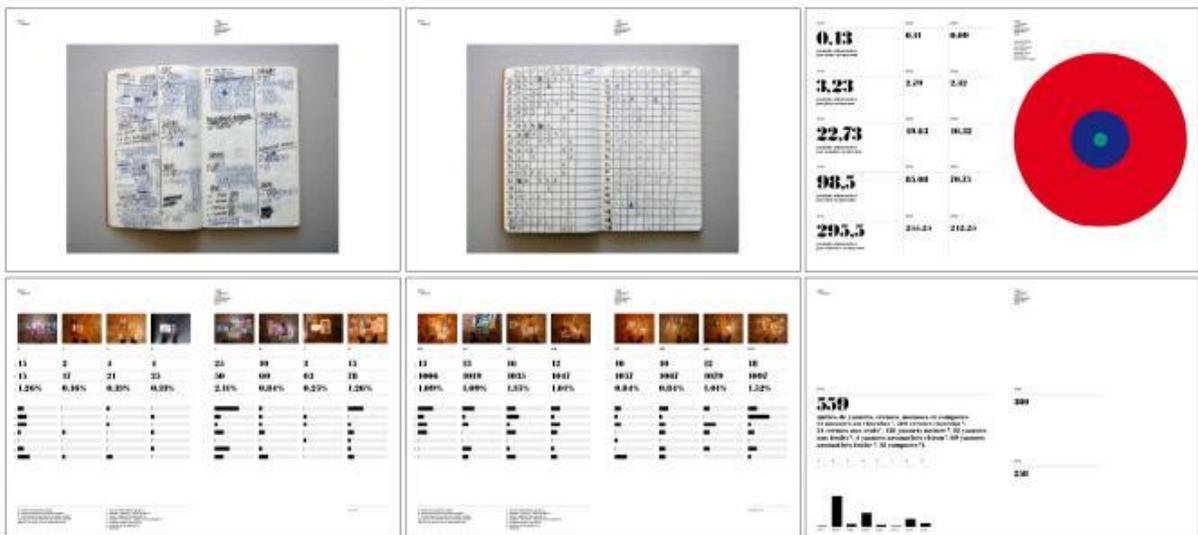
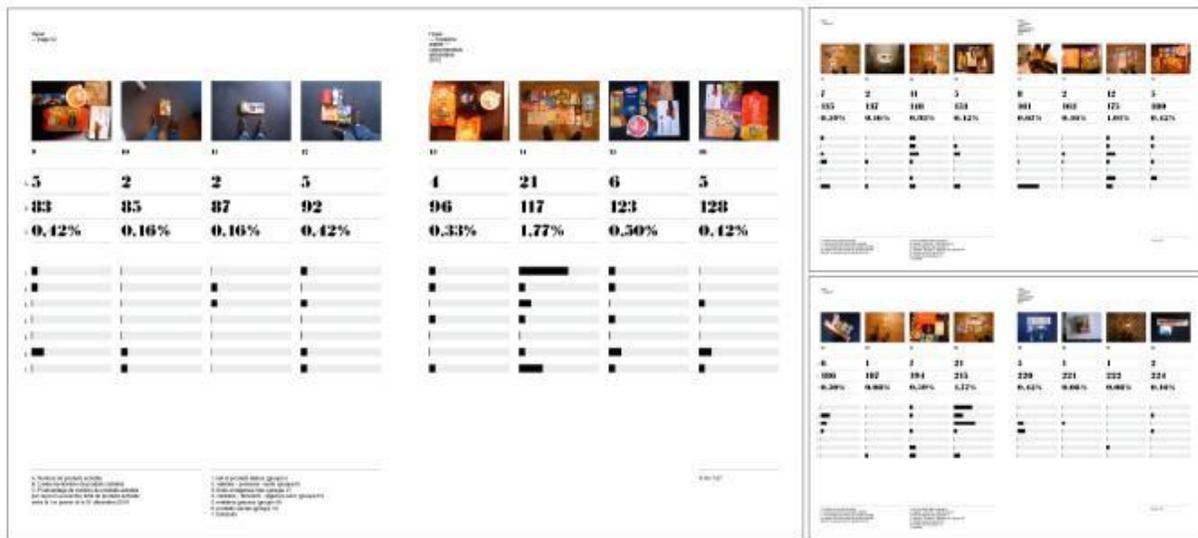


SELF-TRACKERS: WHY DO THEY PREFER THE SPREADSHEET TO THE SOFA?

Stephanie Vidal

With their smartphone, self-trackers log daily chosen parameters. Being the experimenter and the experimenter of their own laboratory, they live a « data-driven » life. Based on numbers, self-tracking is seen as an alternative to psychoanalysis for reaching the self. Trackers mistrust words which they find too limited and prefer to rely on spreadsheet than to lay on sofa.



Hyper, 2010, Florent Guerlain.

A world in Numbers

“Personal Note. 11:15, restate my assumptions: 1. Mathematics is the language of nature. 2. Everything around us can be represented and understood through numbers. 3. If you graph these numbers, patterns emerge. Therefore: There are patterns everywhere in nature.” says Maximilian Cohen, number theorist and main character of π , a Darren Aronofsky’s movie released in 1998.

From Pythagoras to Descartes, from Kant to Poincaré, philosophy comes with the paradigm that our world is run by invisible numbers and mathematical equations. Nowadays this assumption is deeply established in the mainstream culture and embodied in scientific, business and even artistic projects. Artists choose data as raw material, traders use algorithms, some physicists visualize imperceptible particles while others—among them bestselling author, Brian Greene—seek after a unique and elegant equation to explain the entire universe.

Numbers and data streams are everywhere and can be easily collected, analyzed and visualized. Computational technologies we use everyday and everywhere from labs to personal desktops—even the smartphones in our pockets—were originally built to compute. Self-trackers are people who use those technologies to count and quantify themselves. They want to acquire a better understanding of themselves through self-experimentation in an innovative way that decreases human sources of vagueness. Their common assumption is if nature can be understood in a mathematical way, why can’t human beings as well?

As a new practice at the crossroads of technology, digital humanities and art, self-tracking aims to better understand behaviors by finding hidden patterns in daily routine. Self-trackers believe in the truth of numbers more than in the power of storytelling. That is why they use self-tracking as a way to reach the self, an alternative method they consider even better than psychoanalysis. Moreover, some of them use self-tracking in a political gesture, wishing to empower with numbers.

This article aims to present this practice and to show how new contemporary behaviors, that bet on mathematical language and on digital equipments, redefine or redesign established concepts. Self-trackers can be seen as an extreme example of the presence of data in human life. The premises and methods of self-tracking challenge the notions on humanity and society as well as the ways to study humanity in the attention and information age.

The Geek Diary

Self-trackers are people who gather, analyze and share their own data. They log chosen parameters—reporting on work, sports or sexual achievements, measuring and monitoring mood, food, health or finances—to develop a personal project.

Each tracker works out his proper methods. Even if they know what they are seeking at the start of their adventures, they are generally surprised what they find. Some are artists, others scientists, but most of the time they are just curious.

Self-tracking is already a massive trend, growing daily. Community sizes vary from hundreds (Me-trics) to thousands (YFD, Daytum) to billions (Runkeeper) of members depending on the parameters they focus on and the tools they use to monitor themselves. Tools and applications are fundamental; they allow personal logs and create the communities.

Self-tracking is conceived as a geek version of a diary where words are replaced by numbers and paper by digital spreadsheets. Self-tracking starts with a life-logging to begin gathering their data. Leading a kind of anthropological study of which they are the subject; they are looking for self-knowledge and personal insights through imponderability.

Used for the first time by Bronislaw Malinowski, imponderability is defined in his book *Argonauts of the Western Pacific* as "a series of phenomena of great importance which cannot possibly be recorded by questioning or computing documents, but have to be observed in their full actuality (...) such things as the routine of a man's working day, the details of his care of the body, of the manner of taking food and preparing it..." That imponderability are precisely what trackers are looking for and recording thanks to personal devices that did not exist yet in 1984.

Memory Tools

My Life bits, the Gordon Bell's project can be seen as an extreme example of life-logging. It aspires to be an exhaustive recording of his life thanks to several devices that save everything about him. He wears a microphone that keeps all his conversations and a special camera that takes pictures each time there is a change of light in his environment. And all of his physical and digital activities are saved, as are his movements and his web navigations.

The logging process is fundamental for self-tracking; it is the first step to create the appropriate development of the procedure. Trackers note what could be seen as humdrum and insignificant moments, keeping them in external storages. Machines, in opposition to human beings, are not subject to memory distortion or oblivion.

Even if self-tracking is based on life-logging, the example of Gordon Bell gives rise to the differences between these two practices: self-trackers only track the parameters they have chosen, finding them relevant for their personal research. Life-logging and self-tracking diverge in their final goals: the first only cares about saving traces and the second wants to make sense of them. By both leaning and relying on technological devices, they give their equipment the status of memory tools.

If some cases of self-tracking has have been noticed before, the trivialization and ubiquity of technological devices makes the process now easier. Trackers still crave for more automation of the gathering process and crave for digital devices called sensors to elude the manual log. They would save and send the information directly to the analysis softwares. They would seek to make the logging phase less time-consuming and to decrease the rate of human errors in the process.

Transforming daily routine into quantifiable facts the trackers paraphernalia is made of personal devices

that are used as scientific instruments. iPhones and Androids, always in the pocket of a self-tracker, enable precision and repetition of experiments that suits this continuous and rigorous process. Smartphones are at the core of self-tracking. Thanks to them, trackers upload and share their data anytime, anywhere, using specialized social platforms. Those platforms such as YourFlowingData or Daytum generate the graphical representation of the collected data that lead to their analysis.

Daytum was created by the designer Nicholas Felton, also called Feltron, famous for its Annual Report. Edited each year, using various concepts, patterns and datasets, the Feltron's Annual Report is a graphic and statistic review of the artist past twelve months.

He started to self-track to produce innovative designs using his own data as free and endless raw material. The young designer, Florent Guerlain, works in the same way making artwork out of his everyday food consumption. The project called Hyper, started 3 years ago, is still running today (Fig 1 and Fig 2).

The Life Lab

For both designers, self-knowledge through numbers was not the initial goal of their data practice. However they have come to learn funny things about themselves and would not stop collecting data. Data become a material for personal investigation, artistic creation and self-knowledge production.

Trackers tend to grasp their imponderability and to weight it, studying data streams they have composed. Translating their tastes and behaviors in lists of numbers, they develop a rational process to reach the hidden order that secretly drives their self.

“For many self-trackers, the goal is unknown. Although they may take up tracking with a specific question in mind, they continue because they believe their numbers hold secrets that they can't afford to ignore, including answers to questions they have not yet thought to ask,” says Gary Wolf, editor of the magazine Wired and co-founder with Kevin Kelly of the website Quantified Self. Being the experiment and the experimenter of their own laboratory, self-trackers' life is a daily “data-driven” exploration.

Extracting meaning out of data, sharing and confronting results, a self-trackers' first will is “self-knowledge through numbers,” which is also the motto of Quantified Self. They implement a scientific method to curiosity. Self-exploration intends to make sense out of daily routines and transforms non-factual things into meaningful insights. Self-trackers often confront several parameters—like their coffee consumption and their work productivity—to observe if parameters they feel correlate are truly linked. Often numbers disabuse their intuitions.

Spreadsheet versus sofa

Numbers versus intuitions, statistics versus memorabilia, spreadsheet versus sofa: self-tracking is all about that! Self-trackers consider that numbers fit better than words to access the personality core and to reveal patterns hidden between habits. That is why they prefer the spreadsheet to the sofa.

The mathematical language was once based on the verbal one. Then it became more and more complex

and needed to develop its own and separate form. Its history is—to use critic Georges Steiner's words— *the history of a progressive untranslatability*. Since the separation of verbal and numerical language, experience and reality perception have been separated in two aesthetic vision. In *The retreat from the word* Steiner explains that some phenomenons like time-space continuum or relativity theory have been conceptualized *outside* verbal language. Expressed through words they look like "animated fictions". Does the world can be better understood with numbers than with words ? Do they express and reveal the true nature of the universe as world never would? Trackers do not work with difficult equation to explain the world mysteries, they tend to understand their own complexity with simple numbers. They do not spend their life in a scientific laboratory, they are the laboratory. The trackers proclaim and mainstreamize the mathematical language triumph over the word one with their practice.

As they use machines to compensate for what human memory lacks, they too find in numbers the solution to words' failures. Indeed, with self-tracking all spoken language is globally criticized as an obsolete and incompetent system for efficient self-investigation. As psychoanalysis is based on verb, memory and storytelling, we can understand the self-trackers reluctance to subscribe to it.

Trackers upbraid verbal language for several reasons: its linearity and length, its lack of objectivity and expressiveness, its propensity for misunderstanding, its possibility of lying and the impossibility to communicate to whom who do not know this particular code—like people who do not understand a particular language or even animals or plants that are not equipped with sensors.

Seen as biased and incomplete, verbal method is avoided during the gathering and analyzing process. Even if trackers agree that psychoanalysis might help to find troubles that influence mood, they believe that it does not offer solutions as data analysis can. Trackers want to be able to modify their comportments in order to experiment with it directly.

Moreover, they think that people can lie or feel uncomfortable lying on a sofa, talking to a psychoanalyst. Arguing that it is also possible to lie to a machine, trackers answer that there is no personal interest to do so. Machine's main strength is they do not lie or please. Charts guarantee to obtain objective and trustful results.

In this system, the disappearance of human interactions during the process seems to grant a better knowledge of human behavior. But human interactions are not totally eclipsed. They come later when trackers present their methods and results to their community during meetings or let them accessible on social platforms.

Form Collective Intelligence to Collected Consciousness?

Even if the goal of self-tracking is not to figure out mankind in general, it is about finding personal comfort in everyday situations; trackers sometimes contribute to collective events, sharing their data and method to go further.

Sometimes they get along and collaborate on wider projects—most of them are dealing with medical care or emotions tracking—putting their results into a common conversation. On websites like curetogether.com, founded by Alexandra Carmichael, sick people can track their vital parameters and

join together to study their illness. She gives an example of patients affected by amyotrophic lateral sclerosis (ALS) who decided to observe the effect of lithium on their health state. Even if the results were not conclusive, a study seldom involves so many patients for so little time and money.

If data can be used for good, we are yet to discover the potential of these personal datasets. This information can have different use once available on a network. It brings up questions: who has access to personal data, why and what for but also what is considered now as personal data? Indeed, the notion of personal data seems to overtake its juridical definition.

Personal data is not limited to that which allows the identification of human beings, but extends to things that contribute, once viewed together, to build or reveal identity. In this understanding, personal data is not only what people produce or interact with, but also what they decided to gather as an extension of their self. Personal data is then contextual, earning its status by the individual and through the voluntary process of saving. This is perhaps why a data set on coffee consumption or a list of books can reach the status of personal data.

No one likes to lose the content of their hard-drives containing music, pictures, and texts and such. In this way the Collectif 1.0.3 uses the content of personal hard drives to shape digital portraits and Michele Gauler keeps memories of dead people compiling their data in storages that are, at the same time, the material proof of their legacy and everlasting presence.

As we absorb external content to transform it into personal data, we also leave traces of our path everywhere we go in the digital world. Sometimes, like trackers, we digitalize them on purpose, and sometimes we even forget that we do so. In their bachelors thesis called ~IDENTITÄT – The »Gestalt« of digital identity, Jonas Loh & Steffen Fiedler have created sculptures that represent the digital identities of people based on their activities on cultural and communicational websites. Here is a relevant insight into 21st Century society: there are no longer innocent surfaces today.

Information can now be considered as a value and so is attention. In our digitalized society, time is precious and information is massively available and recordable. Our behavior seems to mimic managerial and scientific methods: find what is profitable and, thanks to software, extrude meaningful results out of it. The culturonomics, the study of culture through the amount of digitalized books, can be seen as an other example of this trend. Books are not read anymore, but the words they contain are transformed into data to shape a diagrammatic portrait of our culture. Perhaps the social paradigm shifts following this move. From words to numbers, from information to attention; people seem to progressively abandon privacy for self-attention, sofa for spreadsheet, imponderability and memorabilia for digitalized and quantified facts.

References and Notes:

Bronislaw Malinowski, Argonauts of the western Pacific : an account of native enterprise and adventure in the archipelagoes of Melanesian New Guinea (Prospect Heights Ill.: Waveland Press, 1984).

George Steiner, Language and silence : essays on language, literature, and the inhuman, Yale University Press, 1998.

Jim Gemmell, Gordon Bell, and Roger Lueder, "MyLifeBits: a personal database for everything", in Communications of the ACM (CACM), vol. 49, no. 1, (January 2006) pp. 88-95, Association for Computing Machinery, Inc.

Roberts, S. Self-experimentation as a source of new ideas: Exemple about sleep, mood, health and weight. Behavioural and Brain Sciences, (2004) 27, pp. 227-262.

*Gary Wolf, The Data-driven Life, The New York Times. Website Publication: Avril, 28 2010. <http://www.nytimes.com/2010/05/02/magazine/02self-measurement-t.html>
Print Publication : May 2, 2010, page MM38, Sunday Magazine.*

*Alexandra Carmichael, Self-Tracking: The Quandtified Life is Worth Living, H+Magazine. Website publication: February 8, 2010.
<http://hplusmagazine.com/2010/02/08/self-tracking-quantified-life-worth-living>*

Matthew Fuller's official website, Freaks of numbers, March 2004. <http://www.spc.org/fuller/texts/freaks-of-number>