METRIC CULTURE: ONTOLOGIES OF SELF-TRACKING PRACTICES

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METRIC CULTURE: ONTOLOGIES OF SELF-TRACKING PRACTICES

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Chapter 1

Introduction: Metric Culture and the Over-examined Life

Btihaj Ajana

Abstract

Metrics, data, algorithms and numbers play an unmistakably powerful role in today's society. Over the years, their use and function have expanded to cover almost every sphere of everyday life so much so that it can be argued that we are now living in a 'metric culture', a term indicating at once the growing cultural interest in numbers and a culture that is increasingly shaped by numbers, as Beer (2016) also argues. At the same time, metric culture is not only about numbers and numbers alone, but also links to issues of power and control, to questions of value and agency and to expressions of self and identity. Self-tracking practices are indeed a manifestation of this metric culture and a testimony to how measurement, quantification, documentation and datafication have all become important tropes for managing life and the living in contemporary society. In this introductory chapter, I provide a general contextualisation of the topic of this edited collection along with an overview of the different chapters and their key arguments.

Keywords: Metric culture; data; metrics; Quantified Self; self-tracking; algorithm; governance

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> The unexamined life is not worth living
>
> – Socrates

Our twenty-first century seems to have taken Socrates' postulation rather too seriously. Life in the current age has not only become an examined life but one that is highly 'over-examined' as we are, at least in Western societies, increasingly becoming reliant on self-help industries, life-coaching strategies, quantifiable techniques of (personal) scrutiny and an avalanche of data and information to manage and dissect all aspects of everyday life. The recent proliferation of self-tracking techniques and fitness-monitoring devices together with the relentless quantification of work, leisure and performance have led to the rise of what became known as the 'Quantified Self movement' whose philosophy is 'self-knowledge through numbers'. Every day, millions of people around the world are routinely recording their activities, calorie intake, sleep patterns and a myriad of other physical and behavioural variables, all with the aim of gaining insights into their habits and improve various domains of their lives. In 'this data-driven life' (Wolf, 2010), bodies and minds are turning into measurable machines and information dispensers in the quest for personal development, productivity, health and better performance.

As a result of self-tracking activities and the general use of digital technologies, a growing amount of data is being generated daily. According to a recent report by IBM (Loechner, 2016), between the years of 2014 and 2016 alone, 90% of existing data has been created, at 2.5 quintillion bytes of data a day. Being awash with such amounts of data has made our very own existence increasingly shaped, defined and even ruled by data and numbers. Identities and social interactions are becoming more and more perceived in quantitative terms, framed and ranked within a reputation economy (e.g. Facebook 'likes'). Health, well-being and happiness are now being measured and assessed through a plethora of quantifying tools (e.g. MyMoodTracker app). Performance and productivity at the workplace are also being measured and monitored through various software and tracking devices (e.g. Sapience Analytics software). In fact, even the spheres of play and intimacy have been penetrated by this mentality of measurement and quantification (e.g. Spreadsheet app). And the list goes on.

So there is no doubt that we are indeed living in what we can call a 'metric culture', a term which indicates at once a growing cultural

interest in numbers, as well as a culture that is increasingly shaped and populated with numbers, as the sociologist David Beer (2016) also argues. But of course, metric culture is by no means a new phenomenon and this is certainly not the first time that we are witnessing an avalanche of data and a metric colonisation of life itself. For instance, the rise of statistics and its growing use in the nineteenth century has been described by the philosopher Ian Hacking (1990) as an 'avalanche of numbers' that had a profound impact on the definition and demarcation between what is normal and what is pathological, and on the organisation of human behaviour in various spheres and practices. Numbers, throughout history, became not only a means of measuring but also a highly politicised tool of governing and disciplining individuals and populations (Rose, 1999).

Today, a similar thing is occurring through self-tracking data and the spreading use of metric techniques. New ontologies, new metaphors and new ways of seeing the body and the self are emerging, and in ways that are undoubtedly reconfiguring the relation between individuals and their bodies, between citizens and institutions, between the biological and the social. What is at issue is not simply the volume of the data that is being generated, but also the kind of discourses and rationalities, the styles of thought and strategies that surround these emergent modes of managing the self, the body and everyday activities.

Metric culture is therefore not only a matter of numbers and numbers alone, but also links to issues of power and control, to questions of value and agency and to expressions of self and identity, especially in the way metrics and algorithms are often used to justify certain actions and decisions, define what is deemed as worthy, legitimate and valuable, prioritise certain problems over others and confer legitimacy on various forms of authority. What is striking above all about the current metric culture is that not only are governments and private corporations using metrics and data to control and manage individuals and populations, but individuals themselves are now choosing to voluntarily quantify themselves and their lives more than ever before, happily sharing the resulting data with others and actively turning themselves into projects of (self-) governance and surveillance.

It is with this awareness in mind that this book attempts to engage with the nuances and multifaceted nature of metric culture, providing empirically based and conceptually informed reflections on the different manifestations of data and algorithms in everyday life and their manifold implications. Although the chapters in this edited collection may seem very different in their approaches, sites of analysis, case studies

and geographical backdrops, they all have a common objective: highlighting the transformations that are occurring in various spheres of life as a result of the proliferation of metric culture throughout everyday practices. Therefore, the eclectic nature of this volume should not be regarded as an inconsistency, but as being itself reflective of the diversity, richness and hybridity of metric culture – a fact that does not lend itself to 'totalistic' or 'unified' theorisation but to an appreciation of multiplicity and divergence vis-à-vis both the subject of analysis (metric culture) and the methods of analysis (the different approaches adopted herein).

Chapter 2 in this collection initiates the discussion by tracing the origins of contemporary metric culture. Here the authors, Shore and Wright, contextualise the rise of quantitative performance management systems and tracking techniques in relation to the neoliberalising projects of the 1980s and their 'audit culture'. They begin by tracing how performance indicators were used in the New Public Management (NPM) of organisations, such as schools, universities and factories, as part of the 'agencification' process of government which involved the outsourcing of public services to private contractors and the development of metric techniques for managing targets and monitoring performance. Such techniques were not only confined to the management of organisations as a whole but quickly became applied to individuals themselves for the purpose of measuring and assessing their contribution to a company's strategic objectives. According to the authors, this push to measure and audit performance at both the organisational and individual level is driven by an 'ethic of improvement' and, one could add, an ideology of never-ending development. This is an ideology that lies at the heart of the Quantified Self movement and its ethos of self-knowledge and self-improvement. The final section of Shore and Wright's chapter turns to the example of China's recently proposed 'social credit' system which would involve scoring and ranking the character, trustworthiness and, even, marriage suitability of each citizen. It is envisaged that this ranking and scoring mechanism will be used to decide on instant loan applications, fast-track visas, retail discounts, among other things. All these developments beg the question as to what kind of subjects and citizens are being constructed and what forms of governmentality are emerging as a result of such an increasing culture of metrification and performance monitoring.

Chapter 3 by Thualagant and From addresses such a question focusing on the Nordic context and the digitisation of welfare and health management. In looking at the example of the eGovernment strategy of

Digital Welfare 2016–2020 in Denmark and ePregnancy programmes, the authors explore how digitisation and metrics are producing ideals and new civic virtues regarding perceptions and practices of citizenship. In the context of health, these virtues are primarily about citizens' engagement, self-care, self-responsibility and self-sufficiency. Citizens are thereby encouraged to adopt digital techniques of measurement and self-tracking, as is the case with pregnant women, to manage their health, and embrace the seemingly inevitable digitisation of social services. The authors highlight that, at the state level, the increasing introduction of metric and digital technologies for welfare management is often promoted in economic terms (reducing healthcare costs, for instance). As for the individual, it is promoted in terms of patient's empowerment, emancipation and autonomy (reducing reliance on healthcare professionals). But as the authors point out, there is a very fine line between empowerment and control when it comes to metric culture and its digital strategies.

Chapter 4 by Lupton and Smith moves the discussion to a more micro level by drawing on the empirical study they conducted with Australian self-trackers. Through a set of semi-structured interviews, the authors examine participants' experiences of self-tracking and the ensuing reflexive practices together with, what they call, 'agential capacities'. Key themes emerging from the study include issues of self-improvement, control and goal achievement all of which, as mentioned earlier, lie at the heart of self-tracking and Quantified Self practices and objectives. Rather than being a homogenous and static approach to understanding and monitoring the self and one's activities, self-tracking is shown to be, through this study, as 'a creative performative act of selfhood', involving diverse methods, devices and improvisations that are both digital and non-digital. As such, the authors regard self-tracking as a form of heterogeneous assemblages subsuming human and non-human actors, technologies and techniques, data and information, as well as the spatial and discursive aspects of self-monitoring practices. This heterogeneity carries also into the socioeconomic aspect in the sense that not everyone is impacted by self-tracking in the same way. For while some might benefit from it, others might be disadvantaged by it, especially in the context of 'coerced' rather than voluntary self-tracking, as the authors argue.

The fact that self-tracking practices are heterogeneous, hybrid and diverse is also one of the key conclusions of Chapter 5 by Kappler, Krzeminska and Noji. Here the authors critically engage with the recent work of Hartmut Rosa and his concept of 'resonance', while drawing

on empirical case studies and interviews. Resonance, as theorised by Rosa, is a way of relating to the world whereby the subject and the world mutually affect and transform one another. Rosa links resonance to the idea of the 'good life' itself and sees it as the antidote of accelerated modernity of which self-tracking is an example, according to him. Kappler et al. therefore take upon themselves the task of verifying Rosa's assertions by empirically exploring the extent to which self-trackers 'resonate' or not with their tracking and measuring practices, and by reflecting on the 'quality' of the quantified life. The authors' findings both support and challenge Rosa's hypothesis, leading to the conclusion that a 'playful', rather than purely goal-oriented, approach to self-tracking may result in more resonant relationships.

Practices of self-tracking are often described as transforming the self and the body into 'personal laboratories' where learning and experimentation can take place. This is a common belief within the Quantified Self community and especially among the more experienced and competent self-trackers. Chapter 6 by Christiansen, Kristensen and Larsen develops the notion of '1-Person-Laboratory' in order to give an account of the practices, methods and procedures which take place at the personal level and extend to the Quantified Self community as a whole through its knowledge-sharing activities. Reflecting on their own experiences as advanced self-trackers and technologists who build their own tracking devices, Larsen and Christiansen, with insights from the ethnographic work of co-author Kristensen, provide a useful insider's perspective on the kind of experiments pertaining to self-tracking practices and on the way in which the absence of 'standardised' methods for self-tracking contribute to stimulating creativity and innovation in this field.

Chapter 7 and Chapter 8 focus directly on the relationship between self-tracking practices and health management by addressing this in the context of diabetes and dieting, respectively. In their chapter, Danesi, Pralong and Pidoux discuss the findings of the ethnographic research they conducted in Switzerland on the use of glucose monitoring tools by people living with diabetes. The discussion centres around the ways in which self-tracking creates forms of embodied self-awareness among users and the effect of that on the medical encounter between patients and healthcare providers. The chapter also touches on the surveillance potential of self-tracking as well as the resistance of some patients towards the use of tracking tools.

Monitoring food intake and dieting have long been some of the most practiced forms of self-tracking and health management. In their chapter, Didžiokaite, Saukko and Greiffenhagen explore the use of

MyFitnessPal app for weight management and calorie counting by drawing on a set of interviews involving 31 users of the app. The study shows primarily the level of labour and efforts required to manage weight through tracking tools, such as MyFitnessPal, as well as the diversity of ways through which calorie counting is performed, appropriated and integrated into participants' daily routine. The study also demonstrates how calorie counting can influence and be influenced by other everyday practices, routines and factors.

Sleep is another important health aspect that has become increasingly amenable to tracking and quantification. Recently, a growing number of people have been turning to apps for help with sleep problems and finding alternatives to pharmacological treatments. In Chapter 9, Fage-Butler looks at this rising 'sleep app culture' with a particular focus on the marketing discourses and the discursive mechanisms underpinning the promotion and legitimisation of sleep apps. 'Identity' is also an important theme featuring in this chapter. The marketing of sleep apps does not only influence sales but also identity and behaviour. This happens through the myriad representations of the potential sleep app user that are mobilised in the marketing campaigns of these apps. By unravelling the different discourses that are deployed in the marketing communication of sleep apps, the author provides useful insights into the idealised constructions of user identity that are present in these promotional strategies.

Chapter 10 by Chan, Johns and Moses shifts the focus towards the academic context, looking at how the culture of metrics and self-tracking has invaded universities and their practices. From measuring the quantity of academic outputs, citations and 'read' counts to evaluating performance and 'excellence' through quantitative indicators, academic institutions and their employees are now increasingly being judged through the lens of metrics and a reputation economy. The 'gamification' of research achievements through tracking technologies and data-driven processes has led to the intensification of competition both on the institutional as well as on the individual level, promoting what the authors refer to as the 'celebrification' of academic life. Another major outcome has been the 'stripping out' of narratives in favour of data instead, something that raises various political and ethical questions vis-à-vis metric power, its reach and consequences within academia and beyond.

Remaining within the context of education, Chapter 11 by Staples looks at the adoption of web-based student information systems in American schools as an example of metric culture in educational

settings. These systems provide teachers, students, school administrators and parents access to a variety of data in 'real-time', including attendance records and homework assignments, grades and grading scales, health and immunisation records as well as behaviour and disciplinary notes. Staples argues that such systems represent an example of a neoliberal technology of childhood governance whereby students are drawn into what Lupton calls 'pushed self-tracking' to monitor their academic performance metrics and compare their grades to other students. As a result, students end up internalising the self-governing ethos of autonomy, enterprise and self-responsibility while being encouraged to adopt performance-based identities. Amid this academic metric culture, a warning question arises as to what would happen to students who refuse to deploy this neoliberal technology of self-governing.

The generation and accumulation of masses of data through metric culture practices also raise important questions vis-à-vis issues of privacy and data protection. As it stands at the moment, the majority of terms of use agreements in relation to personal data technologies remain ambiguous and, at times, even non-existent. For instance, a recent experimental research project conducted by Symantec (2014) found that a staggering 52% of the self-tracking apps and devices examined did not have privacy policies. For the rest, many did not provide any clear information on how the generated data would be kept private. Such issues are taken up in Chapter 12 by Palmer and Fairfield from Human Data Common Foundation. The authors conducted a thorough qualitative review of the privacy policy documentation of 55 private sector companies in the self-tracking and biometric data industry, producing what they call the Quantified Self Report Card. The Card serves as an assessment of these companies' user interfaces and privacy documentation. The aim is to measure 'human readability' of this documentation and to reveal areas of inconsistency and opacity in the Quantified Self industry, while also highlighting best practices. Based on the findings of their review, the authors make some valuable recommendations as to how privacy can be best managed in this growing ecosystem of Quantified Self data.

Chapter 13 in this collection offers a sophisticated philosophical meditation on what has become of 'reason' itself in the midst of a rising metric culture. Here the author, Bornemark, looks at the introduction of NPM in Sweden's healthcare system as an example of the metrification of the public sector whereby reason is reduced to a calculating, rather than reflective, capacity. She refers to this as 'ratiofication'. Taking cue from the work of the fifteenth century philosopher Nicholas

of Cusa and his critique of reason and not-knowing, Bornemark identifies three key aspects characterising the ratiofication of the public sector, namely 'concept imperialism', 'empaperment' and 'remote controlling'. Cusa's differentiation between *ratio* and *intellectus* enables the author to systematically analyse what is at stake in a metric culture that constantly fetishises intense calculation and documentation, and tries to eradicate not-knowing from the sphere of reason. Ultimately, Bornemark reveals the paradoxes and ironies inherent in ratiofication and metrification: the more we audit and calculate, the less we get to *know*.

And this is perhaps the biggest fallacy of metric culture!

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