# **OUR DATA DOPPELGÄNGERS**

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#### Abstrac

Data is gathered and presented towards both clarification and inspiration, but also in ways that obscure and confuse. Within creative practices that engage the technological, data plays a central role as a medium for aesthetic objects, motivating and justifying arguments, and even sanctioning design and policy decisions. The more frequently we engage with datasets and databases, the all-too-human nature information collection and representation comes to the fore. This article was presented as part of "The Data Body on the Dissection Table. Arts, Humanities, Medicine and Complex Network" on June 4th, Copenhagen, www.olats.org/studiolab/databody.php.

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# **Interiority and Exteriority**

On the laptop hard drive that stores the words I am typing, are approximately 726,995,853,312 bytes of information that, to greater and lesser degrees, could be said to makeup a traces of who I am. Amongst the more typical and numerous are documents and correspondence I both collect and create: Thoughts inscribed as pixels, textual diatribes and documentation of relationships, projects, ideas and collaborations in the form of chats, audio and video files. All of our "personal" computers contain such ostensibly private anarchives of digital detritus. Also, and in as much as access credentials are mistaken for ontological identity our current username and 'app' laden culture, my laptop contains numerous ways in to networked traces of activities I undertake as a commercial, political and (increasingly, digitally) social animal. (Despite the usual warnings against this kind of behavior, I can never remember all the account passwords and usernames I'm expected to, and so rather ironically and like most people I know, I defer this responsibility to electronic memory: a separate file containing all of my passwords, hidden behind yet another encrypted password). These items make up a rather typical profile of the contents of most peoples' computers: An external and externalized profile of the activities of my conscious self, my actions as a computer-operator, and controller of graphical interfaces. More idiosyncratically and interestingly, on the hard drive where the words you are reading were first stored, resides a highdefinition magnetic resonance image of my upper torso and head [Fig.1]. As provisioned by Birmingham University's Imaging Center in 2010, I happen to have amongst my digital possessions a most accurate portrait of the interiority of my own data-body. This catalogue of data voxels are a crosssectional modeling of my circulatory, ossuary and cranial physiology. And these now lay resident on a spinning silicon platter next to photos of a recent trip to New York, an online order for a pair of pants, and evidence of my dad's recent email-forwarding campaign regarding the apparently unfortunate condition of Canadian politics.

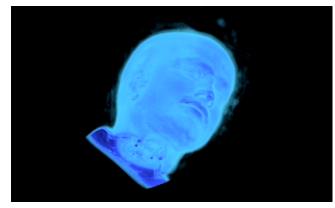


Fig. 1. A rendering of functional magnetic resonance imaging data of the author's head, courtesy of the Birmingham University Imaging Center (2010).

## **Nothing New Under the Database**

In his writings on visuality in technology and communications platforms, Friedrich Kittler points to a long history of the uncanny doubling that media carry out. His is an inventory of artistic and designerly collusions of creativity and technologies, all of which produce an "interruption of all feedback loops between a body and its doubles." [1] The first technology of reflection being the reflection pool or silvered mirror, each subsequent material media form provides a rift between who we are and our impressions of self. Interrupting the "feedback loop between the larynx, Eustachian tube, and inner ear," [2] a digital audio recording of a person's voice does not sound natural to them, although it is indeed how the microphone and digital sound card 'hears' and will sonically archive a person. Interrupting the proprioception of fixed-perspective self-image, film and video cameras shock and disconcert less today than they did when stage-actors-come-movie-actors were confronted with moving-image side views of their bodies walking and gesturing. It remains, for most of us, somewhat unsettling to view ourselves on video. This figure of our reflection in media, of the doppelgänger (as a condition the mind in which we appear to ourselves outside of ourselves as a hallucination or apparition) is the status quo of media and communications technologies. This self-as-other underlies much of the discomfort we feel when new types of representations of our behaviors and ourselves are brought into culture. The anxiety and perenniality of new representations and new constellations of the self-image (aural, optical, or raw data-based) is a defining characteristic of our age. We have many mirrors, of many types, we can peer into.

Considering a co-originary account of how humans and technologies resonantly co-evolve, from the arrowhead to the iPhone, none of this comes as a surprise. That is to say, media technologies are always, and always provide, warped reflections of the self. Those that stick with us, most lastingly partnering in the co-creation of our culture and psychologies, seem to be those that challenge our conceptions of the self most radically; those that deliver the most powerful and uncanny disturbances to our prior self images. People and things that do not rise to the call of these radical challenges are persistently retired to the dustbins of history, as they are "dwindled away together with their medium, until they eventually [become] the subsidized elite." [3]

The collection and representation of digital data in our culture is starting to fulfill its potential as a technical media in just this sense. From statistical representations of an exteriority (through demographics and population statistics) to the mapping and representation of inner space (biological or behavioral-psychological), these further quantifications are showing ourselves to ourselves in weird and wonderful ways. And so, even as we characterize the mirroring that technical media recurrently allows, we ask what challenges and anxieties the new medias of the database bring forth, and how might we best rise to meet them? As artists and designers — as media and data-practitioners — how can we guide the forms and aesthetics that data takes up as it begins to correlate understandings of the external (behavioral, subject-derived) and internal (subconscious, extra-experiential) aspects of our lives? Or, in a more reverent language appropriate such an enduring situation, how might we view "the new gods in our media mirror from a more agnostic approach." [4]

# **Imperfect Mirrors**

Appeals to both truth and beauty are everywhere to be regarded with great skepticism. Culture seems at the moment to be undergoing a thorough data-dousing. Dashboards and data-diviners busily create enumerable applications and interfaces, promising visions of reality and a poetry from this a query-able commodity.

As ever, one function of art-and-technology, and certain design practices, is to deliver alternative visions; to critically highlight parallel, personal perspectives and "gaps in the data." Contemporary creative practices deriving experience-based information sets, can show us the imperfections and peculiarities of more mass-statistical and generalist bodies of data. As with the first silvered mirrors, the first recordings of the human voice, or the uncanny revelation of an actor viewing his or her recorded bodily movements on film — our data doppelgängers provide useful reflections of who we are and what we do, but one warped by the collection, storage and playback steps that all media afford. The challenge and promise of data-driven initiatives like the Quantified Self [5] movement is that of reflecting back to us a representation of our own implicit and unexacting behaviors (e.g.: "I didn't realize that I sleep two hours less a night during the winter months."). This is the revelatory reflection that data can provide, recording and playing

back for us all of the things we hide even from ourselves. This interiority begins with the already quantified metrics of a digital lifestyle (number of photos uploaded per week) but now moves into territories of interiority such as social life and emotion and the health of microbial ecosystems within us. Depiction of these most literal inner spaces allow designers to speculate on what this data might mean in the future. The discovering of unimagined effects and challenging of imagined effects [6] is possible when data is presented not as a full truth, but as a mirror, warped by the artist and means of representation. Artistic and designerly language is chocked full of words that help us understand the process of collecting and interpreting our own kinds of 'data' in ways that acknowledge this fact: inspiration, intuition, and instinct.

The data-body constitutes a new media, a new technical image, that is no longer a photograph of some presumed real, but an infinitely inferential and interpretable rendering of raw data from a highly distributed network of spinning platters of silicon. As the sphere of self-representation expands to include the psychic and biological interiorities of our lives, we increasingly see ourselves reflected in this data, not just as others see us, but as data collection and interpretation machines do. Claims of beauty and truth telling that the data body bring forth are not new: these are always the claims made by the apostles of any new media. There is not more truth in data than there is elsewhere; only newly warped reflections. As we examine the data from the mount on our new digital tablets, we are best to ask how this data reflects, rather that what new truth it holds.

### References and Notes

- 1. Friedrich Kittler, Optical Media (Polity, 2010), p. 181.
- 2. Kittler [1]
- 3. Kittler [1]
- **4.** Pinchbeck, Daniel and Jordan, Ken, eds, *Toward 2012: Perspectives on the Next Age*, (New York: Jeremy P. Tarcher/Penguin, 2009), p. 200.
- **5.** Wolf, G., A. Carmichael and K. Kelly, "The quantified self" *TED http://www.ted.com/talks/gary\_wolf\_the\_quantified\_self.html* (2010).
- 6. Cleveland, William S. Visualizing data, (Hobart Press 1993).