ON SELF-TRACKING AS SURVEILLANCE PRACTICE

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Anna Heitger, BA, born 1992 in Washington, D.C., raised in Austria, studying Cultural and Social Anthropology at the University of Vienna since 2012, currently in the Master program. I aim to write from the intersection of Anthropology and STS, with theoretical frameworks of practice theory, feminist and posthuman theories, and a special interest in affectivity and the role of emotions and affects in the practices we engage in. Investigating self-tracking technologies allows me to bring together these fields of interests within a particular kind of assemblage of human body and technological device.

HOW TO CITE

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Running, walking, climbing stairs.

[the surface of the earth rotates while I'm moving in the world]

Someone is watching my every move.

Even when I do not move – when I sit, when I wait at the bus station, when I eat, when I sleep – there is a constant recording of my activity of being alive.

Breathing in, breathing out. Someone, *something is counting*.

Self-tracking. The idea of self-tracking is to record human activities and provide the user [consumer] with data that is assumed to be useful in regulating activities, habits, the body.

Numbers – distance, duration, pace, calories burnt. Heart rate.

Know your body better through these numbers.

What do they tell you? What can they tell you that you can't learn in any other way?

Why is it important to know these things?

Not only numbers – statistics that cover weeks, months, years. Revise. Compare. Make decisions based on them. *Improve*. Only a few steps more to reach your daily goal, you can do this!

There are countless apps like this, some free, others offer paid pro versions; most of them track physical activities.

Complete the tracking of your self with additional products:

Smart scales that transfer the data immediately to your app.
Smart watches that track your pulse, your every step, your sleeping cycle… as they merge with the body; no external device like the smartphone, but a wearable extension of the body.
Record GPS-routes, differences in altitude, compare your achievements; the data will be there forever, for whenever you want to have a look at it to know… something.

Manually enter additional information into your app. Your mood, emotions. Your menstrual cycle, fertile days.

Then there are apps that remind you to breathe. To relax. To meditate. They give instructions to do so: You tell them how you feel, they tell you what to do – to feel better.

More confident. More productive. They help you manage stress. Depression. Anxieties.

"Manage yourself,"

"Recharge," "reboot yourself".

[technical terms for a technical body]

Researching self-tracking.

As a cultural and social anthropology graduate student, I am interested in how people make sense of their lives and, furthermore, how they do so in interaction with things.

[how do the things that people make, make people?]

This is how I ended up investigating self tracking – as a practice that is enabled by particular technologies, particular materialities and, most importantly, by the particular ways in which things matter to us.

In this research, I have analyzed tracking apps, the assumptions that they rely on and the notions that they evoke; and I did ethnographic research with people that do self-tracking in their daily lives.

Another part of my research is a self-experiment of tracking myself over the course of four weeks with an app in which I learned a lot about how things matter in self-tracking practices – because they didn't exactly matter to me in these required ways.
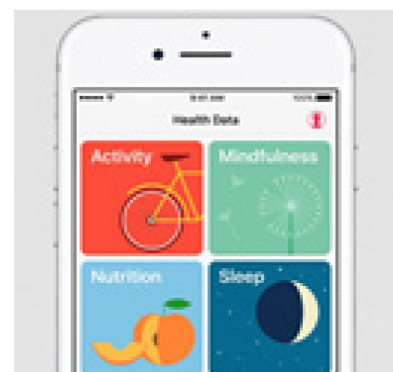

fig. 1

Tracking health.

This is what health is about within Apple's self-tracking system (not removable from the device).

The body. My physical existence-in-the-world, my view from an inside [me] to an outside [world]. In anthropology, we can reveal such understandings of the body as a peculiarity in time and place – there are many other ways to understand ourselves, the world, our being.

And. What are we other than bodies? Where do my thoughts come from, if not from my embodied being-in-the-world? Everything happens *through* and *with* the body, even my most abstract thoughts come from my experiences, embodied experiences. Feelings, touches, sensations on the skin and below. Moving in the world.

We move together with things:

We move with different things that serve different purposes. And some people, well, they move with a technological device that tracks what you are doing, that assumes a *subject* [inhabiting the tracked body] – a person that does something with the information: Look at, revise, compare, think what to do next. A person that makes decisions based on its activities and regulates the body.

The body gets dissected more or less carefully into its different functions –

[flexing, burning calories, keeping your system going]

– and into its different parts

[abs, biceps, fat, tissues, organs, hormones]

And your body – your body is going to disappear a little bit in its materiality, as it is turned into data.
Body: concentration of data. What matters in the end are the numbers.

You have to strengthen this part of your body, you have to eat this in order for your 'whatever' to function. You need to sleep and to relax so that you function correctly, to improve your performance. You have to fuel your body with this nutrient so that you can keep going.

Your body has become an object of desire. The *ideal body*.
The actual body – a site of intervention.

[intervention needed in order to transform the actual body into the ideal body]

The idea: Invest in the body and you'll see the effects. You'll turn into a desirable subject. Not only healthy [healthy is good]. You are strong – physically and mentally. Determined. You make the right decisions. Anyway, it's up to you – *you* are responsible.

[No thoughts lost on the context that an individual lives within – conditions that maybe have some impact enabling or, in other cases, constraining the individual in its actions]

Now.

You've come to know your body so well in biological terms, you know so much about things no one even knew existed before self-tracking technologies became a thing.
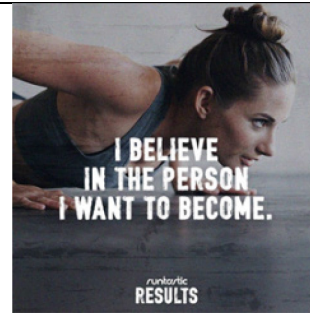

fig. 2

Decisions & excuses.

the body – in need of manipulation/ you – the subject in charge

"It's your decision if you spend your time in front of the TV or outside, being physically active!"

I am still thinking so much about this statement from one of my informants, because:

What about those that are not physically active? That are not like expected, or maybe don't show the expected results? Those that are physically disabled?

But no – there are so many pictures on the internet of differently abled individuals showing off their muscles with a proud smile. Good for them. Old people, too. Moms with kids, too. Have seen it all. Not an excuse, apparently.

fig. 3

Not an excuse for not being actively self-optimizing the body.

What about the context of an individual? The living conditions? Could it be impossible to think of lives where there is no such choice between watching TV or exercising?

Impossible to consider working conditions, responsibilities of care-taking, exhaustion, other preoccupations as impediments?

In this logic promoted in practices of self-optimization, could there even be *any* explanation, any justification that wouldn't be dismissed as an "excuse"?

Where is potential for critique, in this logic?

The individual, left alone with its responsibility, its decision, its excuses. No context, however real, however constraining, is gonna save you.

Measuring the body, measuring the self.

The tracking device (smartphone, smart watch, wearable tracking device) – close to your body, as close as possible.

[human-machine intimacy]

The technological extension that compensates… for your lacking capacities to know the body in these ways.

Know the body in these ways – what for? What's at stake?

"Make it count" is the slogan of a Nike commercial for its tracking device FuelBand, and I think it sums it all up:

track yourself to make it count,

"it": your actions, your effort, your achievements.

If your actions are counted, then you have proof, evidence.

[that you can even share with "friends" on tracking app platforms]

But proof also for yourself: You're taking the responsibility that is, apparently, yours. You're doing your part, and you're doing great. Or good, at least. You can still do better.

This proof helps you to get to know your body, to become aware of your body – "aware" meaning incorporating the measured data displayed on your device.

Defying the erroneous communication between bodily sensations and the controlling mind.

Because: Me, I can't possibly know how many steps I take a day, let alone all the other trackable things. Meaning, I lack ways to know my body. My consciousness of the body: insufficient.

Because: Me, I can't possibly remember exactly what I did so far and in detail. Meaning, I lack ways to store information, I forget, my capacity to remember is not to be trusted, my memories are distorted, imprecise.

Now self-tracking apps help out

a) to know the body: by telling you what you did today

[so you can align your embodied sensations with the data]

and

b) to remember: by creating statistics, by storing records of everything

[so you can have a look at what you did on day xx any time you want]

Of course we could ask: What's this desire to remember all about, this desire to record events, to create history? Cave paintings, written diaries – and now tracking technologies?

But instead of asking big questions, maybe just look at *what happens when we engage with tracked data.*

What understandings does it enable?

And then: What actions?

Self-governance.

…the individual exerts governance on itself, regulating itself according to a regime of body politics. Self-tracking apps create a *body of consumers* through the responsibilization of individuals; likewise, they create the *bodies of consumers.*

Self-governance practices revolve around particular ideals that are taken on by individuals as they try to adapt their bodies and their selves to these ideals.

Self-optimization.

The desire to improve, to get better, to become the true/best version of yourself, as one form of self-governance.

As if there were *versions* of the self – not meaning it is wrong or erroneous to think this way. But it's a peculiarity, this idea of the *self as project.*

Because there are so many other ways to understand ourselves. To be able to think of the self as in versions is, indeed, peculiar.

The important thing here:

Keep asking questions.

In which direction does this improvement go?

Why should you improve? Who would profit from your optimized self, optimized body?

Who would profit from your striving?

What does this desire for a future-truest-version-of-yourself do with the actual-version-of-yourself?

Affordance. J.J. Gibson, ecological psychology)

… is about the (material) disposition of things,

… is about opportunities for action: What does the data from your tracking app *afford* you to do? What are the actions that are enabled by it, what actions are constrained?

Self-tracking apps afford many things.

But among other things, they afford for responsibility, evoked by the visualization of measurement offered by the device. They afford for particular actions following this responsibilization.

Understandings.

So if. If you are going to track yourself. Numbers on your display. And maybe you feel exhausted physically, and believe that you took many steps today. But the app tells you a number, and this number means fewer steps, as compared to your average number of steps per day. Then what?

You are going to say: "Oh, I didn't expect that. … Well."

And you're going to go with this reality. You are aligning the reality [as felt in the body] to the reality [as shown on the display].

Because: Objectivity. We want objectivity, we believe in objectivity:

a) tracking technology/measurement techniques
produce objective information = "facts"
b) brain/human memory
produces very subjective, biased information ≠ "facts"

Objectivity, based on the assumption that there are actual events that can be recorded, when, in "fact" (?) there aren't –

– if we look at facts as constructed.

A "fact": a piece of information, always partial, merged with other information, knowledge, values. They *become* "facts" in particular ways.

And apparently, tracking technologies are effectively concealing this processes in which "facts" are made –

[implications of measurement techniques]

[assumptions built into the tracking app's design]

– and concealing all that is left out by their fact-making –

[everything that is not rendered measurable]

– maybe, just maybe, because they produce only one kind of data; we, in turn, produce many kinds of data in many ways, confusing, sometimes contradictory, unorganized.

However, measuring and producing this kind of information is not just for fun, is not only to *know* something – but to *do* something.

Actions. They are, essentially, embodied movements.

So if. If you do something – and then look at the app, and the app tells you what you did and when and how and so on – then you have information to think about what to do next. Decide. Choose. *Do* something.

Movements in pursuit of self-optimization, supposedly.

In self-tracking practices, activities that supposedly lead to an ideal body emerge –

[activities that are measurable – to make it count]

– as well as other activities that are required for the practice to be carried out:

Reviewing, comparing achievements of the last weeks.

Cybernetics. The science of control through communication emerged in the cold war era as a particular logic:

The world is translated into a problem of coding. Entities are quantified and measured to aggregate data – based on the premise of a shared language between those entities.

Humans and machines speak the same language. A digital language, that is. An entity, here, is a data point, as is its behavior. It is connected to other entities, human and machine, through endless feedback loops [see Orr 2006].

Feedback loops between me taking steps, my app telling me how many steps I have already taken, me adjusting my actions to the numbers (maybe walking an additional round around the block to reach a particular number of steps), the app telling me how many steps I have already taken…

Information and its visualization by the tracking devices, then, is disembodied in this cybernetic logic. Information is the quantifiable element that allows for universal translation [see Haraway 1991].

fig. 4

A script.

Educational videos that show how to do & what to do for a self-optimized body.

Style: An empty room. A mat. A body. Dramatic music. Minimal sportswear/muscular body.

Instruction text.

Dynamic/slow motion/time-lapse.

Script: produces knowledge about possible embodied activities, affording for imitation.

fig. 5

Giving a "like" on a tracking app platform, receiving a "like" for a live-tracked activity/for a before-and-after-picture. Taking this before-and-after-picture. Creating new workouts, new goals for this week.

Responding to the app's notifications, reminders, congratulations for some success.

The app enables some things, some activities, some ways to think about ourselves. It *affords* for usage in particular ways.

The power of a self-tracking app lies exactly therein:
what it enables and in which ways.

Self-tracking apps enable to think of ourselves in certain ways
    [autonomous person + body as site of intervention]
they enable to feel responsible in certain ways
    [responsibilization]
they enable particular ways of moving through the world
    [actions]
and they enables to think about it all in particular ways
    [understandings]
they make participation appear to be a question of self-determination, of choice
    [affective commitment]

To think of power here is not: "Self-tracking apps make us do things."

To think of power here is: "Self-tracking apps enable particular actions."   [and constrain other actions]
They are potentially powerful – because they are embedded in a particular regime of knowledge.

    [because of the desire for an ideal body, because they make it seem achievable]

    [because of the fear of being flawed, because they make you appear to be in charge]

They are potentially powerful because they make sense in some ways.
    [because you believe in the techniques of measurement]
    [because you believe that this kind of knowledge is valuable]

Self-tracking does not work without these things. Without the desire to improve the self, but neither without trust in the measurement techniques.

I realized this, as my own self-tracking experiment failed – somehow. It did help me to learn a lot about the practice, though, and to ask the right questions. Questions that lead me to affectivities of desire, trust, commitment, responsibility for the body.

Practice theory.
One way to understand social life: as organized in practices that consist of doings & sayings.

a practice implies:
▪ **a practical knowledge** –
  how to do things in certain ways.
  operating the tracking device, embodied activities, knowledge of symbols and meanings etc.
▪ **a task** –
  what to do.
  self-optimization
▪ **a logic** –
  why and how.
  measurement paradigm (measurement as the adequate way to know yourself)
  self-governance (knowledge about your responsibility and about the body ideals)

a practice brings together:
▪ **subjectivities**
  autonomous individual
▪ **objectivities**
  body as object of desire/site for intervention
▪ **materialities**
  bodies, landscape, devices, sportswear etc.
▪ **technologies**
  in particular ways.

Affectivity, embodied meaning-making.
Affects become tangible as emotions from time to time – "emotion" being a culturally specified and normed manifestation of an affective state. Affect is always in flow; not private, but social. Never owned, but very real.

Affects are about *how things matter to us*.

Affects lead our attention.

Things can become objects of attention for affectivities.

The body – tuned affectively.

The promise of a *choice* evokes affectivities of desire for an ideal body.

At the same time this idea of a choice invokes affectivities of responsibility. This particular relationship matters, because it is felt – it is real, undeniable.

Affects hold together the elements and components of a practice and arrange them in particular ways.

Affective features of embodiment in self-tracking practices.

At the beginning of my experiment, I felt committed and curious, of course. Tried to adapt understandings of my body as a project in need of intervention, of tracking as an adequate medium for intervention. To know how to intervene.

And it did resonate with the responsibilization incorporated in my sense of self, with the body ideals incorporated.

[acting on the desire for an improved self]

And then.

Then…? I don't know, I fell ill after the first two weeks, had to swipe off the app's notification –

"Time for your daily workout!"

– and got used to doing so, maybe later, but eventually to swipe off. So much else to do. Even the 15 minutes of the workout – better invest them in writing on my paper for this class. The app won't pay me, but my academic career hopefully might someday. So many other things I could do in 15 minutes.

It just didn't make sense to me to do self-tracking. I didn't gain anything by tracking myself. It really didn't make me feel better about my physical activities, either.

Then sometimes, when I did act on the app's reminder and tracked my exercises, I just skipped some when I felt like it – the app has no way to know if I'm doing or not doing something, in the end.

This was when things got interesting for me: How, then, do these apps manage to create the commitment necessary to keep people involved? How come my informants tell me:

"I would never cheat the app, because this would mean to betray myself."

How is this particular relationship established?

I came to understand that self-tracking practices emerge when they come together with affectivities of desire for an ideal body and affectivities of responsibility, within a self-governance regime and the knowledge regime of measurement.

Or, put differently: If you believe that your body is your *responsibility*, if this is the general and shared understanding of your social context, and you have certain *knowledge* about how this body should look like, and this *desire* becomes active, and you *trust* in measurement techniques as the adequate way to create knowledge about yourself – then self-tracking makes sense to you.

But it can make sense to you in very different ways. Because this responsibility, trust, desire can be incorporated in very different ways, they can mean different things to different people. They can lead to different actions, to different interpretations of a self-tracking practice.

The making of commitment.

"Progress Pics: You can now keep track of your transformation by taking Progress Pics right in your app. You can choose to keep them to yourself, or you can share them with your friends on social media to spread the motivation."

fig. 6

From self-tracking app's point of view:
   individual = consumer
   no consumer = no app

this means: need to make people use apps
- catch attention: notifications, reminders etc.
- reinforce desire for ideal body:
  show progress = desire for more progress
  ⇨   progress pics
  [progress is visible]
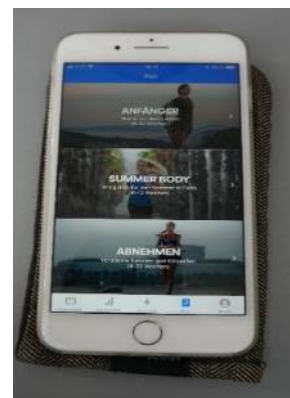 [pictures represent the reality]
- reinforce responsibilization

Body ideals.

fig. 7

workout options:
1) "beginners"
2) "summer body"
3) "lose weight".
How do suggestions like these affect you – don't you want to have a summer body, or at least to lose some weight? These suggestions are not neutral in any way, nor are they innocent. They play directly into a whole affective machine, a system of how things matter to us.

Body ideals of the thin body as healthy body, gendered notions of how bodies should look like and what they should be able to do.

Do they resonate with you?

Be that as it may, we all know that body image disorders, eating disorders are an issue. That they even come with mortality rates: Numbers that demonstrate the pervasiveness of the responsibilization of individuals as it weighs heavily on their shoulders.

There are different *arrangements* of how these elements that make self-tracking meaningful are interrelated. And: There are different arrangements of how self-tracking is interrelated with other practices that you are part of.

Maybe: Conflicts emerge between practices. Maybe other practices have different values, different knowledge regimes. More or less compatible with those of self-tracking.

[a multiplicity of self tracking practices]

Closing remarks. In retrospect, in my case, it was not predictable what would happen. If self-tracking would make sense, if I would be able to adopt measurement as a way to understand myself. If I would learn how to make sense of the tracked data, and of the fact that it is tracked.

This is not about decisions, it is about affectivities. It is about how values of self-tracking are in opposition to values of other practices I'm participating in, some of which challenge the notion of self-optimization and disenchant the desire for the ideal body.

All my informants are proof of the existence of diverse self-tracking practices, different senses of responsibilization, different arrangements of trust, commitment, different desires. But they participate in self-tracking as it makes sense to them. At least – for now. And all this could change, again. It's dynamic, shifting, never fixed.

When writing about self-tracking now, for example, when thinking about how to write about choices, decisions, when looking at the pictures of the self-tracking app:

It's intriguing.

Indeed, in the way that self-tracking apps play into knowledge regimes and responsibilization, they are alluring, convincing.

They beguile us to take on the sense of responsibility, they *afford* taking on this sense of responsibility –

– if we do so or not depends on whether it makes sense to you:
if you believe in your body as project; if you believe in measurement as a valuable way to know yourself; if you believe in the need for optimization as a way of being.
if you believe in the data, made for you by your tracking device, as neutral, objective stating of actual events.

When data, in any case, and the data derived from self-tracking technologies, never speaks for itself, it must always be *made* meaningful –

[within this particular regime of knowledge and self-governance]

– must be interlinked with knowledge, understandings, so that when you look at the data of your self tracking device,

it *does tell you something*.

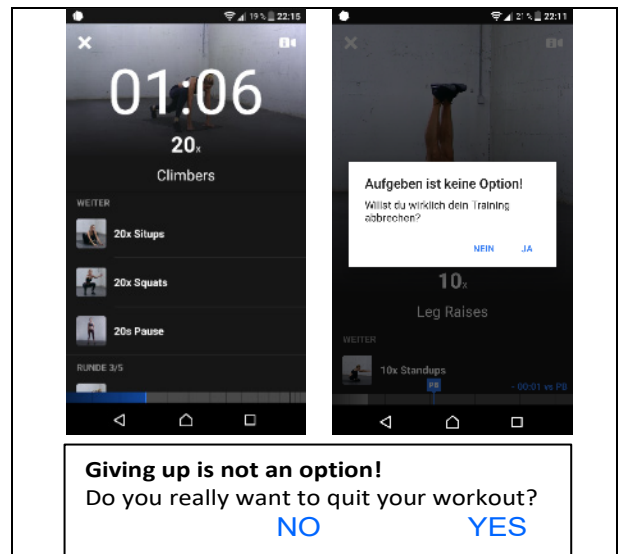So that it *makes sense* to you.

fig. 8

Responsibilization: "the greater visibility of bodily information implies an associated responsibility to act" (Viseu/Suchman 2010: 163). What does it mean to "give up," when giving up is not an option?

Where's the autonomous choice here, when the app has already chosen?

No, of course it doesn't mean that much; it would be exaggerated to say that as consumer of a self-tracking app you pay much attention to those words.

But … it isn't trivial, either. It could say anything else, but these are the exact words. And this exact choice of words does inform actions and understandings, invoking and reinforcing responsibilization.

After all, the message is very clear. No room for interpretations, excuses. All said.

Opening up questions: keep trying to disentangle the understandings that are required for self-tracking to make sense –

when, and how did you learn to read data? to interpret statistics, to make numbers meaningful?

what kind of information is this data, what is left out in this account of actual events?

when did you learn how to self-optimize? how to desire an ideal body?

when did you learn responsibility for your self?

where does your sense of self come from?

– and all the other questions.
 And always, anthropology's dearest question:
how could it be different,
*   how could it be otherwise?*

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