PERSPECTIVES

Health promotion in the digital era: a critical commentary

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SUMMARY

A range of digitized health promotion practices have emerged in the digital era. Some of these practices are voluntarily undertaken by people who are interested in improving their health and fitness, but many others are employed in the interests of organizations and agencies. This article provides a critical commentary on digitized health promotion. I begin with an overview of the types of digital technologies that are used for health promotion, and follow this with a discussion of the socio-political implications of such use. It is contended that many digitized health promotion strategies focus on individual responsibility for health and fail to recognize the social, cultural and political dimensions of digital technology use. The increasing blurring between voluntary health promotion practices, professional health promotion, government and corporate strategies requires acknowledgement, as does the increasing power wielded by digital media corporations over digital technologies and the data they generate. These issues provoke questions for health promotion as a practice and field of research that hitherto have been little addressed.

Key words: obesity; children

INTRODUCTION

In 2011, a group of information science and electrical and computing engineering researchers (Purpura *et al.*, 2011) published a paper which described a prospective digitized weight-loss program. This speculative program, to which the authors gave the title 'Fit4Life', included tracking devices for monitoring users' calorie consumption, exercise and metabolic rate as well as integrating social media as part of a mechanism for support and motivation. In designing this program, they drew on the principles outlined in the persuasive computing literature on encouraging behavioural change using computerized technologies. Fit4Life technologies were designed to persuade users to exercise more and eat less in the pursuit of weight loss. The program's Data Recorder made use of image-processing algorithms to estimate the calories consumed by users, the Earpiece was designed to record jaw movements to track eating

behaviour to link wirelessly to a smartphone app to upload these data, while the Thinsert was an electronic weight scale that could be inserted into a user's sock or shoe. These tracking devices were complemented by a digital Heart Rate Monitor worn around the chest, the Metabolic Lancet worn on the user's toe to measure blood for metabolic rate and the Support Cloud to connect to social media sites to broadcast the user's progress and for the user to receive motivating messages.

Once this digitized weight-loss system was outlined, the authors made it clear that it was an attempt to engage in a thought experiment with the purpose to parody and critique persuasive computing techniques. Their intention was to highlight the social and ethical issues involved in adopting these techniques using such pervasive and interventionist devices: in their words, 'to demonstrate how easily such a design can spiral out of control' [Purpura *et al.*, 2011, p. 427]. Yet a mere 3 years since this paper was published, such

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technologies are now a reality. What is more, they have become accepted as appropriate as part of persuading people to engage in behaviours to improve their health or other aspects of their lives and are increasingly used in corporate and government-sponsored wellness and health promotion programs.

In this article, I present a review and critique of the ways in which digital technologies for health promotion are employed. (The material that I drew on for this review was the available Anglophone academic literature that had been published discussing the use of digital technologies for health promotion. I used the search terms 'health promotion', 'health campaigns', 'health education' and 'public health' combined with 'digital', 'Internet', 'social media', 'web' and 'online' to find the appropriate literature on both Google Scholar and my institutional library website.) In doing so, I adopt a perspective that is part of my current research program in critical digital health studies, which seeks to identify the social, cultural, political and ethical dimensions of digital health technologies. This approach goes beyond the instrumental and technological solutionist approaches that tend to dominate professional and popular discussions of digital health promotion technologies. This article is presented in two parts. I devote the first part of the article to reviewing the digital technologies that have been used for health promotion. I then go on to examine the socio-political implications of digitizing health promotion.

When applying a critical digital health studies approach to the analysis of digitized health promotion, I build on the work of contributors to an established literature that articulates a critical sociological analysis of health promotion. Contributors to this literature seek to identify the social and political elements and implications of health promotion and its relationship to broader issues of identity, selfhood, concepts of health and embodiment and power relations [see, for example (Lupton, 1995; Petersen and Lupton, 1996; Colls and Evans, 2010; Thompson and Kumar, 2011; Ayo, 2012; Crawshaw, 2013; Wright and Halse, 2013)]. I also draw on the publications in another quite separate literature in new media, digital sociology and Internet studies that examine the politics of digital technologies. Very few discussions in the health promotion literature have acknowledged or examined this dimension of digital society. Yet digital technologies are intensely political. The Internet empires of Google, Facebook, Apple and Amazon now wield extraordinary power in shaping social relations, commercial and government activities and all forms of social institutions: the economy, the workplace, the family, the education system, healthcare and public health. As digital data become increasingly commodified and commercialized, new forms of surveillance and social inequalities are developing that go beyond concepts of the digital divide (Best, 2010; Franklin, 2013; Mann and Ferenbok, 2013; Van Dijck, 2013; Fuchs, 2014; Lupton, 2015).

DIGITIZED HEALTH PROMOTION

In the past decade or so, there have been profound changes in the types of digital technologies that are available for mass use. The distinction is now often made between Web 1.0 and Web 2.0 technologies. Web 1.0 tends to be characterized as the era following the development of the World Wide Web (which became readily accessible to the public from 1994). From 2004, the term Web 2.0 (also known as the 'social web') began to be used to describe the current use of digital technologies (Lupton, 2015). Since that time, mobile digital devices that are able to connect to the Internet from almost any location, such as smartphones, tablet computers and wearable sensor-based devices, have emerged onto the market and become widely adopted. So too social media platforms, such as Twitter, Facebook, YouTube and Instagram have been developed, allowing for the creation of content and the sharing of personal data by users. Indeed, Web 2.0 is characterized by the activities of the 'prosumers' of online technologies, or users who both produce and consume digital content (Ritzer *et al.*, 2012). It is now speculated by some writers that Web 3.0 (also called the Semantic Web or the Internet of Things) is emerging as the next stage of digital technologies. This will involve the interconnection of 'smart objects' that will exchange data with each other without the need for human intervention (Miorandi *et al.*, 2012).

The implications of ubiquitous and pervasive digital technologies for healthcare and public health are profound. Many such technologies are now explicitly designed for medical and health purposes, contributing to the digital health phenomenon that has recently emerged. Mobile digital devices and the applications ('apps'), websites and platforms to which they connect, offer not only ready access to medical and health information on the Internet but also new ways of monitoring, measuring and

visualizing the human body and sharing personal information and experiences with others. 'Digital health' is a term that is used to encompass the wide range of technologies that are used for healthcare, health informatics, health education, health promotion and public health purposes. It incorporates other terms such as 'eHealth', 'mHealth', 'connected health' and 'Health 2.0' (see Lupton, in press[a] for an overview).

Digitized health promotion is a subset of digital health technologies. As outlined in further detail below, it includes a range of digital devices, tools and platforms. Some of these practices are voluntarily undertaken by people who are interested in improving their health and fitness, but many others are employed for the broader purposes of organizations and agencies, both corporate and government.

Digital information access and sharing technologies

Health and medical support and information websites, apps and social media sites have proliferated, facilitating the access of lay people to health-related information and providing them with the opportunity to share experiences of their illnesses or health-promoting activities. A Pew Research Center survey of American respondents found that 8 in 10 Internet users look online for health information, the third most common use of the Internet (Fox, 2011). One of the newest digital health technologies is the app that can be downloaded on smartphones, iPods and tablet computers. Tens of thousands of health-related apps for mobile digital devices have been developed for commercial use. Many of these apps focus on disseminating information about behaviours such as food consumption, weight control, alcohol consumption, smoking cessation, physical fitness, sun exposure, mental health and sexual health (Kratzke and Cox, 2012; Kamel Boulos *et al.*, 2014).

Health promotion researchers have sought to investigate how websites and social media sites operate in generating and disseminating information about strategies for promoting health among lay people who do this voluntarily as part of social interactions and support systems [for example (Kamel Boulos *et al.*, 2011; Divecha *et al.*, 2012; Guse *et al.*, 2012; Lorie and Richard, 2012; Evers *et al.*, 2013; Pagoto *et al.*, 2014; Weymann *et al.*, 2014)]. After realizing the reach and potential impact of these technologies, health promoters have experimented with using text messages,

social media sites and apps to strategically disseminate information about preventive health, collect data about people's health-related behaviours and attempt to 'nudge' members of target groups to change their behaviour in the interests of their health [for recent examples, see (Crutzen and De Nooijer, 2011; Kratzke and Cox, 2012; Buhi *et al.*, 2013; Chou *et al.*, 2013; Korda and Itani, 2013; Epton *et al.*, 2014; Smith *et al.*, 2014)].

Personal self-tracking devices for health and fitness

Another element of digitized health promotion that has been led by consumers is self-tracking (also referred to in some forums as 'the quantified self'). The development of wireless mobile devices and associated software that can monitor and measure many aspects of bodily functions and activities and geolocation details has provided people with the opportunity to engage in self-tracking. Such body functions, sensations and indicators as blood glucose, body weight and body mass index, physical activity, energy expended, mood, body temperature, breathing rate, blood chemistry readings and even brain activity can now all be monitored using portable wearable and internal sensors that have been embedded in wristbands or headbands, woven into clothing, laminated onto ultrathin skin interfaces or inserted into ingestible tablets that can monitor the body from within. These technologies produce detailed data that may be readily communicated to others via social media platforms or to medical or public health professionals monitoring people's biometrics and health-related habits.

Here, again some people working in health promotion have begun to discuss the possibilities of incorporating self-tracking technologies into health promotion programs. For example, Swan (Swan, 2009, 2012a, 2012b) has written several articles in which she outlines the ways in which voluntary self-tracking efforts can be mobilized by health promotion and preventive medicine. Self-tracking is also becoming introduced into some workplaces as part of corporate 'wellness programs', particularly in the USA, where employers pay for health insurance coverage of their employees. Wearable technology manufacturers such as Fitbit are brokering deals with employers and insurance companies to sell their fitness and activity trackers and data analytics software as part of these wellness programs (Olson and Tilley, 2014).

Health- and fitness-related digital gaming

Health promotion professionals have begun to use digital gaming technologies in their programs (Albu *et al.*, 2014). The potential of the three-dimensional interactive virtual world Second Life and other platforms like it has been identified for health communication purposes. These platforms offer the opportunity for people to create avatars and interact with others using real-time communication tools. Health promotion researchers have argued that these sites can be used for the dissemination of educational materials for lay people as well as providing virtual training environments for healthcare workers (Kamel Boulos *et al.*, 2007; Beard *et al.*, 2009; Ghanbarzadeh *et al.*, 2014). One study of health-related activities on Second Life conducted in 2008 found a considerable number of sites whose purpose was to disseminate health information (Beard *et al.*, 2009). Second Life and other 3D virtual worlds have been used for such activities as weight loss, diabetes management and obesity prevention programs (Ghanbarzadeh *et al.*, 2014).

Some gaming technologies (sometimes referred to as 'exergames') use sensors to generate digital data on players and encourage them to exercise and lose weight. These include games for Wii consoles such Wii Fit, which calculates players' body mass index and provides data on their fitness levels. Xbox Fitness offers users the opportunity to work out under fitness coaches and receive personalized feedback on their exertions. The Xbox Kinect technology offers such features as seeing which muscles have been engaged in the activity, measuring the user's exertion and heart rate and providing a physical energy expenditure meter. Many apps for smartphones have been developed that attempt to combine fun and fitness, including the popular Zombies, Run! Health promoters have investigated ways to employ these digital games for promoting increased exercise, particularly for young people but also among the elderly (Kamel Boulos and Yang, 2013; Öhman *et al.*, 2014).

Sensor-embedded environments and citizen science initiatives

Sensor-based technologies are expanding in domestic and urban environments. Many self-tracking and self-care devices include digital sensors for monitoring geolocation and physical movement and biometric data. 'Smart' objects embedded with sensors can be installed in people's homes to monitor their physical activity. This is becoming a feature of home-based care for elderly people (Milligan *et al.*, 2011). Homes can also be designed to monitor their inhabitants' use of energy, as well as linking the sleep data collected by wearable devices of their inhabitants to engineer energy use to coincide with going to bed and waking up (Olson and Tilley, 2014).

Some health promotion programs are employing sensor-based and other tracking devices to engage in collective attempts to generate data ('crowdsourcing'). The terms 'citizen science' and 'citizen sensing' incorporate the idea that lay people can be trained and equipped to generate scientific information for research or community projects (Swan, 2012b). The concepts of the 'healthy city' and the 'smart city' are beginning to come together (in what might be called the 'smart healthy city') in some attempts to use the digitized sensing and monitoring technologies for health promoting purposes (Kamel Boulos *et al.*, 2011; Kamel Boulos and Al-Shorbaji, 2014). One example is the initiative announced by New York University in 2014, involving collaborating with the developers of a new residential area in that city, Hudson Yards, to create a 'quantified community' to promote energy efficiency and residents' health and wellbeing. Information on such factors as pedestrian traffic, air quality, energy production and consumption and health and physical activity levels of residents was to be routinely collected as part of this project employing self-tracking sensor technologies used by the residents and embedded into the built environment (Anuta, 2014).

Using big data to generate insights into health behaviours

Big data are also viewed by both corporate and government agencies interested in health promotion as important sources of information. Some social media platforms have been developed for the express purpose of sharing and crowdsourcing health-related information for the collective good. Such platforms as HealthMap and Sickweather encourage users to contribute information about their own or others' illnesses to generate geolocation data that can warn people when there is an infectious disease outbreak in their area. Platforms for people with health conditions such as PatientsLikeMe encourage the

sharing of condition-specific symptoms and treatments by patients with each other.

The potential for data mining the personal health information that users contribute to social media platforms is beginning to be discussed in health promotion circles. The opportunity to collect large masses of digital data by accessing digital patient records and other health informatics and harvesting search engine queries and social media content is viewed as having great potential for producing new knowledges about illness and disease and contributing to preventive medicine and health promotion (Brownstein *et al.*, 2009; Dredze, 2012; Harris, 2012; Swan, 2012c; Barrett *et al.*, 2013). Barrett *et al.*, for instance, discuss how 'collective health' can be improved with a 'data-driven approach', allowing for the identification of 'personalized risk factors' and with the supposed 'precision prevention' approach that large data sets will offer to health promotion efforts (Barrett *et al.*, 2013). Hill *et al.* report how 'online crowd surveillance', or the harvesting of data from social media interactions (tweets, Facebook status updates, search engine queries) can be used to investigate people's 'inner fears and desires about health' [(Hill *et al.*, 2013), p. 160].

THE SOCIO-POLITICAL IMPLICATIONS OF DIGITIZING HEALTH PROMOTION

Given the often unbridled enthusiasm that is displayed in many accounts of the uses of digital technologies in the health promotion literature, it is paramount to investigate and identify the social and political issues that emerge, including the ramifications for social groups who are already socioeconomically disadvantaged, have disabilities or suffer poor health. Many of the technologies and approaches outlined above intersect with each other, blurring the boundaries between healthcare delivery and self-care, self-initiated health promotion, corporate programs, consumer marketing, preventive medicine, health education and communication and community development. What is particularly noticeable about the ways in which digitized health promotion is employed in the majority of current programs is that most strategies render health states even more individualized, and draw attention away from the social determinants of health to a greater degree than ever before (Lupton, in press[b]). This is despite the current emphasis in health promotion policy that seeks to take a broader approach to alleviating socioeconomic disadvantage and inequities rather than focusing on individuals' specific health-related behaviours.

Several writers have pointed to the focus on self-management and self-responsibility that continues to form part of many health promotion strategies in a neoliberal political environment. They have contended that this focus tends to represent individuals or social groups as ignorant, morally deficient and lacking self-control and the capacity to take appropriate responsibility for their health if they fail to take up health promotion imperatives. These moral meanings continue to be expressed in health promotion strategies, despite overt discourses that champion the need to lessen socioeconomic disadvantage, develop communities and challenge political interests as part of health promotion efforts that are features of the new public health (Lupton, in press[b]; Crawford, 2006; Lupton, 1995, 2014a; Petersen and Lupton, 1996; LeBesco, 2011; Salmon, 2011; Ayo, 2012; Crawshaw, 2013). Indeed, in an age of austerity measures that have been taken by many western governments in response to global financial crises, the neoliberalist focus on citizens' self-responsibility for their health outcomes has been articulated with even greater fervour in many spheres of government and commercial enterprise, including healthcare and public health (Veitch, 2010; De Vogli, 2011).

One important element to identify in digitized health promotion is its capacity to operate via intensely surveillant principles. The opportunities to monitor individuals and populations by collecting detailed data on them using digital technologies are unprecedented. The relatively crude consumer marketing principles of identifying target groups based on shared socioeconomic and attitudinal attributes and designing health campaigns for the mass media exhorting them to change their behaviour have become superseded. It is now possible to send target groups text messages that are individualized and tailored to their personalized characteristics and to monitor their bodies, behaviours and geolocation at any time or the day or night using digitized tracking systems. When behaviours and body functions are digitized as quantifiable data, indicators and concepts of health and fitness become narrow representations of these phenomena. Health and wellbeing become represented by certain numbers that are collected by one's self-tracking device, game app or sensor-embedded smart object (Lupton, 2012, 2013, 2014b).

What are the ethical implications of these ways of generating and combining data on people and who will have access to these data? There are questions to be raised concerning the extent which encouragement becomes persuasion becomes coercion, particularly when such players as employers and health insurance companies become involved with using people's personal biometric data. Employees must give their consent to wearing the devices as part of workplace wellness programs and allowing employers to view their activity data. However, when incentives such as lower health insurance premiums are offered to those who opt in, a measure of financial coercion is involved (Olson and Tilley, 2014). App and platform developers have not always taken appropriate steps to safeguard the often very personal data that are collected (Ackerman, 2013), including data on sexual practices and partners and reproductive functions that are collected by some apps (Lupton, 2014b).

Many digitized health promotion strategies are simply versions of old-style health communication using new media. Whether taken up voluntarily or in response to a health education campaign or a corporate wellness program, the focus remains firmly on the individual as an atomized actor. Traditional psychological models of behaviour are employed that display little recognition of the broader socio-cultural and political context in which individuals act. The discourse referring to 'behavioural interventions' using smartphones, wearable technologies or social media (Dennison *et al.*, 2013) in a range of sites, including professional health promotion, persuasive computing, health insurance and corporate wellness programs tends to conform to paternalistic top-down approaches. The goals that such health promotion attempts seek to achieve are frequently not chosen by the people to whom they are directed, but instead are identified for them as priorities (Purpura *et al.*, 2011).

Digitized health promotion that seeks to move away from changing individual behaviour to broader initiatives such as community development and challenging the political status quo remains in the minority. There are currently few published accounts in the health promotion literature describing projects that seek to use digital technologies to develop healthy public policy, confront poverty and sub-standard living conditions and support grass-roots political initiatives aimed at changing the status quo. However, some citizen science, citizen sensing and citizen data programs that are community initiated are beginning to emerge that go beyond simply asking citizens to contribute data as part of crowdsourcing efforts. These involve community groups working to access open government data sources or generate their own digital data on such aspects as crime levels, traffic conditions, waste disposal and environmental pollution in their local environs to use in political activism for change, including using social media platforms to publicize their efforts (see the Citizen Sense website for examples). These initiatives acknowledge that digital media should not simply be viewed as tools for communicating health messages by those in power but can also act as spaces that provide the opportunity for contestation and resistance to top-down directives.

The capacity for citizen resistance and participatory democracy via digital media, however, is limited by the current corporate control that is exerted over digital platforms and devices and the digital social inequalities that are still experienced by many social groups. Many people continue to struggle with access to digital technologies or simply fail to see a reason to use them. Internet use is strongly correlated not only with age but with income and education level and geographical location. Those with lower levels of income, poor language and literacy skills, education and understanding of how to use digital technologies and people living in rural and remote regions and less wealthy countries are less likely want to go online, possess the skills to do so or have access to the Internet (Hargittai and Hinnant, 2008; Chen, 2013; Olphert and Damodaran, 2013; Zickuhr, 2013; Baum *et al.*, 2014). People from disadvantaged social groups often lack both health literacy and digital literacy, resulting in less knowledge and fewer skills in using digital technologies for health promoting purposes. Existing social inequities and higher levels of poor health can therefore be exacerbated by lack of access to or knowledge about digital technologies (Blanchard *et al.*, 2008; Gibbons *et al.*, 2011; Newman *et al.*, 2012; O'Mara, 2013; Baum *et al.*, 2014; Smith *et al.*, 2014).

As the Internet of Things develops and smart objects start to exchange digital data on human bodies with each other, a new and different level of digital data generation is occurring. The implications of this for the ways in which biometric information is produced and used have yet to be fully realized or understood. In a context in which

cities are becoming increasingly programmable with computer software and monitored using sensor-based technologies, even the concept of the 'healthy city' is open to reinterpretation via the lens of digitization. When people's homes can be coded to monitor body movements and sleep patterns, the concept of 'the home' is digitized. When special interest groups are configured and interact via digital technologies such as social media, the very notion of 'community' has become digitized. When citizens can engage not only in self-tracking their own behaviours but are continually surveilled by the digital technologies with which they routinely interact and the sensor-embedded environments in which they move about, their bodies and behaviours are digitized. The notion that people's bodies and behaviours can be tracked 24/7 and the data sent to healthcare providers, health promoters and health insurers and that they may be rewarded or punished with financial incentives or penalties is no longer the speculative design envisaged by Purpura and colleagues with which I began this article.

The power of the Internet empires and what has been described as 'algorithmic authority' (Cheney-Lippold, 2011) also requires consideration. Despite the rhetoric of participatory democracy and sharing that characterizes much discussion of Web 2.0 technologies such as social media sites (Beer, 2009), these media are not the open, collaborative spaces that they once were as they have become commodified and bent to commercial interests. New forms of power have emerged in the digital age. The Internet empires control the digitized knowledge economy. Users' interactions, including their search engine queries, are now archived and algorithmically manipulated for commercial purposes, delimiting the choices that users may be offered (Beer, 2009; Franklin, 2013; Van Dijck, 2013; Fuchs, 2014; Gehl, 2014). As part of the 'new media capitalism' [Gehl, 2014), p. 15], prosumers' unpaid labour that is contributed as part of their engagement with social media is exploited for economic gain on the part of others (Bird, 2011; Fuchs, 2014).

Individual users and health promoters who are using social and other digital media, therefore, are inevitably operating in a corporatized context in which the platform developers delimit what can be achieved and how data are generated, manipulated and used, often preventing users from accessing their own data. When health promoters employ digital devices as part of their work, therefore, they and the target groups they seek to influence are imbricated within and form part of a complex digital knowledge economy and a system that can be employed for mass surveillance of people's personal data. It is now known that surveillance of digital users is not only undertaken for commercial interests but also by government security agencies, as revealed by the classified security documents that have been leaked since mid-2013 by former National Security Agency contractor Edward Snowden. Many people are now becoming aware of the manifold ways in which their personal data are being collected, monitored and re-used for the purposes of others. This may well have an effect on how they respond to health promoters' attempts to do exactly this. Health promoters have yet to acknowledge and come to terms with these changes in how digital technologies are operated and digital data are generated and appropriated.

CONCLUSION

The landscape of health promotion and its reach are rapidly changing. Digitized health promotion initiatives may be viewed as the latest point in a long history of the use of visualizing and biometric devices for monitoring and managing the human body in medicine and public health. The major differences offered by these new technologies are the continual nature of the surveillance opportunities they present, their expansion into intimate and public spaces and relationships and the commercial value of the data they collect on people's health-related behaviours as part of the digital data economy.

Digital health technologies offer interesting possibilities for health promotion practice. As I have argued, however, there are potential pitfalls, limitations and the potential for social and economic disadvantage, moral opprobrium directed at those who are not considered to respond appropriately and poor health outcomes to be exacerbated rather than improved if these technologies are used inappropriately and uncritically. The privacy and security of people's personal digital data are currently not well protected. The growing entry of commercial apps, platforms, self-tracking devices and smart objects and environments into digitized health promotion, and the use of digital data on individuals' health- and wellbeing-related behaviours and biometrics for profit, move health promotion into territories of uncharted political and ethical waters.

In some contexts, digital users are the willing generators of personal data; in others they are the objects of imposed data surveillance. Programs for eliciting and responding to these data are proliferating within government and commercial environments.

Those working in health promotion as a practice and as a field of scholarly research need to acknowledge and confront these changes and what their implications are for health promotion. This may mean examining the ways in which software delimits, and indeed prescribes concepts of health and wellbeing, including the lived experience of being tracked by digital devices and how people interpret and act on the data that are generated by these devices. Another important area of research is identifying how these data are manipulated algorithmically and used commercially by the developers or as part of security surveillance programs. This perspective highlights the position of the digital user (including the health promoter) not as an atomized actor but as an individual who is incorporated into not only the social, cultural and geographical contexts in which they are located but also within networks of software and hardware devices and a global digital knowledge economy and surveillance systems. Future digitized health promotion may involve investigating alternatives to the dominant commercialized social media platforms that may provide better options for data security and privacy and for people and communities to own and control their personal data. All of these investigations require a sophisticated understanding of the complexities and power relations of the technologies that configure digital society.

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