’ signs, rhythms and sensations. This “imperialistic streak” of quantification, as Morozov calls it, implies that as one’s trust in numbers grows, one’s trust in subjective, embodied and intuitive knowledge decreases. As Morozov (2013) cautions, “Human experience, run through the quantification mill, is reduced to little more than a stream of silent and mind-numbing bytes” (p. 256).

The reductionist and imperialist components of the data fetishist critique are supplemented by a third one: the idea that there is a politics of measurement, one that is too often overlooked in what is seen as a blind faith invested in data by the members of QS. The use of technologies of measurement for purposes of state control and the management and disciplining of populations has a long history (Porter, 1996). More recently, a growing number of sociological analyses are demonstrating that no less than their forebears, the generation, collection and analysis of digital data is situated in powerful public and private sector institutions, that may use these for aims of government surveillance and online advertising (Andrejevic, 2014; boyd and Crawford, 2012). For some theorists (e.g. Cheney-Lippold, 2011), this marks a shift to a subtle yet no less pervasive form of control, via the digital constructions of “new algorithmic identities.” As this literature argues, numbers, contrary to their proclaimed candor, are not neutral. What this means for self-tracking is that the very categories being tracked are constructs that may imply highly normative and normalizing ideals of what “fitter” and “happier” mean. The commitment to self-improvement that QSers subject themselves to can thus easily be read against a backdrop of the neoliberal project of citizen activation and responsabilization (Ayo, 2012; Lupton, 2012; Sharon, 2015). As data fetishists, self-trackers are commonly considered to be unaware or unconcerned by the normative assumptions and diverse sinister uses their data-generating efforts can be put to.

The variegated tracking practices of QS

Our interest in QS began at the international conference organized in 2013 in Amsterdam. As participatory events that explicitly invite continuous self-reflection about the nature

and identity of the QS movement and the meaning of its practices, in the years that followed—along with other academic philosophers and anthropologists of digital culture—we developed our understandings of the QS movement in constant conversation with QS practitioners. We did so while organizing break-out sessions at QS conferences, interviewing active participants and sharing our thoughts online.³ During this time, we became increasingly aware of how detached perceptions of the QS movement, and “tracking culture” in general, can be from the different forms of meaning-making related to self-tracking in the context of this network.

As discussed, the stereotypical image of the QSer is of someone obsessively datafying the self into a calculable, objectified quantified self. Yet, we observed the QS movement to be a heterogeneous network of people actively exploring many different other effects, affects and objectives of tracking practices, suggesting that it makes more sense to speak of QS as a loosely knit network of “*quantifying selves*.” QS is home to different types of trackers (from the high-tech to the low-tech, the occasional to the intensive tracker, the purposeful to the “random” tracker, the private to the public tracker), to different kinds of objectives and goals (from tracking the effects of medication on Parkinson’s or diabetes, to tracking the effects of music, the weather and particular types of food on one’s mental state), and to many different types of tracking methods. We also observed a variety of “tracking careers”: from people who have expanded their tracking activities, to others who have reduced their tracking activities to only one type. There are some who have “dropped out,” possibly to drop “back in” at another moment, and there are those who realized they were trackers their entire lives, only to find a label for what they did in the community. What we found to be the most significant common denominator to these various tracking practices was the cultivation of reflection on and through tracking. To this end, different formats define the contours of various QS gatherings, from “show & tell” talks, to break-out sessions, to online discussions around specific topics.

While these discussions and practices indicate that, for some trackers, some of the time, the appeal of data *does* lie in its association with objectivity and truth, we discovered three other forms of meaning-making that QSers drew on as part of their self-tracking practices, which we discuss below: self-tracking as a practice of mindfulness; as a means of resistance against and a remaking of dominant social norms and conventions; and as a narrative and communicative practice that can articulate experiences at the boundaries of different domains of knowledge.

Self-tracking as a practice of mindfulness

As discussed, one of the main concerns underlying the data fetishist critique is that a trust in numbers will trump other forms of subjective, intuitive and embodied knowledge. While there may be a tendency for QSers to transform or re-interpret everyday activities, like eating or walking, to fit the technological requirements of self-tracking devices, the relationship between numbers and subjective experience is not a zero-sum game. Indeed, while new technologies always help create new conditions for human behavior, how this dynamic unfolds is not determined a priori (Verbeek, 2011). The self-trackers whom we listened to often spoke about this relationship as a tension, or a negotiation, that produces meaning. In a discussion that took place in a break-out session that we facilitated at the

QS conference 2014 (QS14), one participant explained that when tracking physical activity,

there is a communication between your subjective knowledge and your objective knowledge that you are creating. You always do this kind of cross-check. I feel like I get a lot of activity, but my data shows me I am not, then I have a conversation: “what do I trust?” and “how do I recalibrate?” So that I am starting to say, “now what I feel aligns with my objective data and I trust my objective data more.” Or you say, “I trust my subjective data more, my subjective feeling, intuition more, and I can now process that data in a way that aligns with the subjective feeling.”

In a plenary session and in our own break-out session, another participant, who has been tracking his food consumption for several years, also alluded to this negotiation. Because the “work of tracking can be a lot,” he explains, “you sometimes simplify,” “avoid[ing] complex recipes and prioritiz[ing] food that best fits the capabilities of [your] databases and sensors.” But for this participant, this simplification never came at the expense of losing his intuitive sense of food. On the contrary, his belief is that tracking his food allowed him to develop a “skill,” even a “sixth sense,” whereby he learned to tell how many calories are in a portion and how much food weighs, just by looking at it. His tracking experiment, he told us, “increased [his] mindfulness”—in the context of a relationship to food that had been *mind-less*. This connection to mindfulness practices is more than coincidental, as other commentators of the QS movement have also observed (Boesel, 2013). In fact, it can be considered a recurrent theme throughout QS conferences and gatherings.

Translated into English from Pali and Sanskrit Buddhist texts, the concept of *mindfulness* has by now become secularized and merged with a host of Western institutional traditions, from health, to business, psychology, and, now, also to technological practices (Zandbergen, 2012). Whereas the exact practice of mindfulness may differ depending on the setting, in general it is dedicated to having an active, watchful mind. In the context of QS, participants often use the term to refer to the way in which the practice of tracking helps them to focus their awareness on habits, unconscious actions, and patterns that are typically unperceivable. At a break-out session, one person told us how he used to take a picture each day at 08.36. For him, this was a way of “developing new senses.” He explains, “when I take a picture at 08.36 every day, I have a little better awareness of when it is 08.36.” Another tracker added, “when you do it long enough, you don’t need the tools anymore.” We encountered many more such testimonies to how tracking trained people to be able to “sense” things. In such examples, numerical data are not at all the end-goal of tracking; they are more like an unsophisticated, intermediate stage towards more augmented senses. For some self-trackers, the cultivation of this awareness is more significant than the actual data generated by tracking.

In 2004, the conceptual artist Alberto Frigo began a project to track all his daily activities by recording every object he held in his right hand. “If I keep up the project until I turn 60,” Alberto explains, “I will have photographed 1.000.000 objects and could thus claim to have some kind of DNA code of my life” (QS14). In the decade Alberto has been at it, he has also started tracking his dreams, songs he hears during the day, his

social surroundings and the weather, all of which he brings together using various media such as photography, notes and audio-recordings (see 2004-2040.com).

Alberto has been hailed as an extreme example of the data-obsessed self-tracker (Preston, 2014), fixated on building a more perfect and complete archival version of himself. Yet for Alberto, the significance of his tracking practices lies not in some truth that his databases may reflect back at him. As he told us, he rarely looks back at his data. Nor does he attempt to automate and perfect his data-gathering in the hope of achieving ever more complete and objective information. Rather, he invests in imperfect and time-consuming manual registrations. As we discuss his project over lunch, Alberto stops, pulls out a simple camera and photographs the spoon he is about to use. His choice of this somewhat outdated and cumbersome medium is telling, as it becomes clear that the ultimate meaning of self-tracking for Alberto resides in the very process of recording. He describes his tracking as a way of “activating himself,” and creating a “playful engagement with an otherwise dull surrounding.” The activity of keeping track of the people, things and music that make up the ambiance of a particular public space enables him to be very present in a way that is engaging, memorable and lively. As he explains, the act of constantly recording allows him to *see* more—interesting trash, fantastic cloud shapes, street musicians—and to appreciate as special an environment that others may regard as mundane, dull and ordinary. In this way, Alberto describes the meaning attributed by him to his tracking activities in very different terms than those usually ascribed to him, for example, as the overriding or replacement of the embodied sensorial, “real” world by a “permanent digital life” (cf. Preston, 2014).

The attempt to cultivate a greater mindfulness or awareness is something we found across various accounts of self-tracking. Dana Greenfield designed her self-tracking project, *Leaning into Grief*, around the death of her mother, as a means of tracking her grief. Using a custom-made digital spreadsheet, she logs various experiences related to her grief—sights, conversations, events that elicit memories of her mother, comments on them, where they took place, and the mood she associates with them. Similarly to Alberto’s, Dana’s project is as much about concretizing her mother’s legacy in her own life as it is about cultivating an awareness of the experience of moving through loss. As she told participants at QS14, “Along with those wincing moments where [my mother’s] absence is acutely felt, I wanted to watch those crushing moments soften to fond memories.” The practice of tracking here opens up a reflective space in which memories can be “explored and cherished,” and in which grief can “work itself out.” As for Alberto, the act of logging the data becomes more meaningful—and therapeutic—than the actual data-as-memorabilia that is its content.

Self-tracking as a practice of resistance

The discourses and practices of mindfulness have, like other manifestations of Western spirituality (Hanegraaff, 1996), a subversive aspect. Rooted historically in the various culture-critical movements of the 1960s and 1970s, the mindfulness emphasis on being “in tune” with one’s personal sensations, thoughts and feelings speaks out against a mainstream culture that is seen as discouraging people from being active producers of this world. Similarly, Alberto and Dana’s mindful tracking practices also enact a form of

implicit resistance to and critique of such a society. Alberto presents his tracking practices as a way of gaining access to “hidden processes” that are typically inaccessible: “When you are photographing the tools ... [you] want to be authentic ... to know a bit of the processes that are hidden from you, along the way, by the society in which one grows.” For Alberto, self-tracking becomes a way of revealing the “nuts and bolts” of the world. Dana also attributes value to her tracking practices in opposition to widespread societal expectations—of how one should grieve, how long it should take and how much of a focus it should be. Or, as another participant put it, her project opposes and proposes an alternative to a society that does not make enough space for grief and loss.

In our observations and discussions with QSers, we found various modalities and degrees of resistance to be characteristic of self-tracking practices, ranging from implicit or modest forms to more explicit and confrontational ones. In this context, self-tracking takes on an oppositional value, by which practitioners enact various forms of agency and autonomy vis-a-vis a larger society, its institutions and corporations, by resisting and remaking social norms and conventions. As a participant in our break-out session explained, “tracking your weight yourself and having a doctor put you on a scale are not the same”. For her, the choice to actively track herself is, as she put it, “liberating”.

One of the ways in which self-trackers enact this autonomy is by tweaking the hardware, software and analytical categories set by their tracking tools. Dana, for instance, felt that existing mood-tracking applications and their pre-determined categories were too restrictive:

Grief is strange and special in that you can experience multiple, seemingly incongruent emotions at the same time ... creating my own form allowed me to name my moods myself.

Similarly, Alberto’s decision to use outdated tracking technologies and self-written software is informed by a rejection of proprietary software, hardware and data platforms that are designed and owned by private corporations and that, he feels, turn him into a passive consumer. Not complying for Alberto means one has to “keep on, move on, tweak things.” As Nafus and Sherman (2014) suggest, this oppositional disposition can be seen as a “soft resistance” that “enables participants to partially yet significantly escape the frames created by the biopolitics of the ... technology industry” (p. 1784).

Many of the origin stories recurrently told at QS meetings explicitly allude to such resistance. Larry Smarr, for example, whose self-tracking led him to detect he had Crohn’s disease before his doctors did, is often referred to as somewhat of a QS hero. Smarr tracked in defiance of his doctors, who believed nothing was wrong with him. Another story regards Seth Roberts, held in similar admiration by the community. Roberts was a professor of psychology who devoted much of his time to bizarre self-experiments long before self-tracking became popular—such as the effect of watching TV early in the morning on his mood or the effect of consuming large amounts of butter on his brain function (Roberts, 2004, 2010). Although his experiments were usually highly criticized for their lack of scientific rigor, their inspiration was precisely the idea that doing science should be more about gathering data and generating new ideas than about adhering to the gold standards of scientific experimentation. After his

passing away in 2014, an entire plenary session was devoted to eulogizing him at QS14. For Gary Wolf and other speakers, Roberts' curiosity and rebelliousness, his questioning of current views about the world, and his refusal to conform to the ritual of science as the randomized controlled trial were praiseworthy. More than the idiosyncratic findings of his personal scientific experiments, this active non-conformism seems to be his legacy.

With respect to this oppositional disposition, it is significant that the QS movement was founded in the San Francisco Bay Area. Not just because of its position as the heart of technological innovation and entrepreneurialism in the contemporary world but also because of its broader cultural and historical legacy as a site of overlapping countercultural movements (Turner, 2006; Zandbergen, 2011). Since the 1960s, in this region, digitization processes were informed by a subversive discourse of (digital) technologies enabling people to "break through" conventional and oppressive ways of knowing the world. The emphasis placed on the *personal* appropriation of these technologies—as opposed to simply consuming products built by others—has been an important element of this subversive technological culture. In the early 1970s, for example, the personal computer was perceived of as a tool of resistance against a larger society in which main-frame computers were owned and controlled predominantly by the Defense Agency, governments and business. In line with Theodore Nelson's (1974) contention that "if you can't control the button, the button will control you," technology-minded activists embraced the development of the smaller, cheaper and more accessible personal computer as a tool that would provide control over knowledge, communication and perception in general to more people.

While QS is currently an international network bringing together very diverse people from different backgrounds, it makes sense to root it in this longer tradition of high-tech counterculturalism and digital resistance. Indeed, many proponents of the QS movement consider this resistance the very essence of what QS is about. As Wolf told us, from the outside, it may seem like QS is an integral part of the normalization of surveillance and compliance. But, "here it's quite different. Here you have conversations about, 'how do you protect your data?', 'how do you get your data?' 'how do you imbue your practices of formalizing your experiences with a spirit of autonomy?'" Reflecting this awareness, typically, QS conferences include a significant number of sessions devoted to critical discussions on access to data, data management, data ownership and privacy.

This is not to say that the QS celebration of digital resistance to mainstream socio-technical norms should be taken at face value. This trope of resistance has always been a tell-tale feature of mainstream technological culture, certainly in Silicon Valley, where leading corporations like Google and Apple thrive on the values of individual ingenuity, creativity and courage vis-a-vis the norms of society at large.⁴ Yet, we suggest that this type of problematization should also apply to the counter-trope of QSers as data fetishists uncritically internalizing societal norms. As we have shown, QSers challenge and remodel the assumptions, norms and categories that are built into tracking devices, sometimes quite literally as they assemble their own projects. As such, the QS movement is best described as one that both feeds into mainstream Big Data culture and that continuously resists, reshapes and redefines it (Nafus and Sherman, 2014; Neff and Nafus, 2016).

Self-tracking as a communicative and narrative practice

In the preceding two sections, we argued that the data fetishist critique, that implies that QSers are unaware of the reductionist effects and normative assumptions of quantification, offers only a partial understanding of QS. In the following, we discuss the notion that self-tracking is also about exploring new forms of expression that do not privilege numbers a priori, but integrate and combine the seemingly objective language of numerical data with other forms, as a means of meaningfully communicating in and navigating a world that speaks both.

Academic and popular reflections on self-tracking often portray self-tracking as a personal enterprise that leads to insights and benefits that are limited to the individual, often accompanied by allegations of “narcissism” or “navel-gazing” (Hill, 2011; Morozov, 2013: 233). Data fetishism seems to be at its strongest when data pertains to one’s self. But while the QS official tagline is indeed “*self-knowledge through numbers*,” QS is also characterized by a strong communal and communicative quality. The abundance of conferences, gatherings and meet-ups where QSers convene to share their experiences is fundamental to what QS is, and they serve as a significant backdrop against which data and self-tracking obtain meaning.⁵ In these presentations, moreover, the numbers that are presented serve as a relay for the sharing of intimate stories. Standing on stage, self-trackers speak about painful episodes in their lives (depression, divorce, disease); they expose their dreams, their diary entries and their meditation practices, and they reveal minutiae about their physical ailments and their struggles with weight and mental well-being. Far from an aggregation of data-obsessed narcissists, then, what one witnesses here is closer to a confessional community, where numbers are used to “confess” intimate details of personal lives to others.

One of the ways in which data are used to tell stories is by interpreting and re-contextualizing them. In one plenary presentation at QS13, Jon Cussins presented a graph of his mood over the course of 6 years, created with the Moodscope app that he used in his struggle with bipolar disorder. In order to make sense of this graph, Cussins diligently explained its high and low points by contextualizing them in relation to things like spending time with family, writing grant applications or specific relationships with business partners. Another self-tracker used the term “mingling” as a way of describing the relationship between the quantitative data generated on her device and subjective terminology. Data become “signals,” that are added on to, or into, subjective narratives, in the form of what she calls “digital storytelling”:

For me it comes down to a form of digital storytelling ... And I would say, this is a form that you can better tell that, because on the one hand, you also have some objective data, to mingle in with your story.

As in self-tracking practices that take on a mindful character, in this example, subjective narratives are not reduced to the language of quanta, but data are supplemental when they serve a communicative function:

You add a signal, that wasn’t easy to get before there was a lot of these techniques, tools and so forth. But basically it doesn’t have to replace any of the other means. It just adds in the mix of other means you have.

The idea that quantified data contribute to enriching narratives has led some self-trackers, increasingly, to speak of a “qualified self” (Boesel, 2013; Davis, 2013; Swan, 2013). The qualified self refers to processes by which quantified data are interpreted, transformed and integrated into qualitative narratives. Jenny Davis (2013) argues that this term better represents the actual entanglements and negotiations between quantitative data and interpretive schemes that create meaning for self-trackers: “If self-quantifiers are seeking self-knowledge through numbers, then narratives and subjective interpretations are the mechanisms by which data morphs into selves.” Data in these types of self-tracking practices are a new element in an aesthetic and continuous process of identity construction. It is not just used to learn about oneself but also to construct stories about oneself.

Such processes of identity construction do not preclude or exclude social interaction. Rather, we suggest that they are premised on a significant communicative and narrative dimension of self-tracking practices. Furthermore, as a communicative and narrative practice, self-tracking is not just instrumental in identity construction but also serves to mediate between and across various realms of meaning and knowledge, such as appropriate and taboo topics of conversation, diagnostic fields and subjective and objective experiences of health and illness.

The notion that quantified data may enable people to more easily express things that are burdensome to verbalize and act as a communicative aid is something that a number of theorists have identified in the healthcare context (Fiore-Gartland and Neff, 2015; Kamphof, 2015; Ruckenstein, 2015). In our break-out discussion at QS14, one participant, a psychologist who works with psychiatric patients who use self-tracking apps, explained that patients often use the apps to communicate across diagnostic fields. Another participant, who tracks how many times a day he goes to the toilet, explained that numbers constitute a common language that could allow him to enter into dialogue with others: “I could either say to people, ‘I have a bladder problem’, or I could say, ‘I go to the toilet 12 times a day, how many times do other people go?’” The abstraction of numbers also made communicating this sensitive issue easier:

I can bring it [number of toilet visits] up, and maybe it is still something you would rather not talk about, but it is easier at least, because it is less loaded ... you can just inquire, ‘is this a normal number?’ It puts it further away.

In these examples, quantified data helped render aspects of a private, subjective and somewhat inaccessible world of feelings and problems more tangible and comparable. Understood as a narrative and communicative practice, self-generated data may thus enable the social sharing of private experiences and mediate between subjective experiences of physical or mental health and more objectifying framings of health and ill-health.

Conclusion

In this article, we argued that insofar as the value of data has become a main focus of critical data studies, more attention needs to be paid to the ways in which data are

valuable and meaningful for those individuals—such as self-trackers—who actually generate it, not only for the public institutions and corporations who clearly benefit from it. Furthermore, we argued that the idea that what draws self-trackers to numerical data is its perceived power of truth and objectivity, which underlies the “data fetishist” critique, only offers a partial explanation of the appeal self-tracking has for trackers.

The data fetishist critique cautions that quantification tends to reduce all phenomena to numbers, to displace other forms of meaningful expression, and that numbers, although seemingly neutral, always imply tacit, normative assumptions. This critique can thus be seen as a reproduction of the critical analyses of the political economy of Big Data on the level of the individual and of “small data.” While the risks that this critique cautions against are real, and some active participants of QS do at times fit the fetishist stereotype, our ethnography of the QS network shows that there are other ways, not accounted for by this critique, in which data become meaningful to self-trackers. Self-tracking can be a practice of mindfulness, in which sensorial and emotional experiences of being in the world are not replaced by automated, quantified registers but are actually given more space, heightening one’s awareness of the everyday. Self-tracking can be a practice of resistance, in which practitioners enact various forms of agency and opposition in relation to social norms and societal institutions and corporations. And self-tracking can be a communicative and narrative practice, where data are used to enrich self-narratives, to share experiences that may otherwise be difficult to convey and to mediate across realms of knowledge. Data are deemed valuable in these practices insofar as they may extend (rather than displace) one’s senses, they may enable users to resist (rather than comply with) normalization and they may supplement (rather than solely constrain) what can be said.

Our ethnographic focus on self-tracking practices thus reveals that alongside the figure of the quantified self, as the perfected, optimized, calculable and controlling subject and object of self-tracking, emerges a *quantifying* self. The quantifying self ascribes meaning to self-tracking and the data generated by it through a process of continuous negotiation with self-tracking methods and tools (literally dismantling them at times), of constant interaction with the daily environment, and of involvement with others who share similar interests. This active engagement is too often unrecognized by the critical literature on the QS movement, a neglect which facilitates a portrayal of QSers as passive, uncritical reproducers of neoliberal tropes of citizen activation and entrepreneurialism who have bought into the promises of Big Data.

By foregrounding this active engagement, we theorize the QS movement as one that both feeds into *and* contests the culture of Big Data, reproduces *and* meaningfully escapes it, thus contributing to its (re)definition. More than just a reactionary or a celebratory movement then, QS may be seen as a network of people who seek to find new ways of navigating, finding agency in, and making sense of an increasingly datafied world. We believe this can be helpful in understanding how other self-trackers, outside of the QS context, also partake in and help reshape the culture of Big Data. Without understanding how data and self-tracking are attributed value and meaning in the context of everyday life, without understanding the appeal that data can have beyond its allure of objectivity, our understanding of Big Data as a cultural phenomenon will remain partial, as will any attempt to steer it in desirable directions.

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Notes

1. In an interview with Evgeny Morozov, Schüll probed him about his somewhat crude depictions of QSers. She says, “I worry that the QSers you quote—mainly from media reports—serve a bit too readily as straw men for your argument [...] I wonder what you might be missing by ignoring their actual practices.” To which Morozov responded, “There’s no way I’m going to go spend time with them—I can’t stand them!” (Schüll, 2013). We thank a reviewer for pointing out this interview and the similarities of the argument made with our own.
2. Additional terms used to describe self-trackers in the media are “data-sexuals” and “data junkies.”
3. We also attended the next international conferences in 2014 and 2015 and visited the Quantified Self (QS) “Public Health Symposium” in San Diego in 2015.
4. See, for example, Apple’s highly successful “Think Different” campaigns, <https://www.youtube.com/watch?v=nmwXdGm89Tk>
5. For a similar argument about hacker communities, see Coleman (2010).

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Author biographies

Tamar Sharon is an assistant professor in the department of Philosophy and the Science, Technology and Society Studies (STS) group at Maastricht University, the Netherlands. Her research explores how people engage with new and emerging biomedical technologies in a context of shifting understandings of health, citizenship, and well-being.

Dorien Zandbergen is an anthropologist researcher at the department of Sociology at the University of Amsterdam. Her main interests regard digital culture in Silicon Valley and Europe, as manifesting at the cross-overs of popular culture, corporate culture and transnational politics.