

Under observation, we act less free, which means
we effectively are less free

-Edward Snowden

Becoming Big Brother: Consumer Wearable Health Technology, Surveillance, & Biopolitics

MATT JOHNSON

MSLS CANDIDATE, UNC CHAPEL HILL

Wearable Health Technology

- ▶ Refers to a broad array of technology used to monitor various health data through technologies that are worn by an individual
- ▶ These technologies can vary significantly in size and design¹
- ▶ More sophisticated technologies are being implemented in the clinical setting²
- ▶ Reliability, Accuracy, Consistency, & Objectivity are questionable³
- ▶ Companies own your personal health data provided by their products⁴

¹ Lin et al 2016; Pellanda & Pellanda 2016; Piwek 2016

² Vaduganathan & Bhatt 2015; Lin et al 2016; Munos et al 2016; Pellanda & Pellanda 2016; Turakhia & Kaiser 2016; Wright et al 2017

³ Bassett, Rowlands, & Trost 2012; Butte, Ekelund, & Westerterp 2012; Glynn et al 2014; Lee, Kim, & Welk 2014; Case et al 2015; Evenson, Goto, & Furberg 2015; Bai et al 2016; Munos et al 2016; Beg et al 2017; Omura et al 2017; Pobiruchin et al 2017; Wen et al 2017; Yingling et al 2017

⁴ Kostkova et al 2016

Wearable Health Technology

- ▶ Consumers wearables are quickly entering the market as a trend for self-surveillance to improve physical health and develop new habits⁵
- ▶ Consumer options also vary widely in terms of use and design, but include such items as smartwatches or wristbands, headbands, badges, camera clips, and sensor-embedded clothing⁶
- ▶ Functionality also varies including sleep tracking, pedometer, thermometer, accelerometer, heart rate monitor, altimeter, GPS, oximeter⁶
- ▶ Users also receive other metrics and analysis depending on the technologies⁶
- ▶ It's important to recognize that institutionalized metrics and indicators are constructed within power relations to create quantities that are useful to the state⁷

⁵ Bravata 2007; Rosser 2009; Carter 2015; Piwek et al 2016, Rosser et al

⁶ Piwek et al 2016

⁷ Prince 2014, Merry 2016

Biopolitics & Medical-Industrial Complex

- ▶ Popularized by Michel Foucault, biopolitics refers to the disciplinary practices targeting governed bodies that control the modes of life.
- ▶ Expounding on Foucauldian biopolitics, Susan Stryker explains biopolitics as “the calculus of costs and benefits through which the biological capacities of a population are optimally managed for state or state-like ends”⁸
- ▶ Medical-Industrial Complex (MIC) refers to corporate control of health care for profit and the network of these industries to reproduce wealth⁹
- ▶ MIC represents the harms of global capitalism, becomes a state-like institution, and is an important installment in the neoliberal carceral archipelago—the network of institutions that mutually reinforce the state’s ability to maintain social control through surveillance¹⁰

⁸ Stryker 2014

⁹ Ehrenreich & Ehrenreich 1969, 1971; Relman 1980; Chowkwanyun 2011; Iriart, Franco, & Merhy 2011

¹⁰ Foucault 1995

Surveillance: Possibilities for Life & Death

- ▶ How can the personal health data that we develop ourselves through self-surveillance be used against us?¹¹
- ▶ Focus of interventions on obesity and diabetes¹²
- ▶ Dissolving separation between public & private & learned expectations of control¹³
- ▶ Legal issues and the sharing of personal health data¹⁴

¹¹ French & Smith 2013

¹² Farmer et al 2007; O'Kane et al 2008; Simon et al 2008; Rosser et al 2009; Allen et al 2013; Carter et al 2013; Klonoff 2013; Heintzman 2015; Gilmore 2016; Rehman et al 2017

¹³ Rich & Miah 2017

¹⁴ Shilton 2012, Hall 2014, Pickard & Swan 2014, Sipek 2014, Kostkova 2016

Surveillance: Possibilities for Life & Death

- ▶ Medical data and the consumerization of health¹⁵
- ▶ Control of the worker in the neoliberal workplace¹⁶
- ▶ Fitbit data used against a women in rape case¹⁷
- ▶ Fitbit data used in personal injury lawsuit¹⁸

¹⁵ Iriart et al 2011, Rich & Miah 2017

¹⁶ Freak-Poli et al 2013, Till 2014, Gilmore 2015, Moore & Robinson 2015

¹⁷ Hill 2015, Moon 2015

¹⁸ Gibbs 2014, Olson 2014, Alba 2016

Future Questions

- ▶ What impacts of this data have not yet been imagined?
- ▶ What are the implications for public & global health interventions?
 - ▶ Trackers are likely ineffective for these interventions and changing behavior¹⁹
- ▶ What are the implications in corporate interest, such as insurance?
- ▶ Within the biopolitical frame, what divergent modes of life will be deemed unlivable? How will the "unhealthy" body be targeted for life and death?

¹⁹ Patel, Asch, & Volpp 2015; Omura 2017; Yingling 2017

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