<http://www.diva-portal.org>

Postprint

This is the accepted version of a paper published in *interactions*. This paper has been peer-reviewed but does not include the final publisher proof-corrections or journal pagination.

Citation for the original published paper (version of record):

Wiltse, H. (2015)

On Being Turned Inside Out.

interactions, XXII: 20-21

<http://dx.doi.org/10.1145/2744710>

Access to the published version may require subscription.

N.B. When citing this work, cite the original published paper.

Permanent link to this version:

<http://urn.kb.se/resolve?urn=urn:nbn:se:umu:diva-102864>

On Being Turned Inside Out

Heather Wiltse, Umeå University

In the Pulse Room of Rafael Lozano-Hemmer's "A Draft of Shadows" exhibition at Bildmuseet on the Umeå University Arts Campus, a large room is empty except for rows and rows of light bulbs hanging from the ceiling and a pair of metal rods on a stand at one end of the room. The light bulbs flash seemingly at random while a low, rumbling, whooshing sort of sound fills the room. But when a person holds onto the rods, the light bulbs start to flicker faster, and then within a few seconds the lights and sounds converge in a pulsing *thump thump... thump thump... thump thump...* The lights flash in unison, each flash further punctuated by a low, thudding sound. It is the unmistakable sound of a heartbeat, and the effect is mesmerizing.

It is also more than a little uncanny to share one's pulse with a room. A heartbeat is one of our most intimate and vital bodily processes. It distinguishes us as living beings. Along with the breath, it is what people check for when trying to determine if a person is alive. It is also at the core of our psychological and emotional being. This is why people talk about being brokenhearted, heavy hearted, or joyful hearted, having a heart that is overflowing, or wearing one's heart on one's sleeve. It is why we know what is meant when it is said that the Grinch's small heart grew three sizes that day.

Hearing someone else's heartbeat is a very particular kind of intimacy, one usually reserved for medical professionals and lovers. Yet in the Pulse Room, one's heartbeat becomes public, pulled out of the usually private confines of one's chest and turned into performative spectacle for others in the room to watch and feel. And it is very much felt: The lights and sounds are so strong that they are not just present to one's senses but rather invade them—a highly visceral, if fleeting, impression transmitted from one body to another through the mediation of the room.

This can lead to a rather unusual kind of performance anxiety: What will my heartbeat look like? Is it going to be really fast because I just climbed five flights of stairs, making it look like I'm nervous or out of shape? What if I actually *am* nervous by the time it's my turn, simply because of thinking about it?

When one woman in the long opening-day queue holds onto the rods and it takes an unusually long time for the room to sync with her heartbeat, looks are exchanged and there is a bit of nervous laughter. What would it mean if this contraption could find everyone's heartbeat except yours?

In reflecting on my experience in the Pulse Room, however, I realized that it was not an entirely novel sensation. I have held other metal rods that register my heartbeat, although they have been attached to exercise machines designed to raise it. I know there are now also many options for wearable devices that sense heartbeats (and myriad other things). One of the features of the Apple Watch is the ability not only to monitor one's heartbeat but also to share it with another person through the device, while the "tap" feature lets you communicate with other Watch wearers through "silent, gentle tap patterns they'll feel on the wrist" [1]. I experienced a similar feeling when realizing that, because I connected it to my Spotify account a couple years ago, my Last.fm profile has a record of over 24,000 (and counting) music tracks I have listened to, and even identifies the track I am listening to at this moment on my headphones. The headphones are private; the Last.fm profile is not. And although they are very different, this line of reflection also makes me think of the recently popular Internet quizzes designed to help you figure out (and share on Facebook) things such as which Elvis song is your anthem, which classic literary heroine you are, what city you should really live in, what your job at Downton Abbey would be, the color of your aura, or which animal you were in a past life.

What all of these things have in common is that they can give the feeling of being turned inside out: of having heretofore private aspects of bodies, everyday activities, and personalities pulled out and displayed for more public viewing and assessment.

This presents a sharp contrast to the self-conscious identity play and carefully styled performance that characterized the early days of online life. Then, it was often assumed that there was at least

the possibility, if not the reality, of a nice, comfortable distance between one's presented and real selves (if such things even exist). Now it is almost as if the cognitive faculties governing performance of self are being bypassed as technologies go straight to the source, collecting the data they need in order to make more definitive presentations.

For example, although I think I have a fairly good grasp on my taste in music, my Spotify “year in review” report provides another view based on the hard data of the tracks played within my account (which might challenge my own subjective description of what I like to listen to). Even silly Internet quizzes that are, it must be said, more than a little reductive and often downright ridiculous, are presented with the rhetoric of finding out who you *really* are (whether in this or a past life). The premise is that a series of carefully crafted questions that might even seem completely unrelated to the matter at hand can be used to dredge up, psychoanalysis-style, the deeper contents of one's psyche that can then be shared directly to Facebook. This allows for that most intimate confirmation of friendship: sharing the results when you have, through the help of a Playbuzz quiz, been shown the nitty-gritty details of your true self [2].

So what does all this mean? Has all the online identity play and lamenting about how our online interactions are less “real” and “authentic” perhaps created a longing for things that are incontrovertibly genuine? After spending time as disembodied avatars, do we long to hear heartbeats that remind us there is, in fact, still a crucial difference between circuits and flesh? Do we need gadgets to tell us stories about ourselves to confirm our unique presence and identity in the world, to count the things we do that might affirm that our lives count for something?

Although I don't know the answer to these questions, I do think they are worth asking. Because in designing technologies to address human needs, the needs and concerns ultimately being addressed often go far deeper than what is foregrounded by a typical use case. It might be said these deeper concerns are of the heartfelt variety.

Endnotes

1. Apple Watch: <http://www.apple.com/watch/new-ways-to-connect/>
2. Playbuzz: <http://www.playbuzz.com/ondazp10/discover-your-true-self>

Heather Wiltse is an assistant professor at the Umeå Institute of Design at Umeå University.
heather.wiltse@umu.se