
Data in the Age of Digital Reproduction: Reading the Quantified Self through Walter Benjamin

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Prologue: Walter Benjamin Takes the Measure of Art

Walter Benjamin, writing in Europe a few short years before World War II, argued that improvements in the technical reproduction of images and the rise of film were having a profound impact on society. For Benjamin, the nature of the shift from print to lithograph to photograph to film was an acceleration of speed and intensity. Works of art, Benjamin noted, had always been reproducible, but at much slower speeds, in both the production of the copy through manual means, and in its distribution.

In his essay “The Work of Art in the Age of Mechanical Reproduction,” Benjamin’s argument is not that photographs and film cannot be art, a debate he calls “futile,” and “confused” (1968, 226). Rather, he insists that the mechanisms of mass reproduction change something fundamental about art itself. First, they detach the artwork from the physical object, situated in space and time. Whereas in more manual art forms, the work of art and its physical articulation in an object are one and the same, in film and photography, where copies abound, the artwork is distinct from any given copy of it (220). Second, this dislocation undermines the aura of specificity that had historically been vested in art, in favor of a “sense of the universal equality of things” (223). No copy is more or less original than another; rather, all copies are equal, and therefore largely interchangeable. Third, for Benjamin, the twentieth-century unhinging of art from the constraints of singularity, through reproduction, and presence, through distribution, uproots art from its original place in cult and ritual. Fourth, Benjamin argues that this new era of cult-free art makes art available to—and vulnerable to—other social categories, particularly the politics of fascism and communism as they played out in Europe in the lead up to World War II (224). Later scholars, notably Baudrillard, link images detached from any “original” to consumer capitalism

in ways that Benjamin does not, but that resonate well with Benjamin's basic framework (Baudrillard 1994).

Reading Benjamin's essay nearly a century after it was written, parallels between images in the twentieth century and data in the twenty-first are striking. We, too, find ourselves at a moment of acceleration that feels emergent and profound, promising and ominous, with repercussions on our social and cultural systems we have yet to understand. Humans have been counting and measuring and tracking things for millennia, and yet the speed, depth, and breadth of this enumeration have undergone, and are undergoing, a process of rapid transformation. It seems at the very least likely, if not entirely certain, that the acceleration of data is changing something about how life is measured, counted, and made accountable, and what kinds of things matter in a more measured world.

This chapter draws on Benjamin's discussion of the mechanisms of image capture and distribution as a lens through which to view the current moment. While there is a larger picture and question out there in relation to "big data" this essay focuses on the specific question of data and the self, drawing on ethnographic fieldwork within the Quantified Self community, primarily on the West Coast of the United States.

The Quantified Self community, founded by Gary Wolf and Kevin Kelly in 2007, is described on their website as "an international collaboration of users and makers of self-tracking tools" dedicated to helping "people get meaning out of their personal data." Primarily volunteer run, local leaders in about a hundred cities across thirty countries organize "meetups" where participants are invited to present stories about their experiences with personal data tracking in a format they call "show and tell."

Within the Quantified Self (or QS) community, and in this chapter, data are understood in very broad terms. Generally speaking, personal data are things measured or recorded (tracked) or both in some way shape or form; most often, though not always, this form is digital. Many folks within QS use spreadsheets. Many of them also use devices and software applications that either take measurements and record information independently (e.g., a pedometer), or prompt the person to enter information at various times of day (e.g., many "mood" trackers). Quite a few use both, or all three.

The point of the exercise, viewing data in the Quantified Self through the lens of Benjamin, is less about presenting a coherent argument about the sameness of data and film, our moment in history and Benjamin's, than it is about opening up a range of questions and perhaps insights regarding what that comparison reveals. In particular, it draws our

attention to the representational aspect of data, the role and function of abstraction in QS, and the mechanisms through which data as representation and abstraction restructure lived experience. Finally, it raises questions about the ways that the acceleration, or expansion of data into the realm of the self might be understood as a domain shift analogous to the movement of art into politics and economics.

Four Months, Seventy-eight Years: Michael Cohn's Quantified Self and "That Guy"

On a rainy night in late March of 2014, four months before rereading Benjamin's essay, and some seventy-eight years after it was written, I attended an event organized by the Bay Area Quantified Self meetup group. We gathered in a large gallery at the San Francisco Exploratorium, overlooking the bay, on folding chairs arranged in an arc facing a podium and a screen. There were four presentations. In the first of these, Michael Cohn,¹ a graduate student in psychology, talked about his use of spreadsheets and a system of "irrational commitment" that helped him regulate his behavior (see Cohn 2014). Cohn described his problem in terms of "this guy," shown in the slides as a shadowy, red-tinted image of Michael himself. "This guy," he told us, doesn't care about his other commitments or his desire to live a healthier life. "He" wants instant gratification and cares little for Michael's concerns about mental and physical health, job performance, and professional achievement. "He" stays up late playing video games though he know Michael needs to work, eats junk food though Michael is trying to eat healthier, and generally undermines Michael's efforts to manage his life in keeping with his goals for himself. Michael told us that by creating specific goals (I will work on x project for at least y amount of time), and then tracking his actual behavior relevant to those goals in spreadsheets he creates each week, he was better able to limit the effects of "that guy." It works, he said, because the concrete nature of those commitments was something "that guy" could understand and left no "wiggle room."

Thinking about Benjamin, it suddenly comes to seem significant, or at least poignant, that Michael uses a photograph to represent the undesirable aspects of himself in lieu of any other possible way he might have chosen. "That guy" is not Michael, exactly, but rather some aspect or part of himself at odds with the rest. Michael's data consisted of multiple spreadsheets tracking commitments set, and values placed on fulfilling those commitments in terms of done/not done and in increments of time

(minutes spent being “productive” or at the gym, for example). Over time, Michael told us, he added more and more categories to his weekly array of commitments that shift and change in relation to his activities and pre-occupations at any given time. In this way, Michael’s story constructed an unfolding of himself in both data and image. In image, “that guy” contrasted with the articulate, well-groomed graduate student standing at the front of the room. In data, Michael’s spreadsheets traced an ongoing process of thresholds, standards, and measurements that bound the two together, Michael the graduate student setting the parameters and recording that guy’s compliance. The data became a drama depicting an inner battle between his better self and the selfish other guy, where victories, defeats, and consequences played out in numbers, lists, and time kept.

At the moment of this writing, when selfies are circulated through an ever-expanding range of mobile devices and platforms, images and data are hopelessly tangled; images as a kind of data are largely interchangeable with other kinds of data distributed through open and closed networks, stored in bits and bytes. Against the backdrop of that entanglement, the blending of data and image in Michael’s presentation surfaces parallel questions of how selfies and self-tracking relate to the selves they represent.

Proximity and Distance: Auras and Operations

For Benjamin, the relationship between image and imaged is central to understanding where photography moves radically away from prior forms of visual representation. Fundamentally, filmic images and their widespread distribution reconfigure relationships of proximity and distance that bind a thing (or person) to the quality that make it uniquely itself, what Benjamin calls the “aura.”

Aura, for Benjamin is a function of singularity and presence. It is the quality of an object, a place, or a person that one can only experience in the presence of the original. He uses the example of seeing a mountain and being struck by the beauty and majesty of the view. The power of the landscape (actual, not painted) is in its presence, which one can perceive only from sufficient distance to take the whole thing in (singularity), and only in person—you have to be there (presence). Thus aura, in Benjamin, entails both the relative distance of a vantage point, and the relative proximity in having to be present in some contiguous space and time.

“Manually produced” works of art, such as paintings, have such an aura of singularity for Benjamin. There is only one authentic Mona Lisa, for example, and she can only be truly experienced by being present at the Louvre, in the gallery where she hangs on the wall. Photographic images,

however, lack an aura of their own; they appear as transparent renditions of their objects, while failing to capture the aura of those things. Images of the Mona Lisa encountered elsewhere in photographs or film are but pale copies. Further, for Benjamin, the ubiquity of copies, poster versions of the Mona Lisa hanging in living rooms and doctor offices across the globe, leach from the Mona Lisa her uniqueness and historical specificity—her aura—in ways that make the Mona Lisa hanging at the Louvre seem but little more than a copy of herself.

Citing the many ways that film captures details not available to the naked eye, or too quick for human perception, Benjamin argues that the cameraman penetrates the photographic subject in ways he likens to a surgeon cutting into the body of a patient with a focus on the operation rather than the patient as a person (1968, 233). The resultant product, the film or photograph, consists of “multiple fragments which are assembled under a new law” of photographic production and reproduction. By contrast, the “painter maintains in his work a natural distance from reality,” and the representation produced by a painter, is “a total one” (Benjamin 1968, 233–234). In this sense, then, photographic images are, for Benjamin, too close to their subject.

At the same time that images are, for Benjamin, too close to the person or thing captured to render a holistic representation, the mechanisms of reproduction and distribution also render the subject too far. If the aura of a person, an artwork, a particular view can only be encountered through locatedness in a single space-time, multiplicity (a thing that exists in multiple, distributed copies) disrupts this relationship. Photographs are too close, in the sense that they are the result of a surgeon-like focus on detail, and too far in the sense that one encounters their subjects from a distance, disjunctive in space and time.

While one might argue with Benjamin over the relationship between painters, photographers, and their respective subjects, his analogy is provocative in relation to data collection. Data collection, however idiosyncratic, tends to approach the thing measured or recorded (whether happiness, productivity, intimacy, or fluid levels) through attention to separable details. Minutes stand in for activity, steps stand in for fitness, food is captured through particular ratios of fat, sugars, and fiber.

Fragmentation and Wholes: Differentiation and Commensurability

Unlike people and paintings, actions and experiences frequently lack clear boundaries that distinguish them as a whole (or wholes). Experiences bleed into one another in ways that are decidedly fuzzy. Thus

while measuring material things in the world such as bottles of wine, or counting people at the level of population is fairly straightforward, measuring experiences like mood, productivity, or even fitness demands an imposition of boundaries and a definition of parameters. Like Benjamin's photographs, these parameters (minutes, scales, laps) capture aspects of the thing measured; unlike photographs, the measurement also redefines the object of measurement as a thing in itself, as well as selecting it as proxy for the larger abstraction it is understood to capture (steps as a measure of fitness, for example). While photographs, for Benjamin, fail to approach their subjects as a whole, focusing instead on specific details, or facets, that then come to appear as if whole, data collection has the capacity to create the boundaries that define the whole it represents through the proxy of aspects measured.

Michael's understanding of what did and did not constitute periods of productive writing differentiated those moments from the broader flow of moment to moment in his life, and reframed them as something—as productive writing—in contrast to other kinds of things Michael might have been engaged in. In fact, Michael was not very specific about how such moments were defined: what was “productive writing” in contrast to other kinds of possible activities? Yet, even in the absence of a precise definition (perhaps he knew it when he felt it), recording those minutes bound them together and differentiated them from the rest. Whereas the “original” that film captures—whether it is a person, a mountain, or a work of art has, for Benjamin, a prior existence as a singular whole, when self-tracking turns its attention to experience, or behavior, the tracking itself has the capacity to define and produce the thing measured.

Yet Benjamin's discussion of auras as related to their unreproducibility is akin to, if not the same as, the unreproducibility of experience. One day's writing can be experientially quite different from the next, each with its own sequence and array of thoughts, feelings, itches, hunches, distractions, epiphanies, and ellipses. The designation of a time as “productive writing” serves to capture an aspect of it (that it was in some sense “productive”) while eliding those nuances that made it uniquely those moments and not any other. In other words, measuring and tracking in the ways that constitute data in the QS community do not capture the incommensurability of experience. In fact, it is largely by bracketing out that incommensurability (the aura of a moment, we might say, bending Benjamin to our own purposes) that data works. By abstracting from the day particular moments, and designating them “productive,” Michael is able to compare experiences that are otherwise not really comparable.

Benjamin's complaint, then, that the lack of aura in photographs undermines specificity in favor of a "sense of the universal equality of things" (Benjamin 1968, 223) is precisely what makes data useful. Bounding certain experiences off from the flow of one moment to the next, and capturing them in ways that make them commensurate is how datasets "work."

Seen this way, Michael's efforts to manage his productivity and his behavior over time using the photographic image of "this guy" make constructive use of the parallels between photographs and data as abstractions that both capture and create distance. The image of "this guy" renders visible a mental image, perhaps, by means of which Michael exorcises those qualities and behaviors that "this guy" represents in ways that sever "this guy" from Michael; the murky reddish "selfie" captures and contains those aspects of Michael's self-image that he hopes to abstract through the practices of data tracking. Thus the image of "this guy," too close in Benjamin's terms, captures details of Michael that do not, ultimately, add up to Michael as a whole, but through its fragmentation lend Michael a vantage point from which to view these aspects of himself. Michael's self-tracking project sutures together Michael's commitments and Michael's fulfillment or failure through fragments of Michael measured. By measuring "this guy's" time and check boxes, Michael abstracts action from experience in time spent, workouts accomplished, or pages written that likewise create a sort of composite representation of a larger whole that is only ever partly captured (Benjamin's surgical penetration), but that gives Michael a vantage point from which to view and—importantly for Michael—to manage his behavior.

Mechanisms and Facticity

Benjamin argues that some of the power of film and photography lies in the way they seem like a window onto the reality they capture. Benjamin suggests that this transparency is produced through the elision within the image of the means of its production. He points to the fact that film and photography are highly technical and equipment intensive with lights, meters, tripods, and other devices that do not appear in the image. Whereas painting clearly reveals itself as representational through brushstrokes and other indicators of the medium and the labor through which it was produced, film and photography hide that mechanism and thus appear as if transparent. This argument is, once again, provocative in relation to data, evoking the ways that categories of data (such as "steps" in current activity trackers) appear not only as a transparent capture of a

particular fact of having taken (or not taken) a specific number of steps that day, but also—as importantly—as a proxy for having achieved (or failed to achieve) a level of “activity.” The mechanisms for the collection of those data, the particular sensor and the algorithms through which it translates its sensing into a measurement, disappear behind the number in ways that give the number a sense of facticity—a window onto reality.

Within QS, where participants are both measurer and measured, this tension plays out in interesting ways. At the level of data collection and data analysis, the specificity of the mechanism of data collection is significant, particularly to the person attempting to integrate various data “streams” to their own ends. Several of the breakout sessions at the 2012 Bay Area QS Conference and even more of those at the 2013 QS Conference in Amsterdam, discussed challenges associated with combining data streams from different devices, or even different spreadsheets, and in one presentation a man compared an array of activity trackers on the market at the time, while attendees debated the relative accuracy and the differences in how data were collected and interpreted by the devices. However, it is also true that debates regarding the accuracy of particular devices are like debates about camera lenses: photographers may passionately debate the appropriate lens for particular subjects under specific lighting conditions, but arguments about lenses do not question the basic relationship between the camera and the person or thing photographed. Similarly, debates about accuracy, while they may undermine particular devices, or even some datasets, do not question the basic relationship between measurement and measured as a capturing of some kind of facticity. Further, because datasets are in large part comparative projects (last month vs. this month, yesterday in relation to today), even arbitrary, made up numbers, so long as they are consistent, take on a particular sense of facticity. Using Nike’s FuelBand, it doesn’t matter that the fuel points do not equate to anything in particular, but the fact that I “earned” eight points today and only six points yesterday is understood and experienced as capturing some kind of fact regarding the relative activity over the course of two days.

The facility with which QS participants can discuss, often in great detail, the mechanisms and parameters of their tracking, and at the same time slip seamlessly into analyses that take the facticity of these measurements for granted is not a failure of comprehension or intelligence, but rather a testament to the powerful ways that the processes of measuring and tracking work to structure and construct facts from the flow of experience.

Idiosyncratic Data, Quirky Commensurability

While many Quantified Self projects draw on measurements and parameters that are fairly common (e.g., weight, activity, or nutrition tracking) many other QS projects and experiments are remarkably idiosyncratic. The challenge of defining parameters to measure and then further developing a method for measuring them is far from obvious or standard in many cases. In one memorable encounter at the 2013 QS conference in Amsterdam, for example, a participant named Fabio told me that he had been feeling like the time and effort he was putting into relationships with various people in his life was not consistent with the relative importance of those relationships to him (see dos Santos 2015). Unimportant people were taking up too much time, and close relationships were getting short shrift. He began tracking all his interactions with people, new and old, in a small notebook. He showed me his entry for me. In a process that had clearly evolved over time, his notation included my name, a number designating how many minutes we spoke, and a symbol indicating that I had initiated the conversation, which I had done with a casual remark about the conference as we stood next to each other, two strangers, outside the main auditorium.² In addition to recording interactions, Fabio began keeping a list of the people in his life with a scale of their importance to him, using a combined score across three “indexes” including “Fi” or “Friendship index,” “Ai” or “Attraction index,” and “Bi” or “Business index” that together comprised the cleverly named “FABi” or Fabio index of that person in his life. Tracking these data, he told me, allowed him to more deliberately limit his engagements with people to whom his relationship was less critical, and also led to shifts in the ways he managed close relationships. In particular, he realized that by proactively reaching out to his mother, with whom he lived, he was better able to satisfy her desire for contact with him, while also limiting the number of interruptions from her that he had found annoying. In this way he felt that the tracking had helped him better his relationship to his mother.

Fabio’s project, like Michael’s, is in many ways quirky and distinctive and impressively creative. It is also, from a distance, rather uncomfortable for its ranking of people in ways that seem to reduce human relationships to a number, emptied of the particularities that make a person and a relationship unique. At the same time, that abstraction was what enabled Fabio to reprioritize his time in ways that were more in keeping with the relationships that meant something to him. For both Fabio’s and Michael’s purposes, the quirks of their evaluative systems, once in place, faded to the

background and what mattered for their efficacy was the mechanism of measurement and abstraction, and the ways this process enabled commensurability between elements that otherwise were not comparable.

As discussed earlier in relation to facts, this play between comparable and not comparable plays out at the level of devices as well (see also Estrin and Hanika, chapter 9; Böhlen, chapter 10, and Taylor, chapter 11, this volume). Different devices use different sensors and different algorithms to translate motions sensed into a unit often glossed as “steps.” The “steps” of one device are often not, strictly speaking and at the level of data, commensurate with those of another. Indeed, in a conversation last year with an entrepreneur who was working on a tracking application intended to work across Android-powered phones, I was told that the same application on the same operating system but different hardware (in this case different phone models) were often neither commensurate nor compatible. While several Quantified Self projects have undertaken comparisons between devices, it is notable that, generally speaking, steps from one device are seen as more or less the same as those from another. In other words, despite the “quirkiness” that can make data technically incommensurate across projects and devices, data tend to enact commensurability and comparability in the lives of people who use it.

Not only do steps abstract activity from the particular walk, run, stroll, or hike that they capture, they become commensurate across people, places, and time. My 10,000 steps today are not only comparable to my 10,000 steps yesterday, but also to my brother’s steps, though he lives in another city and has a longer physical stride. Likewise, and despite the fact that my own criteria for what is and is not a “productive writing” moment may differ from Michael’s, those of us in the audience were so easily able to think across our own experiences that a laugh of recognition rippled across the audience at his introduction. Our own efforts to each contain our own impulsive “this guy” were easily imagined in relation to his. Likewise, once Fabio began to describe how his ranking system helped him better balance his time as a reflection of his connection, it was easy to see how my own intimacies might benefit from a recalibration.

In part, perhaps, this kind of recognition was a result of shared cultural constructs that have come to emphasize “productivity” as something for individuals as well as industries to strive for, and intimacies as something to be managed. But I am suggesting here that the mechanisms of data as a process of abstraction enable commensurability and comparability across individual lives in ways that operate alongside and even independently of the particular criteria by which those things are measured. More, I am

suggesting that the mechanisms of abstraction applied to experience this way begin to restructure not only that flow, but also the stories we tell ourselves about ourselves (see Geertz 1975, 448).

Data, Presence, and Becoming

Toward the end of his presentation, Michael made a curious quasi-confession. Quantification, he told us, isn't really about the data for him. He has lots of data but, in fact, he hasn't "really figured out what to do with it." Instead, he said, quantification for him is about what it does for him "in the moment." While many Quantified Self participants do in fact perform data analysis, Michael's experience, the efficacy he finds in the act of self-tracking and even the lack of certainty about "what to do with it," is not uncommon. In addition, the siloing of data within apps and device platforms means that even technically savvy self-trackers frequently have limited access to data that can at times be distributed across several different locations. Thus, for many, the practice of tracking and collecting data is as far as things go. Yet the mental model of data as something you "do something with" where that "something" involves some kind of analytics is pervasive. Thus in the Quantified Self community there is often something of a gap between how people talk about data in terms of the things that they wish for or imagine they could do or will be able to do one day (if only, like Michael, they knew what to do with it or, alternately, could get it all together in the same place), and how data are used and experienced by many in the present—as what it does for them "in the moment."

The tone of Michael's statement, as well as its substance, speaks to collective assumptions regarding if not what data are, then what they are for. Data are implicitly posited as a kind of "raw" material that leads to an end product, with the dual implication of being intended for processing, and in some way closer to a state of nature (for a discussion of "raw" data, see Gitelman 2013). In the notion of "doing something with data," data production and collection is a preliminary phase in which one gathers data in order to use it toward some kind of insight gained through some kind of analytical processing (either at an end point or, more frequently, on a rolling basis). In QS, however, both the efficacy of tracking in drawing one's attention to details (as when Fabio told me that he realized he was spending more time on unimportant relationships than on the ones that mattered) and insights that result from the processing of data collected prior, are often glossed under a broader notion of "mindfulness."

Mindfulness was a dominant theme in the Bay Area QS Conference in the fall of 2012 and has been a minor yet very present theme in other events I have attended. In session after session, participants talked about the process of self-tracking as an exercise in drawing and focusing attention to particular areas of their lives. One of the presenters at the 2012 conference, Nancy Dougherty, demonstrated a light-up smile tracker that she had made. A sensor near her temple triggered an array of blue Christmas lights every time she smiled (see Dougherty 2013). The lights, she told the audience, made her realize how frequently she smiled throughout the day in various situations. Another presenter at the same conference discussed the way the practice of food tracking made him more mindful of nutrition, even without an explicit effort to implement a particular diet. Another QS participant told me about an experiment he was doing with a heart rate monitor that alerted him whenever his heart rate went over a certain number. The alerts, he said, were helping him to pinpoint the triggers for anxiety in his life by making him more aware of them as they happened. In these ways, self-tracking was cast by QS participants as a way of making certain kinds of behavior or phenomena more present for the tracker. This “making more present” most often meant noticing phenomena as they happened, “in the moment,” as with Nancy Dougherty’s Christmas lights, but was also sometimes understood in after-the-fact insights drawn from the data, as when Nancy, having removed the lights, continued to download the “smile count” collected by her sensor at the end of each day.

That the mindfulness that data bring to experience is of a specific kind was illuminated by a conversation I had when I took a walk one evening with a group of participants at the 2013 QS Conference in Amsterdam. A woman I will refer to here as Nicki (not her real name) told me that she had stopped tracking altogether over the previous year, though she remained active within the QS organization. She said she had stopped because she felt like she had become a “prisoner to the numbers.” In its place she had taken up ecstatic dance. The contrast between tracking and ecstatic dance is revealing. Both might be understood as a practice of mindfulness and presence, but they operate very differently. Ecstatic dance is about losing oneself in the moment such that details become ephemeral: noticed, released, and forgotten. It invests deeply in experience as undifferentiated, uncapturable, and irreducible. In self-tracking, the mindfulness is one of attention to detail in which particular facets are pulled out of the ephemeral, fixed and recorded.

Nicki’s shift from tracking to ecstatic dancing with its emphasis on ephemerality and undifferentiation also draws our attention to the

relationship between fixedness and motion in photography, film, and data. If film is a series of fixed images viewed in rapid succession so that they appear to move in “real time,” data are also frequently viewed as “in motion” over time and trackers often cite the movement of data (usually, though not always glossed as progress). Images, film, and data become fixed in time in ways that lend a sense of authority, or facticity, over the past where human senses and memories can be unstable, even untrustworthy. Yet unlike film, data-tracking projects are as often open ended; there is no end in sight for Michael’s management of “that guy,” for example. The ways in which data come to render a person, then, are always also, at least potentially, in a state of becoming. In this sense, then, data define and fix past experience in ways that are oriented toward data yet to come.

For the most part, the “yet to come” that data orient toward is not just more of the same, but a future that improves over time. While some mindfulness projects within QS, like Nancy Dougherty’s, seem primarily curiosity driven, many more, if not most, tend toward addressing something in the tracker’s life, whether an actual problem that presents challenges, a sense that something could be better, or just a general desire to “optimize.” In this sense, self-tracking in the Quantified Self community has a definite bent toward self-improvement. In his introduction to QS, a volunteer leader at a meetup I attended in Portland, Oregon, in 2014 noted that QS has frequently been seen by detractors as navel gazing in which participants are absorbed by their selves as “special snowflakes.” “We are,” he said, “special snowflakes, but special snowflakes in the best possible way because we use our data and our projects toward becoming our better selves.” Self-tracking data, then, hold out the promise of a capturable, knowable self that is also a manageable, and ultimately an optimizable self.

Ninety-six Days Later

This chapter, more like film and less like a self-tracking project, has an end point that has taken shape slowly over the past three months and four days since I reread Benjamin’s essay on “The Work of Art in the Age of Mechanical Reproduction” and wondered at the remarkable parallels between that discussion and the current moment. Working through these parallels has helped illuminate how self-tracking data construct and fix experience through the selection and recording of what is and is not counted, and how data “work” through proximity and distance to

lend trackers a vantage point from which to view themselves and their experiences. I have argued that the commensurability of data works at a conceptual level that moves beyond the individual person and the idiosyncrasies of both the data projects and the data collection streams, and that in QS, these commensurabilities become organized into stories in which we both render and recognize ourselves in new ways.

For Benjamin, the transition at hand was from an art that vested its works with their own aura of specificity rooted in ritual and religion to an aura-less art available to manipulation in the politics of war, or (as in Baudrillard) the marketplace. In Benjamin, however, the subjects of capture (people, places, landscapes) are not particularly at issue. They remain largely the same. In the first half of the twentieth century, the technologies for capturing and the capacity for mass distribution were what shifted and turned representation into abstraction. In our own moment in history, capacities for duplicating and distributing data have likewise undergone rapid expansion to the point where the tiniest of devices can generate, process, and move data in volumes and at speeds that not so long ago would have taken a room full of processors to accomplish. In addition, the sheer proliferation of such devices over the past few decades is staggering. Yet unlike in Benjamin, I would argue the underlying mechanism of data as abstraction has not substantively changed. Data, to the extent that they are a representation of phenomena in the world through the marking, measuring, and tracking of some aspect or element of those phenomena, are always already an abstraction. What has shifted is not the operation (as Benjamin argues for artistic representation in film) but the objects to which we apply that process. It is not the fact of abstraction that is different in the twenty-first century, but the widening array of phenomena at ever-increasing scale and decreasing increments. It is the penetration of the kind of detailed capture in film that Benjamin describes as leading to the “cult of personality” applied to Everyman. What happens when we all become abstractions of ourselves is a question we have already begun to answer in the proliferation of selfies and self-rendering across social media sites. In tracking oneself, however, one begins to construct new kinds of significance, new kinds of specificity, from new kinds of details. We tell new kinds of stories, and we see ourselves in these stories in new kinds of ways.

Hélène Miallet, in her unpacking of an interview she had with Stephen Hawking, argues that the array of technologies and people that surround him surface the broader truth of the ways that self can be, and is in fact, distributed (Miallet 2003); we extend ourselves through our iPhones, our

email, our avatars, and even sometimes, as with Hawking, through other people. What if the shift at hand is one of re-vestment? What if the proliferation of data and its penetration into daily life, as much as it abstracts our lives, is also a rearrangement of aura, and how it works? Certainly it is true that the ongoing tracking of our physical selves through such measurements as heartbeat and weight have revealed not only variations, but also uniqueness. What happens when specificity and abstraction collapse into one another? In a world of quantified self, here meaning not the organized meetups of the preceding discussion, but the broader term taken up by media and industry, perhaps we, like Hawking, extend ourselves through our technologies and our measurements and our recorded traces into our datasets, revesting them with something of our own selves.

The very notion of a “quantified self,” while it retains the commensurability that lies at the heart of quantification, is here tied to a self, albeit one identified with an indefinite article: a self, not myself, or yourself. In the binding of quantification not merely to bodies or populations but with selves, data has taken on valences that move beyond the physical, material world, and into the ways we understand not only what we do, but who and what we are: ourselves. Lisa Gitelman, in her edited volume *Raw Data Is an Oxymoron*, points out that data “produce and are produced by operations of knowledge production” (2013, 3). In other words, she suggests that data produce and are produced by epistemologies. I am wondering if, in an age of accelerated data, data have come to produce and to be produced by ontologies: not merely ways of knowing, but also ways of being.

Notes

1. A note on naming: several of the material resources I discuss here are drawn from or have been presented in talks given at various Quantified Self events and are posted on the Internet. In these cases, I have used the presenters’ real names and links to their QS talks can be found under “works cited.” In those cases where I draw on personal conversations and no public talk on the topic was given, I have followed anthropological tradition and used pseudonyms to protect the identities of these informants, though they may recognize themselves.
2. These latter details, not included in his notations but represented in my own field notes, arguably represent a different kind of “data” than that discussed in this chapter. This chapter is focused on data as it is discussed, practiced, and articulated within the QS community. I would argue, however, that the implicit understanding of what is and isn’t data that is articulated through practices within QS is, in fact, largely representative of the ways data is understood and practiced in the general public: loosely, imprecisely, yet consistently as the capture

or recording of information that indexes an array of facts, feelings, activities, experiences, achievements, and events that, in the aggregate and through a set of often blackboxed analytics can, or should, lead to something called “insights.” The extent to which anthropological data—generally recorded through a range of “scratch notes” and “field notes” and expressed through a range of rhetorical practices that Clifford Geertz famously captured as “Being There” (Geertz 1988; see also Sanjek 1990, and Clifford and Marcus 1986)—participates in the kinds of abstraction and commensurability discussed here is worthy of further discussion, though outside the scope of this chapter.

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