New Frontiers of Philanthro-capitalism: Digital Technologies and Humanitarianism

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Abstract

Digital technologies that allow large numbers of laypeople to contribute to humanitarian action facilitate the deepening adoption and adaptation of private-sector logics and rationalities in humanitarianism. This is increasingly taking place through *philanthro-capitalism*, a process in which philanthropy and humanitarianism are made central to business models. Key to this transformation is the way private businesses find supporting "digital humanitarian" organizations such as Standby Task Force to be amenable to their capital accumulation imperatives. Private-sector institutions channel feelings of closeness to aid recipients that digital humanitarian technologies enable, in order to legitimize their claims to "help" the recipients. This has ultimately led to humanitarian and state institutions re-articulating capitalist logics in ways that reflect the new digital humanitarian avenues of entry.

In this article, I characterize this process by drawing out three capitalist logics that humanitarian and state institutions re-articulate in the context of digital humanitarianism, in an emergent form of philanthro-capitalism. Specifically, I argue that *branding*, *efficiency*, and *bottom lines* take altered forms in this context, in part being de-politicized as a necessary condition for their adoption. This de-politicization involves normalizing these logics by framing social and political problems as technical in nature and thus both beyond critique and amenable to digital humanitarian "solutions". I take this line of argumentation to then re-politicize each of these logics and the capitalist relations that they entail.

Introduction

New data production and digital labor arrangements are playing a key role in humanitarianism's becoming more capitalist. Over the last 15 years, crowdsourcing, social media, and mass collaboration have been impacting the ways humanitarian agencies address crises, in the phenomenon many are calling "digital humanitarianism" (Meier 2015). Concurrently, private, for-profit businesses are increasingly making philanthropy and humanitarianism central to their business models while humanitarian agencies rely more strongly on contracting work to these companies. This marriage between philanthropy and capitalist relations has been called "philanthro-capitalism", and has made philanthropy a new site for capital accumulation. The form of philanthro-capitalism that is enabled by digital humanitarianism newly de-politicizes the exploitation of marginalized communities, with implications for how we understand the shifting relations between private business and humanitarian action.

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Digital humanitarianism is exemplified in the volunteer-generated global basemap OpenStreetMap[i], the crowdsourcing data collection and mapping platform Ushahidi[ii], and the loosely-coordinated group of contributors emerging in crises under the banner of the Standby Task Force[iii]. It has generally been discussed in academic and practitioners' circles as a primarily *technological* advance in data production, gathering, and processing capacities. Claiming to "revolutionize" humanitarianism and emergency management (Meier 2011, 2012), digital humanitarians often crowdsource mapping responsibilities (Haklay and Weber 2008), develop algorithms to process social media datasets (Pohl, Bouchachia, and Hellwagner 2013), and have recently begun using robotics such as unmanned aerial vehicles (Sandvik and Lohne 2014; Kerasidou *et al* 2015; Hunt et al. 2016; TEDxTalks 2016). However, some recent engagements with digital humanitarianism have expanded the breadth of the concept, rethinking it as a phenomenon that is co-constituted with social and political processes. This nascent scholarship asks us to question the practices, assumptions, and politics of knowledge representation that digital humanitarianism adopts, and which it in turn comes to impact (Burns 2019; Duffield 2016).

Building on a decades-old trend of turning crises and disasters into sites of private business and capital accumulation (Klein 2007; Adams 2013; Loewenstein 2015), private, for-profit businesses have recently been making philanthropy and humanitarianism core to their business models. Through this shift, companies now leverage charity to sell goods and services, increase profits, and thereby accumulate capital. For example, Toms Shoes and Warby Parker promise to donate one of their products – shoes and eyeglasses, respectively -- to a "person in need" for every such product someone purchases from them[iv]. For every purchase of a bottle of Ethos Water, its parent company Starbucks donates $0.05 to water-related charities[v]. In each of these cases, businesses recruit customers with the attractive proposal that their consumption will help others. The businesses, in turn, expect that this charity will help them sell more of their products. At the same time, the figureheads of contemporary capitalism have discovered that by donating large sums to charitable organizations, they channel their strengthened social and political influence through non-profit organizations and philanthropic initiatives. Calling this the "charitable-industrial complex", Buffet (2014) describes his observations of the tensions this creates: "Inside any important philanthropy meeting, you witness heads of state meeting with investment managers and corporate leaders. All are searching for answers with their right hand to problems that others in the room have created with their left." While research paints a more complex picture of these tensions, Buffet brings to our attention the uncomfortable coming-together of philanthropy and contemporary capitalism.

Philanthro-capitalism and digital humanitarianism are merging as private businesses become more involved in providing digital technologies to humanitarian organizations. This raises important questions about what philanthro-capitalism "looks like" when it occurs in digital humanitarianism, as well as the geographies and variegated implications of this convergence. I have argued elsewhere that these two trends are actually part-in-parcel of the same process, the privatization and neoliberalization of humanitarianism (Burns 2019). Importantly, while exemplifying broadly identifiable similarities, these emergent practices take a variety of forms and severity. On the one hand are organizations that engage digital technologies with hopes of reducing resource expenditure; on the other hand are those such as UNICEF's Innovation Fund which uses "models of financing and methodologies used by venture capital funds"[vi]; still others engage privately-funded map-a-thons and datathons in response to a

failure of the state to produce humanitarian data. These diverse particularities, however, operate within larger-scale political-economic logics and shifts that unify them, namely, the growing integration of capitalist rationalities and humanitarianism in response to deepening state fiscal austerity. In other words, in this article, I remain at the analytical level of organizing logics and rationalities, while acknowledging that such an approach does not capture the nuanced diversity of individual actors' and institutions' practices; the value my approach retains is in theorizing the structural conditions in which individual actors and institutions must operate, albeit in contingent ways. This goes hand-in-hand with growing faith that digital technologies can serve as an innovation to "solve" the problems raised in these shifts. To date, researchers have not elucidated the various logics and shifts enabling these practices, or drawn connections to larger processes of philanthro-capitalist reforms.

Here, I contribute to this developing conversation by characterizing and illuminating the philanthro-capitalism of digital spatial technology usage within humanitarianism. For the purposes of this article, I remain at the structural level rather than analytically homing in on individual actors and institutions. I address recent calls to understand more richly the implications of spatial technologies within humanitarianism (Awan 2016; Mazzucelli and Visvizi 2017; Sandvik and Raymond 2017). In this narrative, I consciously imply that the boundaries between the non-profit and for-profit sectors are becoming increasingly blurred, and as such, I use this nomenclature as a proxy while remaining skeptical of its long-term viability. In this manuscript, the argument underscores the new geographies of philanthro-capitalism that are emerging in concert with deeper digital humanitarian integration: namely, that private businesses convince prospective "donors" of a particular closeness with the aid recipients that is enabled through digital humanitarian technologies. Central to the production of these geographies is the promise that "anyone can do it" that underpins much of digital humanitarian work. In other words, what is at stake in these processes is deepening exploitation of marginalized populations, in an increasingly influential capitalist development, that is enabled by the "nearness" one may feel through digital technologies. As I argue below, these processes underwrite new colonial relations of political-economic power.

Specifically, I argue that digital humanitarianism rearticulates three capitalist logics that facilitate and normalize deeper linkages between humanitarianism and capital accumulation interests, in a new form of philanthro-capitalism. The argument below proceeds as follows: I begin by mapping the contours of current research around digital humanitarianism and philanthro-capitalism, surveying in particular the emerging literature conceptualizing digital humanitarianism as an inherently socio-political phenomenon. After a brief explanation of the research project from which this paper draws, I characterize and situate three capitalist logics and rationalities that digital humanitarianism adopts and rearticulates: branding, efficiency, and bottom lines. This discussion allows me to argue that philanthro-capitalism is made resistant to critical inquiry because of humanitarianism's appeal to notions of altruism, global citizenry, and saving lives; digital humanitarianism's new geographies of closeness between donors and recipients expands these appeals. Importantly, in this account I acknowledge a great deal of heterogeneity among individual actors and institutions that, to sufficiently account for, would exceed the purposes of this article; thus, despite the diverse approaches, mandates, and ethos that characterize individual organizations, here I focus on the structural logics and rationalities within which actors operate. I situate this critique within broader conversations in order to re-inject a politics back into digital humanitarian philanthro-capitalism. I conclude by speculating on the significance of these arguments and their applicability across multiple audiences.

Social Origins of Digital Humanitarianism

Digital humanitarianism's "origin story" often begins with the response to the 2010 earthquake outside of Port-au-Prince, Haiti[vii]. Building on then-nascent trends in crowdsourcing (Howe 2006; Sui 2008), peer production (Benkler 2006; Benkler and Nissenbaum 2006), and volunteered geographic information (VGI) (Goodchild 2007; Elwood 2008; Haklay 2010), multiple efforts were initiated to collect and map information using distributed populations' labor through social media and digital humanitarian technologies (Liu and Palen 2010; Munro 2013). Platforms such as Ushahidi crowdsourced translation, categorization, abstraction, and mapping responsibilities to a global audience (Liu, Iacucci, and Meier 2010; Morrow et al. 2011); other platforms like CrisisCamp Haiti, OpenStreetMap, and GeoCommons were used to produce massive amounts of data quickly from disparate geographic locations (Zook et al. 2010). All these platforms hinge on the claim that the technologies are simple enough for any layperson to use – that "anyone" can now produce and sort geographic data in humanitarian contexts. Many scholars speculate at the value of these new technologies for humanitarianism (Goodchild and Glennon 2010; Roche, Propeck-Zimmermann, and Mericskay 2011; Starbird 2011; McClendon and Robinson 2012; Tomaszewski and MacEachren 2012), often focusing on notions of efficiency, speed, and impact (see, for example, Stauffacher, Hattotuwa, and Weekes 2012; Burns and Shanley 2013). In contrast, others have shown that actual impacts were mixed (Currion 2010; Brandusescu, Sieber, and Jochems 2015; Mulder et al. 2016; Read, Taithe, and Mac Ginty 2016). Despite this, many formal humanitarian institutions continue to adopt digital humanitarian technologies (Crowley and Chan 2011; Meier 2015) and provide guidance for others wishing to do the same (Capelo, Chang, and Verity 2012; Shanley et al. 2013; Waldman, Verity, and Roberts 2013), in contrast with academic researchers' rather cautious or critical assessments (Haworth and Bruce 2015; Cinnamon, Jones, and Adger 2016; Haworth, Whittaker, and Bruce 2016). Much digital humanitarian research seeks, then, to provide a technical appraisal of its attendant data, software, and labor arrangements, to the relative neglect of the social, institutional, political, and economic contexts for its emergence.

Recent digital humanitarian research has instead turned its attention to these areas, leveraging critical GIS, science & technology studies, and ethics to re-conceptualize digital humanitarianism as co-constitutive of social and political processes. That is, this research seeks to understand the socio-political conditions for digital humanitarianism's emergence, and the structures and relations which it in turn comes to impact. Burns (2015) has argued that the use of Big Data within digital humanitarianism signals, rather than an advance in information collection, a tripartite shift in technological practices, epistemological claims about what can be known about a crisis, and unequal relations between the global North and global South. Indeed, claims to a widespread proliferation of digital spatial technologies masks a stark unevenness in the types of people who produce particular types of data from particular places in the world (Graham, Hale, and Stephens 2011; Haklay 2013; Graham et al. 2014). Key questions in these debates orient around the ways these technologies frame our understanding of crises, the assumptions on which they rely, and the institutional contexts in which they are used – often dramatically differently than expected (Sandvik and Lohne 2014; Sandvik et al. 2014; Crawford and Finn 2015; Jacobsen 2015; Finn and Oreglia 2016). Further, the inherent inequalities in technological access, use, and proficiency mean that some people are more likely to impact disaster response than others (Burns 2014). More generally, these discrepancies are largely the result of historical and geographical processes, and in turn form a relation of power building on social and economic capital (Gilbert 2010). These perspectives build on the broader theories of

(spatial) technology that see it as both reflecting social process and influencing it (Winner 1985; Kwan 2002; Galloway 2004; Sheppard 2005; O'Sullivan 2006; Kitchin and Dodge 2012).

Digital humanitarianism has emerged amidst trends toward the privatization of public sphere roles and responsibilities. This reconfiguration underwrites geoweb technologies writ large (Leszczynski 2012), and also provides the context for digital humanitarianism to become incorporated into humanitarian work (Burns 2019). For Duffield (2016), digital humanitarianism provides a new means by which the state may experiment with the further withdrawal of resources, in the relatively unregulated spaces of humanitarian crisis zones. The "affirmatory promise of technoscience to positively empower" (Duffield 2016, 147) in this way occludes the possibility of critiquing actually-existing neoliberalism (Brenner and Theodore 2002). This is despite the growing recognition that spatial technologies, data assemblages, and new digital labor arrangements are increasingly sites for exploitation, capital accumulation, and economic marginalization (Graham 2010; Thatcher 2013; Cupples 2015; Beltz-Imaoka 2016; Thatcher, O'Sullivan, and Mahmoudi 2016). While such research reveals the multiple forms of political economy espoused by different technological developments, little work has looked at digital humanitarianism *per se*, and far less has drawn out the implications of digital incursions into humanitarianism writ large.

The New Frontier of Philanthro-capitalism

Philanthropy and charity have long been understood as central to broad capitalist processes (Wolch 2014), and indeed enabling of continued capitalist expansion (Roelofs 1995). Over the last two decades they have become foundational to business models and the profit imperative itself. These recent late-capitalist developments strengthen the exchange value of social and cultural values, which capitalist businesses have successfully embedded in commodities (Žižek 2009). At once this can be seen in "corporate responsibility" movements to divert some profits to charitable causes (Muller and Whiteman 2009), such as Esri's commitment to sponsor and support conservation groups[viii]; at the same time it can serve as the core profit-generation mechanism, such as with Toms Shoes, a shoe company valued in 2014 at $625 million built on the promise of donating a pair of shoes for every pair purchased (Stock 2014). In both cases, the companies intend to perpetuate profit generation through philanthropic branding. This process, philanthro-capitalism, bolsters the notion that purchasing a commodity should contribute somehow to the well-being of another. However, philanthro-capitalism is shaped by the contexts in which it emerged, most notably, the withdrawal of the social welfare state (Arena 2012; Mitchell 2016a), and as such, can be understood as a symptom of neoliberalism (Hay 2013) as well as a new source of governmentalizing rationalities (Mitchell and Sparke 2016).

Research on philanthro-capitalism ranges from boosterism (e.g., Bishop and Green 2008) to critical appraisals of its guiding assumptions, governance implications, and practical shortcomings, as identified above. It is founded on the core contradiction many, such as Joan Roelofs (1995) and David Harvey (2006) explicated with regard to capitalism writ large: that capital accumulation produces the geographic and social inequalities that philanthropy seeks to remedy (see also Watts 1993; Smith 2008). Philanthro-capitalism tends to privilege the voices of private corporate entities and their capitalist-class owners, over individual workers and organized social movements, in the tendency Bosworth (2011, 384) calls "monopolizing the market of ideas". Here, as Birn (2006) has pointed out, wealthy capitalists secure disproportionate access to policymakers, development and humanitarian agencies, and cultural

outlets, strengthening the roles of market-based social investments over a strong social safety net (Morvaridi 2012; Mitchell and Sparke 2016). For these reasons, Bishop and Green's (2008) original reading of philanthro-capitalism holds insufficient explanatory value; whereas they correctly note the heightened presence of celebrities such as Oprah, Bono, and Bill and Melinda Gates, they fail to recognize that the philanthropic acts are rooted in political rationalities that strengthen capital accumulation.

The philanthro-capitalist theoretical lens draws to our attention the creative ways in which capitalism has evolved to produce surplus value from the practices of addressing its own inherent outcomes. While we have a clear picture of how this occurs in the examples I provided above, we are less certain of how its forms and manifestations influence the way it "looks" across a variety of arenas. Important parallels exist between philanthro-capitalism and the more widely theorized neoliberal reforms occurring at least since the 1970s and 80s (Klein 2007; Adams 2013). Indeed, in interrogating the often state-based humanitarian organizations' involvement in philanthro-capitalism, one may read into it an institutionalized form of Peck and Tickell's (2002) roll-out of the state – in many cases pertinent to this context, the "state" role is filled by non-profit and humanitarian actors (Hyndman 2009; Wolch 2014). Philanthro-capitalism does in fact depend on consumption of products saturated with moral values, as well as reliance on media and celebrities, and in this way invokes the market-based rationalities dominant within neoliberalism (Nickel and Eikenberry 2009). However, while philanthro-capitalism could only exist within a neoliberal milieu, many argue that the present political-economic configuration observed in philanthro-capitalism represents a step change in capitalism's evolution, with humanitarianism now representing a quite profitable industry (Essex 2013; Roberts 2014; McGoey 2015). In other words, theories of neoliberalism explain philanthro-capitalism's contexts, but not philanthro-capitalism itself, and it accordingly necessitates unique critique (Jenkins 2011; Morvaridi 2012; Adams 2013). Presently, there is a need to understand how philanthro-capitalism's entanglements with new digital technologies influence humanitarianism's effects in the world. To build in this direction would be to follow Peck's (2006) and Larner's (2003) injunctions to explain the forms political-economic processes take in and through diverse contexts.

In what follows here, I build on previous argumentation that digital humanitarianism provides a new conduit for philanthro-capitalist processes to produce profit from crises (Burns 2019). I explore the way philanthro-capitalism "looks" in digital humanitarianism, the political and economic rationalities it espouses, and the tangible forms it takes. In so doing, I contribute insights into the effects of this particular context of philanthro-capitalism. My goal, therefore, is to characterize and theorize the philanthro-capitalism of digital humanitarianism.

The evidence I present below emerges from a one-year *extended case method* (see: Burawoy 1998) that I conducted 2012-2013. The extended case method focuses on the iterative refinement of theory; it comprises a framework for *extending* from case studies to theoretical propositions. My use of the extended case method entailed three primary methods that I conducted while embedded in a prominent Washington, DC public policy research institute. First, I conducted participant observation in order to identify the ways digital humanitarian technologies were taken up by institutionalized emergency management and humanitarian organizations across multiple scales, such as the International Committee of the Red Cross, and the Federal Emergency Management Agency. Second, I conducted 37 semi-structured, in-depth interviews of contacts I secured in the participant observation work. These interviewees were all high-level managers in emergency management and humanitarian agencies,

key members of the digital humanitarian community, academic digital humanitarian researchers, and policymakers. Third, I combined these data with archival work to locate and collect summations from past deployments.

After collating and transcribing these data, my analysis employed a discourse analysis framework to build inductively toward theory reconstruction, as is characteristic of the extended case method. In the narrative that follows, all personally-identifiable information has been removed, and interviewees pseudonymized.

The Logics and Rationalities of Private-sector Digital Humanitarianism

Private sector logics, rationalities, and languages used in digital humanitarianism are reorienting those of humanitarianism, in an emergent nuance to philanthro-capitalism[ix]. Digital humanitarians market their offerings by internalizing and rearticulating principles in ways that align with private-sector rationalities. These articulations, while invoking a clear capitalist rationality, also adapt to resonate with the context of technologically-mediated humanitarianism. In other words, dominant private-sector rationalities are not simply "dropped" into place in digital humanitarianism, but instead are reworked and adapted for this particular socio-technical context. Here I think through these processes using Stuart Hall's notion of "articulation", which is the process of drawing linkages across ideas, actors, and interests in ways that intimate ideological cohesion and precipitate the formation of subjectivities (1996). In Tania Murray Li's (2000) engagement with this concept, she underscores how it helps to identify the contingent conditions under which particular ideas and political rationalities cohere to advance ideological formations. Articulations are "always about *becoming*, as well as being" (Li 2000, 152), meaning that while they have material impacts on socio-political formations they are also subject to contestation, subtle shifts in meaning, and co-optation. Such discursive realignments Li and Hall term *rearticulations*: the drawing of new lines across ideological elements, always constrained by extant articulations. This conceptualization advances our understanding of the following processes, then, by homing in on the continuities and shifts in discursive elements subtending digital humanitarianism's melding of philanthropy and private-sector rationalities.

Specifically, digital humanitarianism operationalizes the following rationalities: (1) marketing one's *brand*, (2) *efficiency*, and (3) equating saving lives with humanitarian organizations' *bottom lines*. Importantly, these rationalities are not in themselves new[x]; below, I explain how they are rearticulated in digital humanitarianism, thereby producing a new system of knowledge, political import, and ideology. In the formulation that follows, a key notion is that digital humanitarianism produces new geographies of philanthropy in which the potential "donors" – in this case, the consumers of private-sector commodities – are assured of a particular closeness with the aid recipients – either a digital humanitarian organization like Standby Task Force, or an individual affected by crisis. This closeness relates to the idea that the consumer may help the recipient simply by purchasing a commodity; with digital humanitarian technologies, in parallel, a person with little technical expertise may "donate" to crisis-affected communities by producing or processing spatial data. The latter finds inspiration in the popular faith that digital technologies such as Big Data can solve social and political problems (Roy 2010; Maurer 2015). Ultimately, the following sections detail an evolving re-inscription of colonial relations derived from the digitally-mediated site of capital accumulation in crises. Below I detail the specific forms these new geographies take.

Branding

First, "branding" a particular piece of software, collaboration approach, or data store is central to digital humanitarianism's emergence narrative. Lury (2004) has illuminated the centrality of branding practices to late-capitalist development and growth. In contemporary capitalism, an institution's brand – that is to say, its association with images, discourses, qualities, cultural values, and ultimately products – functions as a relation between that institution and the constituted "consumer" (Poster 2006). The brand constitutes "the objective properties of things" (Lury 1999, 499), and as such constitutes the commodity of exchange. Similarly, Kapoor (2012) offers insights into early encroachments of branding into humanitarianism via the celebrity proclivity of philanthro-capitalism, and Beltz-Imaoka (2017) connects these discourses with digital technology. The process of branding functions as a logic through which digital humanitarians see the opportunity to increase their perceived value to formal humanitarians. In an early influential document, Crowley and Chan (2011) devote a section to describing the relationship between digital humanitarian branding and trust: "In most communities, newcomers must earn the trust of veterans; it is not automatically granted. … Trust is part of brand" (2011, 38). This is followed by an excerpted quote from Nigel Snoad, who worked as Product Manager at Google.org and is a key figure in the development of digital humanitarianism:

> If there's a brand that has trust and recognition across the humanitarian community, then it has a chance of being worked with…. So I think one of the problems working with the volunteer technical community is identifying, building the trusted focal points and the trusted network. Really it's about building that brand… (Snoad, in Crowley and Chan 2011, 38)

Some specific brands have become commonplace for digital humanitarians as they try to increase their appeal to formal humanitarianism. One brand that has been adopted by the digital humanitarian community is that of "crisis mappers." In a personal interview with me, Martin, a prominent and long-term digital humanitarian, explained that "'crisis mapping' isn't a real thing; it's just kind of a brand name" a prominent digital humanitarian gave himself – "Director of Crisis Mapping" – while working with Ushahidi in the mid-2000s.

Here, digital humanitarians connect *trust* with this notion of brand, rather than the more traditional formulation, where trust hinges on reputation. Brand, here, is different from reputation, in that a brand is marketable, commercial, and potentially profitable. It also resonates with digital humanitarian practices, in which brands – individual institutions' names and software offerings – become the subjects of TED Talks and other mass-media outreach. According to these quotes, digital humanitarians need to cultivate name recognition and expectation of service that is typically associated with consumer dynamics in the private sector, as is commonly visible in theories of neoliberalism (Birch and Siemiatycki 2015).

As well, both humanitarians and beneficiaries are constituted as *consumers* of digital humanitarian products and services (read: commodities). Humanitarians associate their digital counterparts with images, qualities, and socio-cultural values that are packaged into software, data, and organizations of labor. Beneficiaries presumably learn to associate the digital humanitarian technical assemblage with the delivery of aid and assistance.

Efficiency

Second, the digital humanitarian community adopts and rearticulates private-sector logics related to the notion of *efficiency*. It is well-documented that this notion factors strongly in

discourses promoting the privatization of public and non-profit sectors, assets, and services (Goode and Maskovsky 2001; Peck 2002). Technology's role in the acceleration of production and consumption has likewise long been acknowledged, and capital's imperative to improve efficiency (Harvey 1982; Birch and Siemiatycki 2015). For digital humanitarians, this term means both decreasing the resources spent on information collection, and having a greater impact from the same amount of spent resources.

Lauren, an employee of a major US-based development agency who collaborated on a self-characterized "successful" and impactful digital humanitarian project, said that the efficiency gains from using crowdsourcing in her project were large enough for her to advocate digital humanitarianism's expanded use in banking sectors, United Nations work broadly, and across the board of US government agencies. Similarly, for Jim, an employee of the same agency, the limited resources available to him in his institution has encouraged him to look more closely at digital humanitarianism for efficiency's sake. Asked what considerations led him to use Data.gov for a recent project rather than a service such as the crowdsourcing platform CrowdFlower, Jim said:

> One was cost - we didn't have a lot of money. I do remember being surprised at how cheap it would have been to get it done on Amazon.com or with Amazon on Mechanical Turk. And ultimately we were really attracted to the idea of SamaSource because it's using people - like, women in India doing the crowdsourcing and getting paid a certain amount of money for every record and stuff like that. So we kind of liked some of those narratives. (Jim, 2013)

Ultimately the cost of these platforms led him to use Data.gov instead. Jim and Lauren were able to justify launching pilot projects – and in Lauren's case, justify exporting those workflows to other industries – by invoking the idea of saving resources. Lauren rearticulated "efficiency" to situate digital humanitarianism's similarities with other industries. In order to take her lessons on crowdsourcing to other industries, Lauren implies that similar efficiency gains would be seen elsewhere. On the other hand, Jim's decision was influenced by the private sector's crowdsourcing capacities: Amazon's Mechanical Turk software appealed to Jim's need to expend fewer financial resources in his project. As before, when Lauren speculated that the public sector will increasingly need digital humanitarianism, here she utilizes their conceptualization of "efficiency". Across the field, digital humanitarians discuss new trends such as big data, UAVs, and social media with lexicon that lends itself well to concurrent trends in private-sector data mining and visualization software, articulated in order to connect with extant humanitarian workflows (e.g., "situational awareness").

Bottom Lines

Digital humanitarians have internalized and expressed the notion that saving lives is each humanitarian institution's singular logic. That is, humanitarians should shift their technological practices if there are compelling claims that it would "save lives", with no necessary qualifications. In this way, the notion of saving lives functions similarly to the private-sector logic of a company's profit – the practice of accumulating capital. Since Marx's (1977) clarification of the concept of surplus value, profit has a complex and contradictory history as a central and necessary component of capital accumulation (Sheppard, Barnes, and Pavlik 1990; Herod 1997). The history of securing capital accumulation practices is marked by crises (Klein 2007; Harvey 2010) and deliberate interventions by state and non-state actors (Piketty and Goldhammer

2014). Saving lives has become analogous to profit, as the dominant figure overshadowing other potential logics guiding humanitarianism[xi]. This figure brings with it altered systems of accounting for lives and bodies, particularly important in projects of evaluation – determining the impact of digital humanitarian involvement in a humanitarian intervention. Bartel Van de Walle, Associate Professor at Tilburg University, founder of ISCRAM, and prominent digital humanitarian, echoed the importance of "saving lives" in a passing comment at the Connecting Grassroots to Government workshop: "…you know, in the end it's about how many people have you saved, right? So, that's a fairly easy metric" (WoodrowWilsonCenter 2012a). The logic of saving lives factors heavily as well in most popular press coverage of digital humanitarianism[xii].

The way in which saving lives operates here, as a "bottom line" logic, raises questions about how it can and should be measured methodologically, and how it can be known epistemologically. As a caveat to their very important report, UN OCHA (2013, 7) states: "The report acknowledges that there are serious concerns, in particular a relative lack of empirical evaluation of the new techniques presented. Many anecdotes suggest that these innovations have saved lives, but there is little quantitative assessment, almost no baseline data and insufficient systematic learning." They thus claim that saving lives *should* factor as a primary metric for evidence of digital humanitarianism's efficacy, even without substantial quantitative evidence to support claims regarding gains attained. While this account does imply some methodological and epistemological commitments (quantification, and scientific realism, respectively), it, like other analogous accounts, rely on unexamined assumptions about what "saving lives" can mean. This disconnect between discourse and practice indicates that the number of people who would have otherwise died is less important than the discursive weight the idea of "saving lives" carries in public discussions and in marketing digital humanitarian efforts.

Depoliticizing Digital Humanitarianism, and then Repoliticizing It All Over Again

The transformations detailed above find resonances in existing literature, yet have here taken forms unique to the context of an environment saturated by digital technologies. In some ways, branding, efficiency, and bottom lines characterize much of the ways in which researchers have conceptualized the neoliberalism writ large, and in particular the privatization of humanitarian assistance. For example, Hyndman (2009) discusses the proliferation of metrics, returns on investment, and effectiveness that have in combination driven reforms of humanitarian governance. I have identified similarities with digital humanitarianism, but have argued that this socio-technical context facilitates the re-articulation of these principles in new ways.

Importantly, these transformations occur with less of the heated debate that characterizes other forms of international actions such as military interventionism or international development[xiii]. In a sense, digital humanitarianism is *depoliticized* in popular conversations, policy circles, and news media (Sandvik et al. 2014). By this, I mean to say that these accounts of digital humanitarianism position it beyond what is subject to critique. In this way, digital humanitarianism is an *anti-politics machine* (Ferguson 1990), meaning it frames socio-political problems as technical in nature, in order to be amenable only to technical solutions. As Li (2007) explains, framing problems always entails enrolling a particular kind of knowledge as key to identifying why a problem exists or why the problem was not previously resolved; when

characterized as technical in nature, problems require expertise that will prescribe techniques to modify existing interventions, and thus maintain structural socio-political foundations of inherently *political* problems. When successful in framing problems as nonpolitical, such articulations work to muffle foundational socio-political challenges and critique (Li 2007). Drawing on Gramsci, Arena (2012, xxviii) has identified this as operating within the non-profit sector, as an ideological bolster to ruling class power: "The nonprofits are generally encouraged to approach social problems as technical in nature, requiring the application of expert knowledge, rather than to frame issues as deeply rooted, class-based conflicts" that might challenge fundamental social organizing logics. Digital humanitarianism eludes critical, political inquiry in three ways (I elucidate each of these in Burns 2019). First, it appeals to the "commonsense" ideology of neoliberalism that Bourdieu and Wacquant (2001) call the "new planetary vulgate". Second, it reproduces and relies on widely-held assumptions of altruism and "the good" often associated with humanitarian action. Third, it appears to improve existing humanitarian responses, and as such takes the humanitarian action for granted as a phenomenon simply needing adjustment rather than fundamental re-thinking.

David Kaufman, a former senior-level administrator at the Federal Emergency Management Agency, exemplified this depoliticization in a public 2012 meeting at the Woodrow Wilson International Center for Scholars:

> "Right, so take feeding people. Government doesn't feed people in this country, even in … military and prisons and school systems, we still contract almost all that out. … So we have private sector representation inside our [disaster] operation center now, started with the retail sector, the big box stores, and now the financial services sector. … [W]hat we care about is the ability to see in real time how [private companies] are ... So that we aren't setting up shop … in the same places that they're open for business, that we're putting our efforts in places where there's a gap, and vice versa." (WoodrowWilsonCenter 2012b)

In this quote, Kaufman underscores existing private-sector work within the state in order to normalize it. He lists multiple facets of capitalist enterprise, drawing connections with sites of state governance, not to draw out the problematic relations this entails. Instead, it is to ensure the audience that the state provides both the framework for capital accumulation and fills "gaps" the private sector inevitably leaves. By "[disaster] operation center" and "in real time" Kaufman means the site of technological interventions into crisis relief – the centers in which crisis responders are increasingly utilizing digital humanitarian technologies such as social media analysis tools to increase the volume of information upon which decisions might be made. Throughout this talk and many others in the field, technological transformations are posed as natural developments to which society somewhat inorganically adapts.

Following recent calls to critically evaluate the changing roles and relationships encouraged by digital humanitarianism (e.g., Sandvik et al. 2014; Duffield 2016; Sandvik and Raymond 2017), I contend here that researchers can and should *re*politicize digital humanitarianism. Doing so means to draw attention to the unevennesses, unintended impacts, assumptions, trade-offs and vulnerabilities, and epistemological limitations of emergent humanitarian technologies – as discussed above. Thus, to this end, here I repoliticize the three private-sector logics in the previous section.

First, as Lury (2004) argues, branding practices are more than signs or symbols representing a guarantee of quality, as digital humanitarians conceive of it. Instead, "the brand may be seen as both promoting and inhibiting 'exchange' between producers and consumers, and informs this asymmetrical exchange through a range of performances of its own" (2004, 6; see also Beltz-Imaoka 2017). These performances include the production, organization, and distribution of both abstract and concrete cultural values – abstract in the sense of Bourdieu's (1986) social capital referring to the immaterial significations and resources possessed by social groups, and concrete in the sense that they imbue discrete capacities, offerings, services, experiences, and products. Combined, the brand thus constitutes a social and cultural relation between those producing/offering and those consuming/receiving. While *reputation* is subsumed within the brand, it is not the brand's equivalent. This circulation and performance has been discussed widely in research, often under the umbrella term of "soft capitalism" (Thrift 1997). If digital humanitarian organizations adopt the logic of the brand, they carry with it the uneven power relations and systems of value exchange dominant within capitalism. This deepens the rationality of capitalist relations within humanitarianism writ large. Simultaneously, it can streamline the entry of private-sector technology companies into humanitarianism, as has been the case with Google.org, Esri, DigitalGlobe, Facebook, and many others.

Second, while digital humanitarians hope to improve the efficacy of humanitarianism by focusing on efficiency, the concept's centrality to neoliberal reforms entrenches the primacy of private-sector logics in humanitarian action. Throughout much of the last century technology has served as a metaphor to represent poverty and need (Watkins 1993), while simultaneously positioning itself as central to increased efficiency of post-Fordist economies (Morozov 2013). In his characterization and critique of the latter idea's technological determinism, Morozov (2013) adroitly quotes Aldous Huxley (1946): "In an age of advanced technology, inefficiency is the sin against the Holy Ghost". The attainment of market-level "efficiencies" in most contexts has mobilized the political project of reducing the state's roles and responsibilities, in order to expand the presence and operations of private capital (Brenner and Theodore 2002; Harvey 2005). Importantly, various actors have situated digital technologies at the center of these visions of efficient market development (Neubauer 2011; Tretter 2016). The deployment of the term "efficiency" within digital humanitarianism involves rearticulating, *within the narrow framework amenable to capital accumulation*, diverse ways of measuring, securing, and evaluating a range of principles such as value, justice, and need. That is to say, digital humanitarianism collapses multiple ways of conceiving of and expressing impacts on efficiency, such as improved quality of life or strengthened self-determination, into difference in revenue expenditure over a given time period. This enables the deepening philanthro-capitalist presence in digital humanitarianism, such as Facebook's recent deployment of a disaster mapping initiative (Meier 2017)[xiv]. In this initiative's announcement, Meier (2017) describes the value of Facebook's involvement: "The faster responders get reliable information, the faster they can prioritize and mobilize relief efforts based on established needs. … The more people around the planet connect and share on Facebook, the more insights responders gain on how best to carry out relief efforts during major disasters." In this way, digital humanitarians express notions of efficiency in ways that normalize and strengthen the role of private, for-profit companies in humanitarian relief.

Lastly, the notion of saving lives, as I have qualified it above, can be repoliticized on at least two grounds: that insofar as it functions as a business's bottom line – or profit – it adheres to a different way of operating in the world than humanitarianism, and that currently its

conceptual elaboration leaves insurmountable epistemological challenges. As Chandler (2001) observes, the history of humanitarianism has always been contingent on geopolitical, military, and socio-relational imperatives. This has meant that many logics and rationalities under which it operates have shifted through time, and have consistently faced contestation (Mitchell 2016b). Digital humanitarians conflate a plethora of humanitarian logics – not least among them the four core values of humanity, neutrality, impartiality, and universality – when positing that saving lives should be an organization's bottom line. Beyond this, the notion of saving lives must be critiqued for its epistemological claims, as it implies the technology vendor can know the lives that have been "saved", and assumes this construction of being "saved" is itself straightforward. Polman (2010) shows that the history of humanitarianism is dotted with cases in which numbers of "lives saved" have been exaggerated to attract funders who want to increase their "impact" by reporting large numbers of beneficiaries. These two limitations notwithstanding, the logic of saving lives enables private businesses to leverage simplistic forms of accounting in order to sell products (McGoey 2015). Indeed, as Guilhot (2007, 451; cited in McGoey 2015) asserts, this practice has longstanding roots in a "scientific rationality", the philanthropic methods of Carnegie and Rockefeller, "to apply the rational methods of business to the administration of charitable deeds, which they considered to be outdated and deficient". Saving lives as a driving value can be seen across new forms of digital technologies, including Esri's landing page for their industry application area "Emergency and Disaster Management", which foregrounds saving lives in its list of offerings: "When a disaster strikes, knowing what you need and how to find it can be the key factor that saves lives, resources, and critical infrastructure. Esri can help you with all phases of emergency management, from developing mitigation plans to managing limited resources and prioritizing recovery efforts once the dust settles" (Esri n.d.). Indeed, as of 2010, Esri and Ushahidi have begun a partnership to streamline interoperability between their respective platforms (Theodore 2010).

At the heart of these transformations is a reinscription of colonial relations of geopolitical power underwritten by political-economic forces. These colonial relations can be understood as supplementary to, yet divergent from, older geographies of philanthropy: digital humanitarian organizations and practices operate under the assumption that they are better able to deliver aid resources to affected populations. This assumption has wide purchase in philanthro-capitalist evolution, as indicated by the growing involvement of digital humanitarianism in it. Indeed, geographers are increasingly recognizing and theorizing the connections between digital technologies and contemporary colonialism (Cupples 2015; Maurer 2015; Thatcher, O'Sullivan, and Mahmoudi 2016).

Conclusion: Against Philanthro-capitalism

In this article I have argued that digital humanitarianism is providing a new conduit through which capitalist logics embed in humanitarianism. The particular form this takes is philanthro-capitalism, in which humanitarian projects constitute a private enterprise's business model and marketing strategy. These developments rely on new geographies in which "donors" – i.e., consumers, or digital humanitarians – feel a particular closeness with aid recipients – i.e., a digital humanitarian organization, or a crisis-affected community. My primary contribution here is in elaborating three logics digital humanitarianism adopts and rearticulates in new ways to produce its philanthro-capitalist practice. Building on this, I disputed the tendency to normalize and insulate philanthro-capitalist digital humanitarianism from critique, and, by

illustrating the stakes involved in these processes, offered three ways to inject a politics back into it.

This argument has implications reaching far beyond the bounds of digital humanitarian research. For one, these insights suggest research might productively consider how the collusion between (digital) humanitarianism and private-sector businesses has implications for how people's needs and knowledge are captured as data, and in turn, are addressed by crisis responders. This is both a question of the types of needs considered "legitimate" for inclusion in digital humanitarian platforms, and the specific ways in which that translation into data imbues the needs with values and norms. In other words, the imperatives driving humanitarian data collection frame how phenomena are represented, impacting the spatial socio-political purposes to which they can be put. One question this raises for future research is how data models, lines of code, database design, and other technologies provide small yet tangible inroads for private sector incursion into humanitarianism. Another question for future research is the degree to which these broad tendencies shift or take particular forms in relation to the nations or other socio-political geographies involved; philanthro-capitalist digital humanitarianism would likely exhibit unique and interesting particularities in such different contexts.

As debates about privatizing humanitarianism continue to develop and indeed face renewed interest, this study provides insights into a new form it may take and the mechanisms by which it occurs. Namely, digital technologies serve as an innovation that deepen capitalist rationalities within humanitarianism largely because its promoters promise that their branded offerings increase efficiency and save lives. These same promoters, in the case I have identified here, stand to benefit from these claims, while effectively strengthening the collusion between the sectors. In short, private businesses have found a new frontier for accumulating capital – by integrating philanthropy and digital humanitarian organizations into their business models, for the latter under the trope that "anyone can do it".

In synthesis, I contend here that philanthro-capitalism can be resisted through understanding and foregrounding the interests it serves: not those advancing democratization, empowerment, and operational efficiency, as its promoters claim, but instead of private capital. While I have here presented ways in which digital humanitarianism enables philanthro-capitalism within humanitarianism, but I do not mean to suggest that this is a categorical necessity of the field. One can easily imagine rearticulating the "value" of digital humanitarianism to align with alternative political, social, and economic agenda. Such agenda could align more strongly with economies of care, or rearticulate new modes of social justice possible with digital humanitarian technologies; geographers have seen intimations of both these, in the emergence of digital cooperatives and the development of new technologies to subvert oppressive relations of power. Of course, it would continue to be subject to critical inquiry, but might make small steps toward non-capitalist futures.

Bibliography

Adams, V. 2013. *Markets of Sorrow, Labors of Faith: New Orleans in the Wake of Katrina*. Durham, NC: Duke University Press.

Arena, J. 2012. *Driven from New Orleans: How Nonprofits Betray Public Housing and Promote Privatization*. Minneapolis, MN: University of Minnesota Press.

Awan, N. 2016. Digital Narratives and Witnessing: The Ethics of Engaging with Places at a Distance. *GeoHumanities* 2 (2):311–330.

Beltz-Imaoka, L. 2016. Platform Capitalism: The Speculative Value of ArcGIS. http://meridian.aag.org/callforpapers/program/AbstractDetail.cfm?AbstractID=69962 (last accessed 14 September 2016).

———. 2017. Selling the Conceptual and Computational Value of Esri's ArcGIS Platform. *SocArXiv*. https://osf.io/preprints/socarxiv/tzewh (last accessed 10 July 2017).

Benkler, Y. 2006. *The wealth of networks : how social production transforms markets and freedom*. New Haven, CT: Yale University Press.

Benkler, Y., and H. Nissenbaum. 2006. Commons-based Peer Production and Virtue*. *Journal of Political Philosophy* 14 (4):394–419.

Birch, K., and M. Siemiatycki. 2015. Neoliberalism and the Geographies of Marketization: The Entangling of State and Markets. *Progress in Human Geography* :1–22.

Birn, A.-E. 1996. Public health or public menace? The Rockefeller Foundation and public health in Mexico, 1920-1950. *Voluntas: International Journal of Voluntary and Nonprofit Organizations* 7 (1):35–56.

Bishop, M., and M. Green. 2008. *Philanthrocapitalism: How the Rich Can Save the World*. New York: Bloomsbury Press.

Bosworth, D. 2011. The Cultural Contradictions of Philanthrocapitalism. *Society* 48 (5):382–388.

Bourdieu, P. 1986. The Forms of Capital. In *Handbook of Theory and Research for the Sociology of Education*, ed. J. Richardson, 241–258. New York: Greenwood.

Bourdieu, P., and L. Wacquant. 2001. NewLiberalSpeak: Notes on the New Planetary Vulgate. *Radical Philosophy* 108 (1):2–5.

Brandusescu, A., R. Sieber, and S. Jochems. 2015. Confronting the Hype: The Use of Crisis Mapping for Community Development. *Convergence: The International Journal of Research into New Media Technologies*. http://con.sagepub.com/content/early/2015/05/15/1354856515584320.full (last accessed 29 August 2016).

Brenner, N., and N. Theodore. 2002. Cities and the Geographies of "Actually Existing Neoliberalism." *Antipode* 34 (3):349–379.

Birn, A.-E. 1996. Public health or public menace? The Rockefeller Foundation and public health in Mexico, 1920-1950. *Voluntas: International Journal of Voluntary and Nonprofit Organizations* 7 (1):35–56.

———. 2006. *Marriage of Convenience: Rockefeller International Health and Revolutionary Mexico*. Rochester, NY: University of Rochester Press.

Buffett, P. 2014. The Charitable-Industrial Complex. *The New York Times*. http://www.nytimes.com/2013/07/27/opinion/the-charitable-industrial-complex.html (last accessed 10 March 2014).

Burawoy, M. 1998. The Extended Case Method. *Sociological Theory* 16 (1):4–33.

Burns, R. 2019. "Let the Private Sector Take Care of This": The Philanthro-capitalism of Digital Humanitarianism. In *Digital Economies at the Global Margins*, ed. M. Graham, 129-152. Cambridge, MA: MIT Press.

———. 2015. Rethinking Big Data in Digital Humanitarianism: Practices, Epistemologies, and Social Relations. *GeoJournal* 80 (4):477–490.

———. Moments of Closure in the Knowledge Politics of Digital Humanitarianism. *Geoforum* 53 (2): 51-62. https://doi.org/10.1016/j.geoforum.2014.02.002.

Burns, R., and L. Shanley. 2013. *Connecting Grassroots to Government for Disaster Management: Workshop Report*. Washington, D.C.: Woodrow Wilson International Center for Scholars. http://www.scribd.com/doc/165813847/Connecting-Grassroots-to-Government-for-Disaster-Management-Workshop-Summary (last accessed 24 September 2013).

Capelo, L., N. Chang, and A. Verity. 2012. *Guidance for Collaborating with Volunteer & Technical Communities*. Digital Humanitarian Network. http://www.scribd.com/doc/101420316/Guidance-for-Collaborating-With-v-amp-TCs (last accessed 28 January 2013).

Chandler, D. 2001. The Road to Military Humanitarianism: How the Human Rights NGOs Shaped A New Humanitarian Agenda. *Human Rights Quarterly* 23 (3):678–700.

Cinnamon, J., S. K. Jones, and W. N. Adger. 2016. Evidence and Future Potential of Mobile Phone Data for Disease Disaster Management. *Geoforum* 75:253–264.

Crawford, K., and M. Finn. 2015. The Limits of Crisis Data: Analytical and Ethical Challenges of Using Social and Mobile Data to Understand Disasters. *GeoJournal* 80 (4):491–502.

Crowley, J., and J. Chan. 2011. *Disaster relief 2.0: the future of information sharing in humanitarian emergencies*. UN Foundation & Vodafone Foundation Technology Partnership. http://www.globalproblems-globalsolutions-files.org/gpgs_files/pdf/2011/DisasterResponse.pdf.

Crutcher, M., and M. Zook. 2009. Placemarks and waterlines: Racialized cyberscapes in post-Katrina Google Earth. *Geoforum* 40 (4):523–534.

Cupples, J. 2015. Coloniality, Masculinity, and Big Data Economies. *geography/development/culture/media*. https://juliecupples.wordpress.com/2015/05/11/coloniality-masculinity-and-big-data-economies/ (last accessed 14 September 2016).

Currion, P. 2010. "If all You Have is a Hammer" - How Useful is Humanitarian Crowdsourcing? *MobileActive.org*. http://www.crowdsourcing.org/document/if-all-you-have-is-a-hammer---how-useful-is-humanitarian-crowdsourcing/3533 (last accessed 13 September 2013).

Duffield, M. 2016. The Resilience of the Ruins: Towards a Critique of Digital Humanitarianism. *Resilience* :147–165.

Elwood, S. 2008. Volunteered Geographic Information: Future Research Directions Motivated by Critical, Participatory, and Feminist GIS. *GeoJournal* 72 (3):173–183.

Esri. GIS for Emergency & Disaster Management. http://www.esri.com/industries/public-safety/emergency-management (last accessed 10 July 2017).

Essex, J. 2013. *Development, Security, and Aid*. Athens, GA: The University of Georgia Press.

Ferguson, J. 1990. *The anti-politics machine: 'development', depoliticization and bureaucratic power in Lesotho*. New York: Cambridge University Press.

Finn, M., and E. Oreglia. 2016. A Fundamentally Confused Document: Situation Reports and the Work of Producing Humanitarian Information. In *Proceedings of the 19th ACM Conference*

on Computer-Supported Cooperative Work & Social Computing, 1349–1362. ACM http://www.ercolino.eu/docs/Oreglia_Pub_Fundamentally%20Confused%20Document%202016_AD.pdf (last accessed 29 August 2016).

Galloway, A. 2004. *Protocol: How Control Exists after Decentralization*. Cambridge, MA: MIT Press.

Gilbert, M. 2010. Theorizing Digital and Urban Inequalities. *Information, Communication & Society* 13 (7):1000–1018.

Goodchild, M. 2007. Citizens as sensors: the world of volunteered geography. *GeoJournal* 69:211–221.

Goodchild, M., and J. A. Glennon. 2010. Crowdsourcing geographic Information for Disaster Response: A Research Frontier. *International Journal of Digital Earth* 3 (3):231–241.

Goode, J., and J. Maskovsky. 2001. *The New Poverty Studies: The Ethnography of Power, Politics, and Impoverished People in the United States*. New York: NYU Press.

Graham, M. 2010. Neogeography and the Palimpsests of Place: Web 2.0 and the Construction of a Virtual Earth. *Tijdschrift voor Economische en Sociale Geografie* 101 (4):422–436.

Graham, M., S. Hale, and M. Stephens. 2011. *Geographies of the World's Knowledge*. London: Convoco!

Graham, M., B. Hogan, R. Straumann, and A. Medhat. 2014. Uneven Geographies of User-generated Information: Patterns of Increasing Informational Poverty. *Annals of the Association of American Geographers* 104 (4):746–764.

Haklay, M. 2010. How good is volunteered geographical information? A comparative study of OpenStreetMap and Ordnance Survey datasets. *Environment and Planning B: Planning and Design* 37 (4):682 – 703.

———. 2013. Neogeography and the delusion of democratisation. *Environment and Planning A* 45 (1):55–69.

Haklay, M., and P. Weber. 2008. OpenStreetMap: user-generated street maps. *IEEE Pervasive Computing* :12–18.

Hall, S. 1996. On Postmodernism and Articulation: An Interview with Stuart Hall. In *Stuart Hall: Critical Dialogues in Cultural Studies*, eds. L. Grossberg, D. Morley, and K.-H. Chen, 131–150. London: Routledge.

Harvey, D. 1982. *The Limits to Capital*. Chicago: University of Chicago Press.

———. 2005. *A Brief History of Neoliberalism*. New York: Oxford University Press, USA.

———. 2006. *Spaces of Global Capitalism: Toward a Theory of Uneven Geographical Development*. New York: Verso Books.

———. 2010. The Crises of Capitalism. http://www.thersa.org/events/video/archive/david-harvey-the-crises-of-capitalism (last accessed 11 November 2012).

Haworth, B., and E. Bruce. 2015. A Review of Volunteered Geographic Information for Disaster Management. *Geography Compass* 9 (5):237–250.

Haworth, B., J. Whittaker, and E. Bruce. 2016. Assessing the Application and Value of Participatory Mapping for Community Bushfire Preparation. *Applied Geography* 76:115–127.

Hay, I. 2013. Questioning generosity in the golden age of philanthropy Towards critical geographies of super-philanthropy. *Progress in Human Geography* :0309132513500893.

Heilbroner, R. 1985. *The Nature and Logic of Capitalism*. New York: W.W. Norton & Company.

Herod, A. 1997. From a Geography of Labor to a Labor Geography: Labor's Spatial Fix and the Geography of Capitalism. *Antipode* 29 (1):1–31.

Howe, J. 2006. The Rise of Crowdsourcing. *Wired*. http://www.wired.com/wired/archive/14.06/crowds_pr.html (last accessed 10 May 2013).

Hunt, M., J. Pringle, M. Christen, L. Eckenwiler, L. Schwartz, and A. Davé. 2016. Ethics of emergent information and communication technology applications in humanitarian medical assistance. *International Health* 8 (4):239–245.

Huxley, A. 1946. *Brave New World*. New York: Harper & Row.

Hyndman, J. 2009. Acts of Aid: Neoliberalism in a War Zone. *Antipode* 41 (5):867–889.

Jacobsen, K. 2015. *The Politics of Humanitarian Technology: Good Intentions, Unintended Consequences and Insecurity*. London: Routledge.

Jenkins, G. 2011. Who's Afraid of Philanthrocapitalism? *Case Western Reserve Law Review* 61 (3):1–69.

Kapoor, I. 2012. *Celebrity Humanitarianism: The Ideology of Global Charity*. New York: Routledge.

Kerasidou, X., M. Büscher, and M. Liegl. 2015. Don't Drone? Negotiating Ethics of RPAS in Emergency Response eds. L. Palen, M. Büscher, T. Comes, and A. Hughes. *Proceedings of the 12th Annual ISCRAM*. http://eprints.lancs.ac.uk/74881/1/2015_Kerasidouetal_Drone_ISCRAM2015.pdf (last accessed 26 March 2018).

Kitchin, R., and M. Dodge. 2012. *Code/Space: Software and Everyday Life*. Cambridge, MA: MIT Press.

Klein, N. 2007. *The Shock Doctrine: The Rise of Disaster Capitalism*. New York: Picador.

Kwan, M.-P. 2002. Feminist Visualization: Re-envisioning GIS as a Method in Feminist Geographic Research. *Annals of the Association of American Geographers* 92 (4):645–661.

Larner, W. 2003. Neoliberalism? *Environment & Planning D* 21 (5):509–512.

Leszczynski, A. 2012. Situating the Geoweb in Political Economy. *Progress in Human Geography* 36 (1):72–89.

Li, T. M. 2000. Articulating Indigenous Identity in Indonesia: Resource Politics and the Tribal Slot. *Comparative Studies in Society and History* 42 (1):149–179.

———. 2007. *The Will to Improve*. Durham, NC: Duke University Press.

Liu, S., A. A. Iacucci, and P. Meier. 2010. Ushahidi Haiti and Chile: next generation crisis mapping. *ACSM Bulletin* 246. http://www.webmazine.org/issues/bull246/documents/ushahidi.pdf.

Liu, S., and L. Palen. 2010. The New Cartographers: Crisis Map Mashups and the Emergence of Neogeographic Practice. *Cartography and Geographic Information Science* 37 (1):69–90.

Loewenstein, A. 2015. *Disaster Capitalism: Making a Killing Out of Catastrophe*. London ; New York: Verso.

Lury, C. 1999. Marking Time with Nike: The Illusion of teh Durable. *Public Culture* 11 (3):499–526.

———. 2004. *Brands: The Logos of the Global Economy*. New York: Routledge.

Marx, K. 1977. *Capital: A Critique of Political Economy* Vintage Books Edition. New York: Random House, Inc.

Maurer, B. 2015. Data-mining for Development? Poverty, Payment, and Platform. In *Territories of Poverty: Rethinking North and South*, eds. A. Roy and E. S. Crane, 126–143. Athens, GA: University of Georgia Press.

Mazzucelli, C., and A. Visvizi. 2017. Querying the Ethics of Data Collection as a Community of Research and Practice: The Movement Toward the "Liberalism of Fear" to Protect the Vulnerable. *Genocide Studies and Prevention: An International Journal* 11 (1):2–8.

McClendon, S., and A. Robinson. 2012. Leveraging Geospatially-Oriented Social Media Communications in Disaster Response. In *Proceedings of the 9th International ISCRAM Conference*, eds. L. Rothkrantz, J. Ristvej, and Z. Franco. Vancouver, BC, Canada: Simon Fraser University.

McGoey, L. 2015. *No Such Thing as a Free Gift: The Gates Foundation and the Price of Philanthropy*. New York: Verso.

Meier, P. 2011. Do "liberation technologies" change the balance of power between repressive states and civil society?

———. 2012. Crisis Mapping in Action: How Open Source Software and Global Volunteer Networks Are Changing the World, One Map at a Time. *Journal of Map & Geography Libraries: Advances in Geospatial Information, Collections & Archives* 8 (2):89–100.

———. 2015. *Digital Humanitarians: How Big Data Is Changing the Face of Humanitarian Response*. Boca Raton, FL: CRC Press.

———. 2017. The Future of Crisis Mapping is Finally Here. *iRevolutions*. https://irevolutions.org/2017/06/07/crisis-mapping-future/ (last accessed 9 July 2017).

Mitchell, K. 2016a. Celebrity humanitarianism, transnational emotion and the rise of neoliberal citizenship. *Global Networks* 16 (3):288–306.

———. 2016b. "Factivism": A New Configuration of Humanitarian Reason. *Geopolitics* :1–19.

Mitchell, K., and M. Sparke. 2016. The New Washington Consensus: Millennial Philanthropy and the Making of Global Market Subjects. *Antipode* 48 (3):724–749.

Morozov, E. 2013. *To Save Everything, Click Here: The Folly of Technological Solutionism*. PublicAffairs.

Morrow, N., N. Mock, A. Papendieck, and N. Kocmich. 2011. *Independent Evaluation of the Ushahidi Haiti Project*. Development Information systems International. http://www.alnap.org/pool/files/1282.pdf.

Morvaridi, B. 2012. Capitalist Philanthropy and Hegemonic Partnerships. *Third World Quarterly* 33 (7):1191–1210.

Mulder, F., J. Ferguson, P. Groenewegen, K. Boersma, and J. Wolbers. 2016. Questioning Big Data: Crowdsourcing crisis data towards an inclusive humanitarian response. *Big Data & Society* 3 (2):1–13.

Muller, A., and G. Whiteman. 2009. Exploring the Geography of Corporate Philanthropic Disaster Response: A Study of Fortune Global 500 Firms. *Journal of Business Ethics* 84 (4):589–603.

Munro, R. 2013. Crowdsourcing and the Crisis-Affected Community: Lessons Learned and Looking forward from Mission 4636. *Journal of Information Retrieval* 16 (2):210–266.

Neubauer, R. 2011. Neoliberalism in the Information Age, or Vice Versa? Global Citizenship, Technology, and Hegemonic Ideology. *tripleC* 9 (2):195–230.

Nickel, P., and A. Eikenberry. 2009. A Critique of the Discourse of Marketized Philanthropy. *American Behavioral Scientist* 52 (7):974–989.

O'Sullivan, D. 2006. Geographical information science: critical GIS. *Progress in Human Geography* 30 (6):783–791.

Peck, J. 2002. Labor, zapped/growth, restored? Three moments of neoliberal restructuring in the American labor market. *Journal of Economic Geography* 2 (2):179–220.

———. 2006. Response: Countering Neoliberalism. *Urban Geography* 2 (2):179–220.

Peck, J., and A. Tickell. 2002. Neoliberalizing space. *Antipode* 34 (3):380–404.

Petersen, K., and M. Büscher. 2015. Technology in Disaster Response and Management: Narratives of Ethical, Legal, and Social Issues eds. L. Palen, M. Büscher, T. Comes, and A. Hughes. *Proceedings of the ISCRAM 2015 Conference*. http://eprints.lancs.ac.uk/74877/1/2015_PetersenBuscher_ELSINarratives_ISCRAM2015.pdf (last accessed 26 March 2018).

Piketty, T., and A. Goldhammer. 2014. *Capital in the Twenty-first Century*. Cambridge, MA: Belknap Press.

Pohl, D., A. Bouchachia, and H. Hellwagner. 2013. Supporting Crisis Management via Detection of Sub-Events in Social Networks. *International Journal of Information Systems for Crisis Response and Management* 5 (3):20–36.

Polman, L. 2010. *The Crisis Caravan: What's Wrong with Humanitarian Aid?* Metropolitan Books.

Poster, M. 2006. *Information Please: Culture and Politics in the Age of Digital Machines*. Durham, NC: Duke University Press.

Read, R., B. Taithe, and R. Mac Ginty. 2016. Data hubris? Humanitarian information systems and the mirage of technology. *Third World Quarterly* 37 (8):1314–1331.

Roberts, S. 2014. Development Capital: USAID and the Rise of Development Contractors. *Annals of the Association of American Geographers* 104 (5):1030–1051.

Roche, S., E. Propeck-Zimmermann, and B. Mericskay. 2011. GeoWeb and crisis management: issues and perspectives of volunteered geographic information. *GeoJournal* :1–20.

Roelofs, J. 1995. The Third Sector as a Protective Layer for Capitalism. *Monthly Review* 47 (4):16–25.

Roy, A. 2010. *Poverty Capital*. London: Taylor & Francis Group.

Sandvik, K., M. Jumbert, J. Karlsrud, and M. Kaufmann. 2014. Humanitarian Technology: A Critical Research Agenda. *International Review of the Red Cross* 86 (893):219–242.

Sandvik, K., and K. Lohne. 2014. The Rise of the Humanitarian Drone: Giving Content to an Emerging Concept. *Millenium: Journal of International Studies* :1–20.

Sandvik, K., and N. Raymond. 2017. Beyond the Protective Effect: Towards a Theory of Harm for Information Communication Technologies in Mass Atrocity Response. *Genocide Studies and Prevention: An International Journal* 11 (1):9–24.

Shanley, L., R. Burns, Z. Bastian, and E. Robson. 2013. Tweeting up a Storm: The Promise and Perils of Crisis Mapping. *Photogrammetric Engineering & Remove Sensing* 79 (10):865–879.

Sheppard, E. 2005. Knowledge production through critical GIS: genealogy and prospects. *Cartographica: The International Journal for Geographic Information and Geovisualization* 40 (4):5–21.

Sheppard, E., T. Barnes, and C. Pavlik. 1990. *The Capitalist Space Economy: Geographical Analysis after Ricardo, Marx, and Sraffa*. New York: Routledge.

Smith, N. 2008. *Uneven Development: Nature, Capital, and the Production of Space* 3rd ed. Athens, GA: The University of Georgia Press.

Starbird, K. 2011. Digital Volunteerism During Disaster: Crowdsourcing Information Processing. In *CHI 2011*. Vancouver, BC, Canada.

Stauffacher, D., S. Hattotuwa, and B. Weekes. 2012. The Potential and Challenges of Open Data for Crisis Information Management and Aid Efficiency: A Preliminary Assessment. *ICT4Peace Foundation*. http://ict4peace.org/updates/the-potential-and-challenges-of-open-data-for-crisis-information-management-and-aid-efficiency-a-preliminary-assessment (last accessed 18 March 2013).

Stock, K. 2014. Bain Capital Buys Toms, Will Still Give Away Shoes. *Bloomberg* 21 August. https://www.bloomberg.com/news/articles/2014-08-21/bain-capital-buys-toms-the-625-million-do-gooder-shoe-company (last accessed 21 December 2016).

Sui, D. Z. 2008. The Wikification of GIS and Its Consequences: Or Angelina Jolie's New Tattoo and the Future of GIS. *Computers, Environment and Urban Systems* 32 (1):1–5.

TEDxTalks. 2016. Disaster-relief robotics in Nepal | Patrick Meier | TEDxBerlin. *Youtube*. https://youtu.be/h4QinwOC534 (last accessed 10 July 2017).

Thatcher, J. 2013. Avoiding the Ghetto through Hope and Fear: An Analysis of Immanent Technology Using Ideal Types. *GeoJournal* 78 (6):967–980.

Thatcher, J., D. O'Sullivan, and D. Mahmoudi. 2016. Data Colonialism through Accumulation by Dispossession: New Metaphors for Daily Data. *Environment and Planning D: Society and Space* :02637758166331 95.

Theodore, J. 2010. Ushahidi and Esri Team to Improve Crisis Mapping Services. *Esri News*. http://www.esri.com/news/releases/10_4qtr/ushahidi.html (last accessed 10 July 2017).

Thrift, N. 1997. The Rise of Soft Capitalism. *Cultural Values* 1:29–57.

Tomaszewski, B., and A. MacEachren. 2012. Geovisual Analytics to Support Crisis Management: Information Foraging for Geo-historical Context. *Information Visualization* 11 (4):339–359.

Tretter, E. 2016. *Shadows of a Sunbelt City: The Environment, Racism, and the Knowledge Economy in Austin*. Athens, GA: University of Georgia Press.

United Nations Office for the Coordination of Humanitarian Affairs. 2013. *Humanitarianism in the Network Age*. UN Office for the Coordination of Humanitarian Affairs. https://ochanet.unocha.org/p/Documents/WEB Humanitarianism in the Network Age vF single.pdf (last accessed 15 April 2013).

Waldman, A., A. Verity, and S. Roberts. 2013. *Guidance for Collaborating with Formal Humanitarian Organizations*. Geneva: Digital Humanitarian Network. https://app.box.com/s/w25sqotkg4qc2f2ch1ii (last accessed 7 February 2014).

Watkins, E. 1993. *Throwaways: Work Culture and Consumer Education*. Stanford, CA: Stanford University Press.

Watts, M. 1993. Development 1: Power, Knowledge, Discursive Practice. *Progress in Human Geography* 17 (2):257–272.

Winner, L. 1985. Do Artifacts Have Politics? In *The Social Shaping of Technology*, eds. D. MacKenzie and J. Wajcman, 26–38. Philadelphia, PA: Open University Press.

Wolch, J. 2014. The Shadow State: Transformations in the Voluntary Sector. In *The Power of Geography: How Territory Shapes Social Life*, eds. J. Wolch and M. Dear, 197–221. New York: Routledge.

WoodrowWilsonCenter. 2012a. *Evaluation Frameworks, Performance Metrics, and Impact*. Washington, D.C.: Youtube. http://youtu.be/fYd6HmjkBJc (last accessed 30 June 2013).

———. 2012b. *Legal and Policy Issues*. Washington, D.C.: Youtube. http://youtu.be/apEMNJFnBEM (last accessed 30 June 2013).

Žižek, S. 2009. *First As Tragedy, Then As Farce*. Verso.

Zook, M., M. Graham, T. Shelton, and S. Gorman. 2010. Volunteered Geographic Information and Crowdsourcing Disaster Relief: A Case Study of the Haitian Earthquake. *World Medical & Health Policy* 2 (2):7–33.

[i] See www.openstreetmap.org and the extension project Humanitarian OpenStreetMap Team https://www.hotosm.org/.

[ii] See https://www.ushahidi.com/

[iii] See http://www.standbytaskforce.org/

[iv] See http://www.toms.com/improving-lives and https://warbyparker.com/buy-a-pair-give-a-pair, respectively.

[v] See https://www.starbucks.com/responsibility/community/ethos-water-fund.

[vi] See https://www.unicef.org/innovation/innovation_90879.html (retrieved 4/16/2018)

[vii] To be empirically sure, uses of digital technology for disaster response and humanitarian crises predate this earthquake – notable examples include Google Earth in Hurricane Katrina (Crutcher and Zook 2009) and GIS Corps' longstanding broadly-mandated work around the globe (see https://www.giscorps.org/our-history/). However, this history is usually absent in digital humanitarians' retelling of the growth and development of the field; most stories begin immediately following the 2010 earthquake.

[viii] See: http://www.esri.com/~/media/files/pdfs/library/fliers/pdfs/esri-csr-statement.pdf

[ix] Here I use the terms logics, rationalities, and languages largely interchangeably to mean, as described by Heilbroner (1985, 25), "the movements of and changes in the 'life processes' and institutional configurations of a society… express[ing] the outcome of the system's nature."

[x] Birn (1996), for example, argues that the Rockefeller Foundation's programs in Mexico relied on public health campaigns to foster a fear of hookworm, and to figure themselves and their approaches as key to eradicating hookworm, thus progressing national development. The overlaps here largely orient around Rockefeller Foundation's reliance on branding, scientific accounting metrics, and the imaginary of lives saved.

[xi] Such alternative logics could include, for instance, social justice, political-economic equality, and interpersonal networks with friends and family, all of which are impacted by emergencies and humanitarian crises. Moreover,

[xii] See, for example, "MicroMappers: Microtasking for Disaster Response" (http://irevolution.net/2013/09/18/micromappers/), "Digital Humanitarians: Patrick Meier at TEDxTraverseCity" (http://youtu.be/eUGRziSDbY4), or "An Open Letter to the Good People at Benetech" (http://irevolution.net/2011/04/18/open-letter-benetech/).

[xiii] Some exceptions are within the large and growing body of literature looking at ethical considerations of digital humanitarianism (see Petersen and Büscher 2015), notably including recent work by the American Association for the Advancement of Science, and a recent special issue in the journal *Genocide Studies and Prevention*.

[xiv] Other examples abound: the currently inactive Google Crisis Response Team within Google.org (Google's *for-profit* philanthropic wing) (https://www.google.org/our-work/crisis-response/); the private digital humanitarian company Humanitas Solutions (https://www.humanitas.io/); Tomnod (http://www.tomnod.com/) and its parent company DigitalGlobe (https://www.digitalglobe.com/), which monetize digital crowdsourcing efforts around a variety of crises; and many more.