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# Quantified Bodies

## A Design Practice

James Dyer

### Abstract

*Self-trackers are a diffuse and diverse group that quantify their lives. From the ordinary to the extraordinary, intimate and vital happenings that occur on (infra)-empirical planes are cast as legible events. The tracked data consists of blood pressure, heartbeat rate, testosterone levels, posture, diet, muscle tension, social activity or geographical position. These are now happenings to be intervened upon and rendered as units of measurement and comparable variables. These measurements may give insight to help rebuild a recognition of oneself (Catani 2015), or allow a brooding recall of lost moments (Kalina 2012) – this is the manifest quantified body, a body read and a body written. Yet the quantified body is a veneer, it is the outward appearance of control, awareness and care-for-self: we were cynical subjects (Sloterdijk 1987) long before we were quantified bodies. However, self-tracking intrinsically disassociates from the ubiquitous cynical condition. The cynical self-tracker gropes for independence whilst submitting to a life of mediated self-discovery, it is a renunciation of independent vitality so as to act “as if”, to appear to be whilst never being – to fall short of realising difference. It is argued here that the quantified body allocates us all to be designers – reading and writing in culture. And as such, our actions must be critiqued as a symptom of a design practice, where the condition of subjectivity is at the forefront of value-making in taste, style and fashion. How does the cynic self-track? What is the value of design in the field of new media and digital culture?*

## Self-Tracking

Self-tracking constructs intimate and vital events into units of measurement – writing the body into legibility. The intimate is formulated here as the encounter with another person or place, as a quantified relation. This could be relations to and between people, monuments, location, weather, time, and so on. The vital is all essential and belonging to life: heartbeat rate, body temperature, or blood pressure for example. Presenting intimate and vital events as variable units fundamentally alters perspectives of personhood, social relations and the body (Rabinow 1999; Novas/Rose 2000). The expanded (infra)-empirical access to intimate and vital relations has created a new logic of accountability,

one that has not been experienced before (Pantzar/Ruckenstein 2015: 14). The emergent popularity of self-tracking demonstrates a strong cultural currency in the reading and writing of the body. As such, self-tracking is not an inconsequential fad, rather it is a phenomenon requiring sensitive attention.

Sensitivity is paramount in a critical study of self-tracking. To concern intimacy and vitality without sensitivity, particularly sympathy, is to shun self-tracking towards the well-established routine of divorced judgement: it deserves more than the “gullible critiques” (Latour 2004: 230) of ideology (Žižek 1989), social control (Foucault 1978) and fetishisation (Pietz 1987). To claim self-tracking is harboured in illusory perception (ideology), manipulation (social control) or false values (fetishisation) is to renounce the fundamental core of the practice, the agent – that is, the “tracker”. Whilst predictable concerns of nefarious panopticism are perpetuated – and heightened post-Snowden – there are also encouraging accounts that break away from this dominant discourse – such as a proposed “soft resistances” to biopolitical regimes (Nafus/Sherman 2014: 1790), events such as Lifehack Marathons (Setup 2015) and schools for poetic computations (SFPC 2015). Here, an extend reach of alternative cultural debates is proposed – presenting a different view on quantification. The new perspective is from the position of design, a perspective that is not landlocked in the quotidian shuffle of impartiality and cold sobriety, rather it is deeply connected to the reading and writing of cultures – self-quantification is fundamentally a designerly practice.

## Design

Design is defined here as the consideration of significances. The manifested significances – the designed object – is the composition of those considerations. To be clear, the designed object is not necessarily a luxury designer object, but it may be a service, system, machine, body, and much more. Therefore, design is not merely faithful to form or function, but more towards fiction – design is world-making. This definition crucially incorporates two facets of design – action and value. Action is consideration, and the (in)-significances of a designed object are its value. As such, the intensities of a designed object’s value-significance make up a potency of argumentation (Cross 1982: 229). That is to say, designed objects contest and concur with their environment and each other by their very existence; minimalism is an argument opposed to ornamentation, just as luxury cars are an argument against sustainability.

The assembly of argumentation in design becomes a design style. In this instance, style is a manner of pursuit, preference in taste, and choice of value, and it is from a particular posture of style that a designer reads and writes in culture. That is to say, disagreements are read and opposing positions are written – in new styles. It is to compose what does not exist via a contestation of what already exists – “one way of doing things, chosen from a number of alternative ways” (Simon 1975: 287). Design is a practice of suggesting and manifesting possible solutions and futures (Cross 1982: 225; Fry 2009). Accordingly, argu-

mentative positions of design are concerned with what has come before, what happens now, and what may happen. Self-tracking and design meet within this spectrum of read-write culture, argumentation, and style.

The quantified “readable” body becomes a body of contestation as it is written into culture. It is a body of interaction, between (inter) operations (action), a body deeply embedded in relations of and to itself via the practice of self-tracking. As considerator (designer) and composition of significances (designed), the body is not solely the valued object of design, but also the acting agent enforcing such design. Via self-tracking, vital variables and intimate relations are read and new ones written, the body is written in acknowledgement of its past, present and future form – this is the quantified body. The culmination of this independent “designerly” agent of self-tracking is clearly seen developing through a brief leapfrog genealogy of electrocardiogram (ECG) devices.

## The Quantified Body: A Brief Genealogy

Genealogically, the quantified body may be traced back to the early 1900s with the introduction of telemedicine. Dutch scientist Willem Einthoven developed an early form of telemedicine when he successfully transmitted a patient’s ECG signal from a hospital to his laboratory, some 1.5 km away. Einthoven called this a “telecardiogram” (Einthoven 1957), it is an early indication of bodily quantification; it is the interception of a vital event, the heartbeat, for the purpose of transmission, communication and manipulation (medical care).

Notably, the career of physicist Norman J. Holter presents a clear trajectory from Einthoven’s work. In 1947 Holter introduced an eighty-five pound backpack – the Holter Monitor – consisting of two batteries and an ECG radio transmitter (Gawłowska/Wranicz 2009: 386). It was later refined to a more compact and portable system in 1962, which the inventor called a “step toward freedom” (Holter 1961: 1214), a freedom from the limits of poor “electronic and mechanical performance” (ibid: 1219). Holter’s later inventions allowed up to ten hours of monitored heart activity to be stored on magnetic tape using a portable “electrocardiocaster” and “electrocardiocorder” (ibid), the device was now discreet and the patient was mobile.

Both Einthoven and Holter produced unique equipment to grant specialists an unprecedented access to the body, however this changed with the emergence of e-health in the early 1990s. The dominant motif of e-health was the repurposing of existing devices and their surrounding rhetoric. E-health adopted orbiting ideologies of technological developments and socio-economic aspirations, such as e-commerce and the Internet. In this sense, e-health is not an active development of telemedical services, but is instead an adoption of relevant and proximal trends, particularly ones that charge the user as champion over the specialist. The specialist has been disregarded in lieu of an “informed user”.

E-health emphasises the “device-process” as opposed to the telemedical service of “specialist-procedure”. The focus is less oriented towards disaster response and urgent needs (Garshneck 1997: 42), and rather aimed towards

a vague state of health attention. This can be seen in the addled and prophetic celebrations for e-health's adoption of the "explosion" in email communication in medical care in the 1990s (Pallen 1995). E-health created a growth of "proto-professional" user-consumers (Novas and Rose 2000), they are the "informed patients" (Detmer et al. 2003) and the "worried well" (Frith 2014). The divorce from specialists, and the introjection of mediated independence, still resonates today, it is the "user-model" of the independent agent – designing and designed – called here, the quantified body. However, the cast of an independent self-tracking read-write agent is, on the whole, a myth – that is to say un-lived. There is a stagnant slump in necessary action – we are all, still, cynics.

## Cynicism

The philosopher Peter Sloterdijk, heralded by social scientist Bruno Latour as being the designers' philosopher (2008: 8), proposed in his seminal book *Kritik der Zynischen Vernunft* (1983) that the dominant human condition is a cynical one. It is a diffuse condition of enlightened false consciousness (Sloterdijk 1987: 5). The cynic acts as if ignorant of their own knowingness, or in cultural critic Slavoj Žižek's maxim "they know very well what they are doing, but still, they are doing it" (1989: 29). As such, self-tracking clearly jars with the condition of cynicism, if the model self-tracker is to know (read) and act upon that knowledge (write) – to change and manipulate – then the cynical self-tracker appears only to know (read) and to reinstate that knowledge (re-write) – to maintain a conservation of behaviour. In illustration: cynical self-trackers know very well that they smoke 200 cigarettes per week, but they are still doing it. This has detrimental effects for the traditions of the critique of ideology, in which the goal has been enlightened consciousness, to liberate the mislead, to unveil the veiled and dismantle illusion. Yet, the dominant cynical subject is not mislead by illusion and requiring enlightenment, rather the subjects are acting "as if" whilst knowing otherwise – this results in a post-ideological Fukuyama-esque tension.

Political scientist Francis Fukuyama notes the development of history is dependant on the conflicts of ideologies (Fukuyama 1989: 4), an ideology being an assemblage of beliefs and values that sanction particular behaviours. The cynical self-tracker does not employ the necessary condition of active conflict – the writing of difference – to create authentic change over their body. As such, if the general goal of self-tracking is to alter, manipulate or better oneself – under the rubric of care, optimisation, or health – then there must be an action of opposition. That is to say, there must be an envisioned alternative of "x" or a potential better version of "y", the self-tracker must contest something so as to mark progress. The cynical self-tracker does not need more intimate and vital data, they need to act, to create friction and genuine change, the quantified body needs to be animated so as to agonise and develop, this is what Sloterdijk calls "kynical" action (1987: 218), a way of acting in knowledge.

For Sloterdijk cynicism is “self-embodiment in resistance”, opposing cynicism as “self-splitting in repression” (1987: 218). Through his postmodernist cubist-like style, Sloterdijk delivers existential emphasis on the diffuse being; the Socratic imperative to know thyself is no longer enough, the unexamined life may not be worth living but the examined life is yet to be lived. As such, the cynical strapline of the Quantified Self organisation, “self knowledge through numbers” (2007), presents a transparent inadequacy. An amended kynical strapline would be; “self doing through knowing numbers”, that would be a materialised kynical read-write project of “flesh and blood” rather than a cynical read-re-write “dialogue of heads” (Sloterdijk 1987: 104).

## Conclusion

In many cases traditional academic rebuttal of self-tracking, and more broadly new media and digital culture, has remained rooted in a well-trodden path of critique, one which champions a dispassionate sobriety and “matter-of-factness”. Such critiques have untimely cast self-tracking as a known phenomenon that presents certain predictable variables, almost as if prematurely archived in Bruce Sterling’s Dead Media Project (1995) – home to the known and redundant. Employing a design perspective will recast self-tracking as unknown, as an intriguing and unique field requiring sympathetic critique; allowing discovery, error, and debate, rather than inculcating tradition and dominant narratives. Rational conflicts of (enlightenment) reason and logic do not command design, instead it is the sensations of intensities and styles of argumentations with non-absolutist ends that steer and guide it. As such, through the position of design, it is possible to appropriate and reinvigorate lyrical writings (such as Camus, Cioran, Sabato) within contemporary theorisations of design practices (such as Latour, Willis and DiSalvo) to inform an emotive and sympathetically reflective perspective of critique. Further research is needed into the materialist/vital potentials for creating theories of “flesh and blood” (Sloterdijk 1987: 104). This must regard the emergence of self-quantification beyond the false values in fetishism, the misdirection in ideology and the manipulations of social constructions. These theories still have an important place, but room must be made for the free cynical agent, as manipulator and manipulated, and design creates this room.

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