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Chris Till

Leeds Beckett University.

Author note.

Chris Till, School of Social Sciences.

Correspondence concerning this article should be addressed to Chris Till, School of Social Sciences, Leeds Beckett University, Leeds, LS1 3HE. Contact: c.till@leedsbeckett.ac.uk

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Chapter 6: Self-tracking as the mobilization of the social for capital accumulation

Chris Till

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Introduction

This chapter will investigate the ways in which self-tracking (ST) systems are presented as a means of enabling corporate wellness (CW) initiatives to mobilize the productive potential of "the social". Critical Discourse Analysis (CDA) has been conducted on promotional literature and whitepapers produced by two companies who offer CW ST initiatives to employers; Global Corporate Challenge (GCC) and Virgin Pulse (VP) who merged in 2016 (along with ShapeUp) to form Virgin Pulse Global Challenge 'the world's largest, most comprehensive technology-enabled wellbeing software provider' (Virgin Pulse 2016). The ST aspect of their initiatives incorporates the provision of an activity tracker to employees which enables them to monitor their movement and access statistics, analysis and personalised feedback through an online dashboard. In addition, competitions are offered in which employees form teams to collectively track activity and compete against others in various challenges usually built around collectively and virtually travelling the furthest distance. This chapter will use analysis of the discursive practices drawn on by individual and corporate authors to promote the notion that managers need to find ways to stimulate social interactions and invest them with meaning while directing them in a way which will serve the overall interests of the employer. Such interventions are assumed to promote both good health and high productivity and while the primary aim of the authors of the texts is to promote CW ST they do this through aligning it with a "connexionist" philosophy which is already prominent in management discourse.

Self-tracking, corporate wellness and "connexionism"

ST has grown in prevalence in recent years largely due to the increased availability and promotion of digital devices capable of tracking steps, sleep and other human activity and the incorporation of similar technologies into many smart phones (Chamorro-Premuzic 2015). Existing sociological analyses of ST tend to focus on how and why people track and what the impacts are with investigations into the production of "digital traces" of behaviour which construct a "digital double" or "digital doppelgänger" (Ruckenstein 2014; Bode and Kristensen 2015). The particular type of reflection on the self which this has enabled has led some to suggest that its use is consistent with a responsabilised neoliberal self (Lupton 2015; Lupton 2016b; Whitson 2013; Millington 2014) and a retrenchment of gendered norms (Sanders 2017). More broadly this has been contextualised within the ongoing withdrawal of the state from direct healthcare intervention (Rich and Miah 2014). Alternatively, it has been proposed that some more dedicated self-trackers embody a "soft resistance" to the controls enacted through the aggregation of personal data (Nafus and Sherman 2014; Sharon and Zandbergen 2016) and that many use ST to delegate responsibility for health to

devices and networks (Schüll 2016). While most of the focus has been on the level of identity and selfhood it has been proposed that ST is a form of “biosociality” (Ajana 2017), however this is a sociality which is often used as a tool of marketing or engagement tangential to the real target of self-discipline and data collection (Fotopoulou and O’Riordan 2017). I have previously theorised that the transformation of exercise activity into data through ST has enabled a conceptual convergence of work and exercise (Till 2014). This chapter builds on these assertions to look at the particular case of how managers are encouraged to manipulate “the social” and are thus positioned as architects of the network.

The intensified interest employers have taken in broad aspects of wellness and lifestyle over the last three decades has been characterised as an attempt to shape the lives of workers to achieve greater productivity through the implementation of a “new corporate health ethic” (Conrad and Walsh 1992). This cultural critique has been influential and has taken a more critical form since the 2000s often drawing on Foucauldian analysis of neoliberal disciplining (Haunschild 2013; Maravelias 2009; Zoller 2003; Dale and Burrell 2013). CW analyses which focus on ST are now starting to emerge which position it as a means of managing precarity by using neo-Taylorist forms of measurement to encourage the internalisation of disciplinary controls (Moore and Robinson 2015; O’Neill 2016). In addition, Deborah Lupton (2016a, 107–8) has characterised CW ST as a form of “pushed” or partly involuntary tracking. My other work has proposed that CW ST are part of a project to make employers more ethical, and ultimately negate critiques of the process of capital accumulation, but in the process remodel health as productivity. (Till, n.d.). While this existing work has dealt with some aspects of subjective engagement with work it has not yet addressed the significance of a “network ontology” of “connexionism” informing the rationale and implementation of ST initiatives.

The analytical approach I take in this paper is derived from Luc Boltanski and Eve Chiapello’s work on what they refer to as *The New Spirit of Capitalism* (NSC). My empirical focus on management discourse, as represented by promotional materials produced by CW vendors, is similar to that taken by those authors. I share their interest in the role which discourse plays in encouraging subjective engagement with work which they propose has occurred through three broad “spirits” of capitalism all of which are built on three processes of “stimulation”, “Fairness/Justice” and “Security” which take on different forms in the different historical epochs. “Connexionism” is the predominant form of stimulation, or encouragement of subjective investment in capital accumulation, in the third spirit which emerged in the 1980s and persists today (Boltanski and Chiapello 2005, xiii). The ideal worker is reimagined as a node within a network and relationships are seen as valuable if they open flows of information, enable the establishment of projects or generate value. The ideal “connexionist” worker is always looking for new and fruitful relationships but crucially never becomes too attached to existing ones in case they become unproductive and need to be dropped or sidelined in favour of others. They are expected to be ‘engaged, engaging, mobile, enthusiastic, involved, flexible, adaptable, versatile’ (Boltanski and Chiapello 2005, 111–12). The encouragement of “networked subjectivity” and “connexionism” is one of the key additions to the aims of CW initiatives in recent years and one which is presented as being enabled through the use of ST initiatives.

Method

In order to unpick the ways in which meaning is constructed in management discourse through the publication of advice and advertising which promotes the use of ST CW programs I will use a CDA approach. This is a method of analysing the dialectical relationships between discourse and other social practices (Chiapello and Fairclough 2002, 185). CDA, as opposed to simply discourse analysis, is oriented towards the exploration of causal relationships between discursive (and related) practices and broader social structures to establish how power relations shape ideological constructions in language use (Fairclough 2010, 93). It has previously been established that such an approach to management discourse is legitimate in a jointly authored article by Eve Chiapello, one of the co-authors of the book which formed the basis of the theoretical approach I have taken (Boltanski and Chiapello 2005), and one of the central and most influential figures in critical discourse analysis, Norman Fairclough (Chiapello and Fairclough 2002).

The focus on discourse in the present analysis is important as it elucidates how the availability of ST technologies influences and merges with management strategies. Boltanski and Chiapello's notion of "connexionism" is central to my analysis however they do not refer to "discourse". Instead they use their own terminology of the *Cité* or 'justificatory regime', however, Chiapello and Fairclough suggest that these can be translated into what they refer to as an 'order of discourse' (Chiapello and Fairclough 2002, 188). These largely consist of "imaginaries" or ideal representations of how things should be which can be identified in the genres, identities and specific discourses represented in the text (Chiapello and Fairclough 2002, 195). Genre is discernible through 'uses of language associated with particular socially ratified activity types' (Fairclough 2010, 93). The construction of identity can be seen through the style in which the text is written and implicit claims about 'being a particular sort of person, claims about what is the case, value claims about what is good and desirable' (Chiapello and Fairclough 2002, 199). Discourses are characterised as 'ways of signifying areas of experience from a particular perspective' (Fairclough 2010, 93). In addition, "interdiscursivity" will be significant to all of this analysis and is the appropriation of other discourses as part of an attempt to construct a new identity (Fairclough 2010, 107). The analysis presented below is structured around these three elements and more detail on how each has been conceptualised will be given in the relevant sections.

The texts analysed in this chapter represent a purposive sample intended to map the construction of a particular discourse in the literature which has been produced by CW vendors. The texts take the form of three whitepapers (one still branded as GCC), one case study, one report, one website and one research report. This literature has all been accessed through the websites of (VP) and GCC¹ whose 'mobile-first platform delivers a personalised user experience that utilises gamification to engage users in building habits that inspire meaningful and measurable change across individuals and the business' (Virgin Pulse 2017). Although the primary aim of the texts analysed here is to sell the initiatives to employers there is very little direct discussion of the technologies themselves instead the focus is on the philosophy and evidence which justify them. For instance, one report contains images of employees using tracking devices and oblique references to the programs:

Our scientifically developed, independently proven program takes employees on a journey that fundamentally improves their relationship with exercise, nutrition, sleep and

¹ At time of writing two separate websites were still maintained but had been rebranded for a consistent look and largely contained the same materials with some GCC information expunged.

psychological wellbeing, instilling in them a new sense of personal responsibility, self-belief and resilience [...] In other words, we deliver a simple and effective solution that optimises your most valuable asset – your people [...](Global Corporate Challenge 2016, 11).

The texts discussed below thus function as advertising copy while forging an inter-discursive link between management practice, scientific discourse and a socio-technical intervention.

Analysis

All of the texts discussed below have an overt goal of selling products to a customer (CW programmes to an employer) but do this through informing good management practice. The first section of analysis “Genre” will focus on how the texts are structured and broadly presented to appear engaging and legitimate to the right audience. This will be followed by “Style” which will show how the “good manager” is presented as one who promotes “connexionism”. The final section, “Discourses”, will characterise the specific representations of “connexionism” in the text and show how they are interdiscursively related to a broader network discourse.

Genre

We can consider genres as ‘semiotic ways of acting and interacting’ (Fairclough 2010, 232) and the study of them is interested in how texts relate to one another and in the different resources drawn upon for “texturing” and producing meaning (Fairclough 2010, 174). The main consideration is, then, how the text is constructed *as a text* and how this relates to social practices. While the content of the discourses is not addressed directly in this section it is crucial for understanding how the reader is engaged and the context for the discourses set. Two key aspects of genre which are common across all texts (the “paratactical” construction and modality of clauses) will be discussed and their significance suggested.

This extract from the VP website gives a good sense of the tone used to engage readers in many of the texts.

Unify Your Workforce with Social and Mobile. Make teamwork easy and contagious and build a workplace that is the envy of your competitors and a source of pride for your employees. Virgin Pulse’s mobile solutions support employees 24/7 on any device. Harness the power of social networks and team-based contests to drive friendly competition, promote wellbeing tips and healthy habits, and increase collaboration (Virgin Pulse 2017a)

The above extract is constituted largely of individual statements which make assumptions of facts without them being established such as “Virgin Pulse’s mobile solutions support employees 24/7 on any device”. Other parts function as friendly commands “Harness the power of social networks and team-based contests to drive friendly competition...”. Paratactical construction like that seen here makes for writing which is easily memorised and encourages the move from prescription to action as it discourages complexity and analysis (Chiapello and Fairclough 2002, 198).

The modality of the clauses used in the pieces tends to be largely “declarative” with statements of fact or high probability (Fairclough 2010, 106) such as this quotation taken from a GCC whitepaper ‘an employee’s psychological health can impact their physical health’ (Global Corporate Challenge 2016, 6). However, often these statements are quotations from experts employed by the company (in this case GCC) which lends authority to the statements and personalises the advice with

the reader being instructed by an individual expert rather than by a company. The experts cited are nevertheless representatives of the company and help to construct an institutional identity which is assertive through the text which constructs the reader as the recipient of advice and often gives instruction 'Managers need to remember that...' (Global Corporate Challenge 2016, 6).

Straightforward advertising copy would be more likely to be dismissed or undervalued by the intended readers as frivolous or directly persuasive and manipulative. The establishment of genre is crucial in encouraging the "right" readers to engage with the text and take on its message. It is, however, through situating the reader within the text that the discourse starts to take hold.

Style

Styles can be defined as 'ways of being' (Fairclough 2010, 232) in a particular context and are concerned with the use of language to construct or evoke of identity or identities (Li 2009). They can be analysed through unpicking the ways in which what it means to be a particular kind of person is constructed through the text. Particular styles become attached to specific identities (Fairclough 2010, 174) with types of language used to address the reader and construct them, and the author, as certain types of people while also defining the identities of others with whom they might engage.

All texts in the sample use an informal style frequently addressing the reader with a singular "you" but simultaneously exert authority over them through commands ("Look around your teams..."). The single exception to this is a paper by Nicholas Christakis (see below) which provides one of the core academic bases of the sample through presenting the theoretical and empirical grounding of the intervention. Here the plural "you" is used in the explanation of the theory and examples used and functions to align the reader with the author and to position both as someone who can influence the way others behave and feel through strategic interventions: "Basically, if you take a group of people and connect them one way, they are kind to each other". Similarly, a GCC whitepaper presents the "good manager" as one who actively intervenes into the lives of the workers to encourage "emotional contagion":

Dr Ackrill confirms that leaders have an important role to play in creating happiness. "Emotional contagion is real and it's powerful. Employers and managers have a great deal of influence over whether or not their employees catch the happiness habit. (Global Corporate Challenge 2016, 7).

The only voices which are heard in the texts are those of "experts" and HR or other managers rather than employees themselves, with the sole exception of a paper specifically discussing the importance of friends and family for wellness (Virgin Pulse 2013). For instance, the impact of the VP initiative is summarised in a case study by an "Executive Director of Budget & Finance" for public school system:

"That first summer we launched the Virgin Pulse program, the excitement and buzz was truly unbelievable," said Davis. "It's become 'cool' to have your activity tracker on. If you don't have it on, people will ask you why you aren't doing it; it's a culture change toward health." (Virgin Pulse 2015, 3).

No such quotations are taken from employees in any of these texts which helps to place the manager in a position of power and creates identification between them and the reader. Employees

are also not presented as agents in subject positions (Li 2009, 102), they are talked about rather than able to speak themselves as seen here:

“For both us and especially for employees, to have participation and rewards information available in one place on their Virgin Pulse portal is so much simpler and user- friendly” (Virgin Pulse 2015, 2).

In the extracts above the employees are excluded through “backgrounding”, they are mentioned but always as a “class” or category (Fairclough 2003, 145–46). This prevents them from being subjects in the discourse instead they are seen as objects to be acted upon by the managers and experts.

Through analysis of the style of documents we can see that managers are given subjectivity while employees are positioned as objects in the discourse through not being directly given a voice. Furthermore, the identity of the “good manager” is construed through their willingness to intervene into the lives and relationships of workers in order to produce better outcomes for health and productivity. The underlying ontology which informs the justification for this intervention can be seen through the construction of discourse.

Discourse

The study of discourse is concerned with how texts represent the world and are associated with different social positions (Fairclough 2010, 174–75). Discourses are largely concerned with the classification of the world into types of things and a text will often recontextualise social practices in order to present them in terms of a particular way of understanding (Fairclough 2010, 185). The discourses present in these texts represent a normative proposition that “connexionism” is good for business *and* wellness and that the manager should be actively engaged in stimulating it. This serves as a justification for the use of a ST programme and has consequences for the type of intervention expected of the manager due the conceptualisation of the worker.

The most prominent aspect of the discourse is the assertion that good health and a productive workplace can be achieved through increasing social connections:

We’ve proven, with clinical research and published outcomes, that fostering social connections will spread better health. So, with Virgin Pulse, employees not only connect with their colleagues at work, but with friends and family outside work, too. We empower the existing social networks they rely on across the many roles they balance in life – and that affect their job performance (Virgin Pulse 2017b, 2).

Present tense verbs are used which give a sense of assertiveness of the truth claims rather than equivocation or discursivity (Fairclough 2001, 243). Both “good health” and “job performance” are presented as being the result of “empowered” “social networks”. While “empowerment” is a central concept in employee engagement literature (CIPD 2009; MacLeod and Clarke 2014) the presentation here is slightly different to that in many other contexts as it is the network that is the target of empowerment not the individual. So although active verbs are used to refer to employees in the above extract (“employees not only connect with their colleagues at work”) which would usually suggest a prominence in the discourse (Fairclough 2001, 243) it is VP who is the “we” who empowers the social networks.

A GCC paper reported on findings that ‘positive emotional contagion resulted in “improved cooperation, decreased conflict, and increased perceived task performance”’ (Global Corporate Challenge 2016, 7). In this extract passive verbs are used to refer to employees (“positive emotional contagion resulted in”) who are absent as active subjects with good habits seen as spreading via “contagion”. VP offer supplementary free memberships to the program because ‘including family members and friends in wellness programs can increase participation, boost long-term engagement, and provide measurable ROI’ (Virgin Pulse 2013, 10). They assert ‘including social connections in wellness programs can significantly influence employee participation and engagement’ (Virgin Pulse 2013, 2). The provision of ST devices to family and friends of members is presented as a way to incorporate them into the network infrastructure which will improve health and productivity.

The ontological foundation for this network thinking is derived from the work of Christakis, a Professor at Yale and an author of branded VP whitepapers. His work is built on the insight that ‘artificial tipping points can be created [...] by strategically targeting structurally influential individuals, so that, once one person changes their health behaviors, many others follow suit (Christakis 2015, 2). The consequence of the insight that society is a network is that the manager can, and should, manipulate it in order to produce desirable outcomes:

This in turn means that there are two broad ways to intervene in networks: by manipulating connection or by affecting contagion. Increasingly, we have examples of both, applied to workers, customers, patients, and so on. For example, manipulating online network structures can affect health behaviors. Or, manipulating the structure of social network ties can affect cooperation behaviors both online and offline. How nice people are to each other depends on how we arrange the ties among them (Christakis 2015, 2).

Here agency lies with the manager rather than the individual or the collective themselves who simply respond automatically to the structures of the network. This is a rhetorical strategy of empowering “us” and disempowering “them” and constructs a “we-community” (“we have examples”) of managers and experts (Li 2009, 103–4). Moreover, the grammatical role of the two groups is clear. The “us” group of managers and experts are placed in an active subject position (“How nice people are to each other depends on how we arrange the ties among them”). The “them” group of workers or the public in general are approached generically rather than specifically and as objects who are acted upon rather than being themselves active (Li 2009, 94). They are hardly given agency in their own health or happiness at all (“manipulating online network structures can affect health behaviors”).

“Network thinking” has been present in anthropological and sociological work since at least the 1950s (Wolfe 1978) and the “network paradigm” has grown significantly in the social and physical sciences generally (Borgatti et al. 2009) and organizational studies specifically (Borgatti and Foster 2003). However, ST devices and related programmes have provided a means of physically integrating individuals into digital networks. Data generating tracking devices stand as proxies for individuals in actually occurring digital networks thus materialising the network imaginary which has already been applied to workers in organizations.

Conclusion

In this chapter I proposed that ST CW initiatives and the networks they form are presented by vendors as enabling the “mobilisation of the social” or as way of using and facilitating social

connections to improve the health, productivity, and engagement of workers. The chapter has unpicked how an interdiscursive connection has been forged with social network analysis to invest CW initiatives with the perceived power to create healthier, happier and more productive workers through manipulating the structures of social networks.

Analysis of the genres used in these texts showed how CW vendors positioned their products as legitimate and suitable for employers by blurring the line between advertising copy, advice and research findings. Two broad stylistic devices were identified; the use of a paratactical construction and a declarative modality which function to make the messages contained more memorable less contestable. The style of the texts helps to construct the identity of the author and reader. Normative claims and prescriptions of good practice suggest that the “good manager” is an active subject who can manipulate and restructure social relations to produce desirable outcomes while the worker is rendered relatively inert. The subjective engagement of the manager and employee is ensured through the ethical justification of practices of capital accumulation principally through the promotion of the discourse of “connexionism”.

A “connexionist” “justificatory regime” was identified in management discourse by Boltanski and Chiapello in the 1990s but the introduction of ST technologies into CW and the interdiscursive relation forged with social network analysis has enabled an intensification of this. ST initiatives perform a double function, firstly they confirm the “network ontology” associated with “connexionism” through revealing the workplace as a collection of interconnected digital nodes. The introduction of tracking devices which produce a digital trace enables people, and certain aspects of their behaviours and interactions, to be represented as a network. Secondly, ST appears to provide a means of encouraging “connexionism” through stimulating interactions between workers which are beneficial for health and productivity thus supporting the ethical justification for the manager’s intervention.

References

- Ajana, Btihaj. 2017. “Digital Health and the Biopolitics of the Quantified Self.” *Digital Health* 3: 1–18.
- Bode, Matthias, and Dorthe Brogård Kristensen. 2015. “The Digital Doppelgänger within: A Study on Self-Tracking and the Quantified Self Movement.” In *Assembling Consumption: Researching Actors, Networks and Markets*, edited by Robin Canniford and Domen Bajdge, 119–34. New York: Routledge.
- Boltanski, Luc, and Eve Chiapello. 2005. *The New Spirit of Capitalism*. London: Verso.
- Borgatti, Stephen P, and Pacey C Foster. 2003. “The Network Paradigm in Organizational Research: A Review and Typology.” *Journal of Management* 29 (6): 991–1013.
- Borgatti, Stephen P, Ajay Mehra, Daniel J Brass, and Guiseppe Labianca. 2009. “Network Analysis in the Social Sciences.” *Science* 323 (5916): 892–95.
- Chamorro-Premuzic, Tomas. 2015. “Wearable Devices: Tracking Your Every Step May Not Make You Happier | Media Network | The Guardian.” *The Guardian*.
<https://www.theguardian.com/media-network/2015/jul/17/wearable-devices-technology-monitor-behaviour-wellbeing>.
- Chiapello, Eve, and Norman Fairclough. 2002. “Understanding the New Management Ideology: a Transdisciplinary Contribution from Critical Discourse Analysis and New Sociology of Capitalism.” *Discourse & Society* 13 (2): 185–208.
- Christakis, Nicholas A. 2015. “How Social Connections Affect Well-Being.”
<http://community.virginpulse.com/sab-social-connections-web>.
- CIPD. 2009. “An HR Director ’ S Guide to Employee Engagement What Is Employee Engagement ?”

- http://www.digitalopinion.co.uk/files/documents/An_HR_Directors_Guide_to_Employee_Engagement.pdf.
- Conrad, Peter, and Diana Chapman Walsh. 1992. "The New Corporate Health Ethic: Lifestyle and the Social Control of Work." *International Journal of Health* 22 (1): 89–111.
- Dale, Karen, and Gibson Burrell. 2013. "Being Occupied: An Embodied Re-Reading of Organizational 'Wellness.'" *Organization* 21 (2): 159–77.
- Fairclough, Norman. 2001. "The Discourse of New Labour: Critical Discourse Analysis." In *Discourse as Data: A Guide for Analysis*, edited by Margaret Wetherell, Stephanie Taylor, and Simeon. Yates, 229–66. London: Sage.
- . 2003. *Analysing Discourse: Textual Analysis for Social Research*. London: Routledge.
- . 2010. *Critical Discourse Analysis: The Critical Study of Language*. London: Routledge.
- Fotopoulou, Aristeia, and Kate O’Riordan. 2017. "Training to Self-Care: Fitness Tracking, Biopedagogy and the Healthy Consumer." *Health Sociology Review* 26 (1): 54–68.
- Global Corporate Challenge. 2016. "Happy Days Drive Better Business." <https://www.gettheworldmoving.com/proof-it-works>.
- Haunschild, Axel. 2013. "Humanization Through Discipline? Foucault and the Goodness of Employee Health Programmes." *Tamara: Journal for Critical Organization Inquiry* 2 (3): 46–59.
- Li, Juan. 2009. "Intertextuality and National Identity: Discourse of National Conflicts in Daily Newspapers in the United States and China." *Discourse & Society* 20 (1): 85–121.
- Lupton, Deborah. 2015. "Health Promotion in the Digital Era: A Critical Commentary." *Health Promotion International* 30 (1): 174–83.
- . 2016a. "The Diverse Domains of Quantified Selves: Self-Tracking Modes and Dataveillance." *Economy and Society* 45 (1): 101–22.
- . 2016b. *The Quantified Self: A Sociology of Self-Tracking*. Cambridge: Polity.
- MacLeod, David, and Nina Clarke. 2014. "The Evidence: Wellbeing and Employee Engagement." <http://engageforsuccess.org/the-evidence-wellbeing-and-engagement>.
- Maravelias, Christian. 2009. "Health Promotion and Flexibility: Extending and Obscuring Power in Organizations." *British Journal of Management* 20 (s1): S194–203.
- Millington, B. 2014. "Smartphone Apps and the Mobile Privatization of Health and Fitness." *Critical Studies in Media Communication* 31 (5): 479–93.
- Moore, P, and A Robinson. 2015. "The Quantified Self: What Counts in the Neoliberal Workplace." *New Media & Society* 18 (11): 2774–2792.
- Nafus, Dawn, and Jamie Sherman. 2014. "This One Does Not Go Up to 11: The Quantified Self Movement as an Alternative Big Data Practice." *International Journal of Communication* 8: 1784–94.
- ONeill, C. 2016. "Taylorism, the European Science of Work, and the Quantified Self at Work." *Science, Technology & Human Values*, 1–22. doi:10.1177/0162243916677083.
- Rich, E, and A Miah. 2014. "Understanding Digital Health as Public Pedagogy: A Critical Framework." *Societies* 4 (3): 296–315.
- Ruckenstein, Minna. 2014. "Visualized and Interacted Life: Personal Analytics and Engagements with Data Doubles." *Societies* 4 (1): 68–84.
- Sanders, R. 2017. "Self-Tracking in the Digital Era Biopower, Patriarchy, and the New Biometric Body Projects." *Body & Society* 23 (1): 36–63.
- Schüll, ND. 2016. "Data for Life: Wearable Technology and the Design of Self-Care." *BioSocieties* 11 (3): 317–33.
- Sharon, Tamar, and Dorien Zandbergen. 2016. "From Data Fetishism to Quantifying Selves: Self-Tracking Practices and the Other Values of Data." *New Media & Society*, March, 146144481663609. doi:10.1177/1461444816636090.
- Till, C. 2014. "Exercise as Labour: Quantified Self and the Transformation of Exercise into Labour." *Societies* 4 (3): 446–62. <http://www.mdpi.com/2075-4698/4/3/446/htm>.
- Till, C. n.d. "Commercialising Bodies: Action, Subjectivity and the New Corporate Health Ethic." In

- Understanding Personal Medical Devices: Critical Approaches*, edited by R. Lynch and C Farrington. London: Palgrave Macmillan UK.
- Virgin Pulse. 2017a. "Build a Great Company Culture - Virgin Pulse." Accessed January 31. <https://www.virginpulse.com/use-case/build-great-culture/>.
- . 2017b. "Social Connections: A Force For Good." Accessed February 23. <https://www.virginpulse.com/resources/>.
- . 2013. "Lean On Me." <https://www.virginpulse.com/resources/>.
- . 2015. "Case Study Howard County Public School System." <https://www.virginpulse.com/resources/>.
- . 2016. "Virgin Pulse, ShapeUp and Global Corporate Challenge Unite - Virgin Pulse." *Virgin Pulse*. <https://www.virginpulse.com/press/virgin-pulse-shapeup-and-global-corporate-challenge-unite/>.
- . 2017. "State of the Industry : Employee Wellbeing, Culture and Engagement in 2017."
- Whitson, JR. 2013. "Gaming the Quantified Self." *Surveillance & Society* 11 (1/2): 163–76.
- Wolfe, Alvin W. 1978. "The Rise of Network Thinking in Anthropology." *Social Networks* 1 (1): 53–64.
- Zoller, Heather M. 2003. "Working Out: Managerialism in Workplace Health Promotion." *Management Communication Quarterly* 17 (2): 171–205.