FCJ-147 Liberation Technology and the Arab Spring: From Utopia to Atopia and Beyond

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Abstract: While the tendency in the West to refer to the Arab Spring movements as 'Twitter Revolutions' has passed, a liberal discourse of 'liberation technology' (information and communication technologies that empower grassroots movements) continues to influence our ideas about networked participation. Unfortunately, this utopian discourse tends to circumvent any discussion of the capitalist market structure in which these tools operate. In this paper, I suggest that liberation technologies may in fact increase opportunities for political participation, but that they simultaneously create certain kinds of inequalities. I end by proposing a theoretical framework for locating alternative practices of participation and liberation.

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1 After some initial fascination with the concept, there now appears to be more skepticism than support for the idea that tools like Twitter and Facebook are single-handedly responsible for igniting the Arab Spring movements. As we witness the immense effort and human cost that has gone into uprisings in Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Saudi Arabia, Sudan, Syria, Tunisia, Western Sahara and Yemen, we recognise that it takes much more than a social media platform to organise and sustain a grassroots protest movement. And yet, the neoliberal discourse behind the trope of a "Twitter Revolution" (a revolution enabled by "liberation technologies" which empower oppressed groups) continues to function—especially in Western media and academia—as a utopian discourse that conceals the role of communicative capitalism in undermining democracy. The meme of the Twitter Revolution may have come and gone, but the ideology that gave rise to it continues to colour our ideas about participation and democracy.

2 What follows are some observations about the manner in which discourses around liberation technology are used to imagine a utopian model of activism in which digitally networked communities are capable of changing their political realities through mediated participation facilitated by corporations. Specifically, I want to do three things: 1) to examine how the utopian discourse of liberation technology circumvents any discussion of the market structure of digital information and communication technologies; 2) to explore how this utopian discourse normalises the role of digital networks as platforms that increase participation while simultaneously increasing inequality, and 3) to propose responses to the utopian discourse of liberation technology that provide alternative imaginings of social participation. I should clarify that my objective is not to provide a detailed account of the unfolding of the Arab Spring movements or their continuing repercussions; rather, my goal is to describe how the assumptions behind the *rhetoric* of liberation technology correlate to the *practice* of civic disobedience, and to delineate a theoretical framework for understanding the contrast between the two. Hence, I do not believe my argument is limited to a North African or Middle Eastern context. Events since the Arab Spring such as the England riots in August of 2011, or the emergence of the Occupy movement in September (which happened after this text was originally submitted for publication, and are therefore not discussed in detail) serve to extend the validity and application of my argument.

3 It would be adequate to begin by expanding the constrictive parameters set forth by the concept of *utopia*. Here, I will take a page from McKenzie Wark (2007) and augment this idea with the concepts of *heterotopia* and *atopia*. While a utopia is a nowhere that exists in a theoretical realm, a heterotopia is an actual but different space, an elsewhere where exceptional conditions from those that usually apply exist. Thus, while a utopia can only exist in the imagination, a heterotopia is an "island" (such as a school, a prison, a stadium or a hospital) where people are allowed—or forced—to follow different social rules. Lastly, an atopia is similarly an alternative site with different social norms, except that in this case, the site can be located anywhere or everywhere; it is borderless. In the remainder of this paper, I will be sometimes alluding to how the discourses of digital networks, participatory media, and mobilisation inscribe social participation in the different topological planes of utopia, heterotopia and atopia. Although these concepts are not central to my argument per se, they will help me frame a critique of liberation technology.

4 There is, indeed, much utopianism around the discourse of social media and recent protest movements. Even before the so-called Twitter Revolution, we can point to a growing trend,

particularly within mainstream and even alternative journalism, that suggested that protest movements all over the world were transformed by participatory media (examples include statements about the revolutionary impact of cell phones in the Philippines, YouTube in Iran, Facebook in Moldova, and so on). I am choosing to collect this particular brand of techno-utopianism under the rubric of "liberation technology," not because this is a term that is readily recognisable in popular or academic discourses, but because of its rich semiotic meaning. One noticeable place where a definition of liberation technology is attempted is the Web site for the Program on Liberation Technology at Stanford University. There, we are informed that the goal of the program is to research 'how information technology can be used to defend human rights, improve governance, empower the poor, promote economic development, and pursue a variety of other social goods' ('Program on Liberation Technology').

5 These are worthy goals. But my first encounter with the term "liberation technology" made me think of a similarly sounding concept, and even now, typing those words in Wikipedia will cause the search algorithm to ask: 'Did you mean liberation *theology*?' At first glance, perhaps both movements share a certain ethos and idealism. But my critique of liberation technology centers on the fact that, whereas liberation *theology* sought to lend legitimacy to the struggle of the oppressed by questioning the hierarchical structure of the Catholic church from within, and suggesting that the church itself could be the source of injustice, liberation *technology* does not seem very interested in questioning the roles and structures of the institutions that own and control social media networks. Instead, liberation technology seems to posit a worldview whereby technologies that emerge in the context of capitalism (precisely at places like Stanford) can be used by those wishing to challenge capitalism itself.

6 As the history of global unrest intersects with the emerging affordances of information and communication technologies (ICT), no one can deny that these can—often in unforeseen ways—aid in the defence of human rights, improve governance, empower the poor, and so on. But that is not the point. The point is that while presenting these technologies as nothing less than the agents of liberation, a critique of the capitalist institutions and superstructures in which these technologies operate is obscured, and this critique is necessary for understanding the relationship between capitalism and ICT, as well as for opening up new frontiers of liberation.

7 It has already been convincingly argued that neoliberalism would not have been possible without ICT (cf. Robert Neubauer, 2011), to the extent that these technologies facilitated transnational flexible production and unrestricted capital flows, causing the erosion of organised labour and the promotion of an unregulated, privatised "free" market as the solution to all of society's ills. But here I am more interested in the link between capitalism and communication as an act of participation in society. Jodi Dean's concept of communicative capitalism is particularly relevant, since she defines it as 'the materialisation of ideas of inclusion and participation in information, entertainment, and communication technologies in ways that capture resistance and intensify global capitalism' (2009: 2). In communicative capitalism, everyone has the tools and opportunities to express an opinion. "Participation" in society is therefore identified first and foremost as the ability to communicate, to express one's opinion, in particular about the—mostly commercial—choices that give individuals their identity. However, the overabundance of communication in a marketplace in which all statements compete for visibility results in an environment where political change becomes difficult (if all options are equally valid, how can one option be declared superior?). Thus, the more we communicate (through our participation in digital networks, for instance), the more resistance is obstructed, and the more the ideology of capitalism is reinforced. Communicative capitalism—to paraphrase Gilles Deleuze—doesn't stop people from expressing themselves, but forces them to express themselves continuously (1997: 129).

8 Encouraging compulsive and continuous expression has turned out to be a profitable business model, as evidenced by the growth of the social media industry. Facebook, launched only in 2004, was adding on average 250,000 new members a day by 2007. Currently, it has over 845 million members ('Facebook Company Info'), who store 'more than 100 petabytes (100 quadrillion bytes) of photos and videos' in the company's servers ('Facebook Infrastructure'). According to industry reports, the social networking market as a whole grew 87% from February 2006 to February 2007 (Britton and McGonegal, 2007: 80). Currently, the world spends over 110 billion minutes a month on social networks and blog sites, which equates to 22% of all time spent online (*Nielsen Wire*,

2010). Social media is driven by advertisements targeted to users based on the demographic data they provide, and the amount spent on advertising in social network services was $1.4 billion in 2008, with companies spending $305 and $850 million dollars to advertise their products on Facebook and MySpace, respectively (Eskelsen, Marcus and Ferree, 2009: 102-103). While the launch of new social media companies gives the impression of a competitive market, merger and acquisition trends suggest a move towards conglomeration that mirrors that of (and intersects with) traditional broadcast media. In a notable example, MySpace (which currently has over 185 million members) was acquired for US$580 million in 2005 by Rupert Murdoch's News Corporation, one of the eight companies that dominate the global media market (although it was later sold again, once it lost its market share to Facebook).

9 In essence, communicative capitalism means that communication and social exchange take place not just in any environment, but in a privatised one. The neoliberal impulse to subsume all social communication and participation to market forces can only be achieved if the network is made the dominant episteme or model for organising social realities. This is accomplished by the application of what I call a nodocentric filter to social formations, which renders all human interaction in terms of network dynamics (not just any network, but a *digital* network with a profit-driven infrastructure). Under a nodocentric view, the goal is to assign to everything its place in the network. Nodocentrism is an epistemic stance where the distance between a node and something outside the network is, for all practical purposes, infinite (Mejias, 2010). Thus, to be anything other than a node is to be invisible, non-existent. The technologies of communicative capitalism are applied towards the creation of a pervasive or ubiquitous computing environment in which every thing and every utterance must be integrated or assimilated as a node in a digital network.

10 As a way to illustrate the concept of nodocentrism in broader terms, consider the example of search engine results, and how they point to documents, sites or objects that have been indexed in a database. What has not been indexed is not listed as a result, and it might as well not even exist in the universe of knowable things as far as the search engine is concerned. Nodocentrism is also at work in the creation of friend lists like the ones used in social networking programs. These lists are nodocentric because they depict a social network comprised of individuals available (or potentially available) to interact with, but they render invisible the individuals who are not on the list because they do not use the same program, or because they do not have an account with that service. The algorithms of digital networks operationalise decisions about what is included or not included on the list. I am not suggesting that nodocentrism provides a deficient or false image of the world; I am simply pointing out how it embodies a politics of network inclusion and exclusion.

11 Consider the example of social movements like the Arab Spring. The discourse of liberation technology presents these movements as the work of "wired" activists, although this portrayal excludes the work and participation of activists who are not computer literate, or simply not social media users. Social change is thus imagined as an outcome of information flows within a network, and activists are portrayed as nodes transmitting dissent to other nodes. In order for liberation to happen, everyone must be connected to the same digital networks. Change and resistance are conceived in nodocentric terms.

12 But privileging a networked view of activism in this way can also serve to obstruct any real critique of social media technologies, and to justify their use without the need to question their terms of use. The discourse of liberation technology accomplishes this by providing two different—although interdependent—versions of the affordances of these technologies: one for the homeland territory, and one for abroad. While communicative capitalism provides citizens at home no real opportunities for resistance (the majority are too occupied compulsively communicating), liberation technology presents a liberal and utopian narrative of the emancipating and empowering potential of technology in places not entirely corrupted by capitalism. In other words, change, while impossible "here," is realised through liberation technology "over there," in a heterotopian elsewhere (that in the case of the Arab Spring includes the Middle East and parts of Africa). This is a valuable manoeuvre for liberal sensitivities, because it redeems the technologies of communicative capitalism. Activists "over there" are using these tools not just to talk about commercial choices, but about things that *really matter*: the overthrow of injustice, the plight of the poor, etc. Liberation technology thus functions as a form of self-focused empathy in which an Other is imagined who is nothing more than a projection that validates our own desires, a user of

the same technologies we are using—a user who applies these tools not for the frivolous ends of consumerism, but for the betterment of the world.

13 This would seem to imply that the discourse of liberation technology can only serve to arrest social change at home. If that were strictly the case, it would be difficult to account for the Wisconsin protests in early 2011, the emergence of the Occupy movements, or for that matter, any subsequent act of protest in the West that uses technology to mobilise people. The fact that these events continue to germinate and spread seems to demonstrate that it is only a matter of time before social movements influence each other in this age of global media, thus making it possible for liberation technologies to fulfil their true potential wherever the social and economic conditions that fuel social unrest are present, even at home.

14 What is interesting, however, is that coverage of post Arab Spring movements in the West has not really revolved around protesters' use of social media, or it has only minimally. Participatory media being used at home for organising protests is apparently not that newsworthy, since it lacks the sensationalist and media-friendly orientalism of the Twitter Revolution stories. And as the use of participatory media in social movements has become normalised and generalised, there seems to be continued support for the belief that these corporate products have fundamentally shifted the balance of power between producers and consumers, and therefore between the owners of the means of production and the audience.

15 However, I would propose that the discourse of liberation technology conceals, in fact, how production on the new platform continues to exhibit a power imbalance. In theory, the internet (the über liberation technology in the liberal worldview) brought about the end of communication monopolies with their one-to-many models of dissemination; now, in the age of user-generated content, we have communication that is many-to-many. Access to the tools of production and the channels of distribution has been greatly democratised—the theory goes—and monopolies have been replaced by a free market with perfect competition. Everyone has the opportunity to create content, and everyone has the opportunity to engage that content. While the equation of this continuous communication cycle with civic participation is precisely what the concept of communicative capitalism seeks to critique, we need to also question the utopian narrative that describes a seamless evolution from monopolies (one-to-many) to more democratised circuits of communication (many-to-many). Has the empowering of more voices fundamentally altered the market structure of participation?

16 To answer that question, we need perhaps to take a brief detour through the *Hitler Finds Out* meme. This phenomenon refers to a series of parody videos on YouTube that began to appear circa 2006 in reaction to a sequence from the German film *Downfall* (2004), which depicts the last days of Hitler towards the end of World War II. Users took a three minute clip from the film in which Hitler learns he is losing the war, and while leaving the original German soundtrack intact, provided new subtitles to make it appear as if the Führer is ranting about something else (like being kicked out of Xbox Live, the subprime mortgage crisis, the cancellation of the TV show *Ugly Betty*, and so on). But when the company that produced the film began to receive complaints that the parodies were trivialising the war and the holocaust, they decided to pull the clips from YouTube, claiming that the videos constituted a violation of copyright. The creators of the parodies felt their Fair Use rights were violated, and responded by creating more videos. One of them, in which Hitler rants against the videos being removed from YouTube, contains an interesting moment. When a Nazi general suggests to Hitler that they simply upload the videos to another video hosting service, like DailyMotion or Vimeo, Hitler angrily responds that nobody uses those services, and that 'YouTube is the de facto standard' (Green, 2010).

17 The point of this anecdote is to highlight the fact that when people have a video they want seen by the largest audience, they will most likely use YouTube (even if it is a video critiquing YouTube). And when people want to join a social networking site, they will join Facebook. And when they want to participate in a micro-blogging community, they will choose Twitter. There are alternatives for each of these services in the marketplace, but the fact that these networks host the most users renders the competitors almost useless. Most individuals will not willingly opt to use a service with a lesser share of the market.

18 This brings us to an important realisation about the market structure of social media: one-to-many is not giving way to many-to-many without first going through many-to-one. In other words, in this

age where everyone can be producer and not just a consumer, the communication *monopoly* has merely been replaced by the *monopsony* (in economic terms, a monopoly is a market structure characterised by the presence of a single seller, whereas a monopsony is characterised by the presence of a single buyer). We—the sellers—are legion, but the buyers of what we produce are few. What we sell is not a product assembled in a factory, but "content" generated through social interactions which we hand over to the only buyer in town, the Facebook's and Google's of the world.

19 That monopsony has become the dominant market structure of the Web is not accidental. The architectures of participation of social media are based on a model where profit margins are maximised the more users join the network (which is why access is free or extremely low cost), and the more demographic data those users provide so that advertising can be targeted at them. As the saying goes: if you are not paying for it, you are not the customer, you are the product being sold. Access to "free" social media services exist only because companies have figured out a way to monetize our participation.

20 My argument is that this exchange is not fair for a variety of reasons, and that while digital networks increase opportunities for participation, they simultaneously increase inequality. In other words, the technologies of communicative capitalism embody practices of social participation and inclusion, but as Dean (2009) suggests, they also perpetuate the ideology of capitalism and obstruct any resistance to it. The way in which they do so—the way in which they create inequality while increasing participation—is through strategies that include the commodification of social labour (bringing activities we used to perform outside the market into the market), the privatisation of social spaces (eradicating public spaces and replacing them with "enhanced" private spaces), and the surveillance of dissenters (through new methods of warrantless wiretapping and social network analysis).

21 In order to provide a clear picture of the impact of this inequality, we must consider not only arguments that show the immediate benefits of a particular technology, but a broader arguments that contrast the increase of access and participation with more comprehensive societal indicators. For instance, a Pew Internet & American Life Project survey from July of 2010 (Smith, 2010) indicated that cell phone ownership in the United States was higher among Latinos and African Americans (87%) than among Whites (80%). This would seem to suggest some progress in terms of inclusion, and perhaps even economic opportunity. However, when we contrast this data with the fact that the median wealth of African Americans has decreased 77% since 2007 ('Harper's Index,' 2010), it becomes apparent that access to certain technologies does not, by itself, translate into more equality. It might be helpful to speak of the inequality generated thorough participation via digital networks in the manner that Andre Gunder Frank (1967) spoke of underdevelopment: not as the result of being excluded from the economic systems of capitalism, but precisely as the result of being included in them.

22 That digital networks increase participation while increasing inequality is also evident in the case of the Arab Spring. While we have seen a diminishing in the compulsion to brand these acts of protest as Twitter Revolutions (as if corporate products, not people, deserve the credit), the discourse of liberation technology nonetheless implies that social media is partly responsible for igniting the uprisings—and in cases like Egypt, for their success. That these tools can and should be used for getting more people to participate in democratic movements is not what I am arguing against. Rather, I am interested in the larger consequences and implications for democracy of employing such tools, and I am proposing (along with people like Evgeny Morozov, 2011) that the use of social media by activists increases opportunities for participation and action, but it also makes it easier for governments and corporations to operate a repressive panopticon.

23 According to a report by the OpenNet Initiative, around 20 million users in the Middle East and North Africa have already experienced the blocking of online political content carried out with the help of Western technologies (Norman and York, 2010). To the extent that grassroots movements all over the world continue to rely on corporate liberation technologies to organise and mobilise, we can expect inequality (through participation) to take various forms.

24 First, there is the loss of privacy through surveillance. States can monitor activity within online social networks to identify dissenters and learn of (and obstruct) their plans. This is accomplished through deep-packet surveillance, filtering and blocking technologies, provided to repressive

regimes like Iran, China, Burma and Egypt by companies like Cisco, Motorola, Boeing, Alcatel-Lucent, McAfee, Netsweeper, and Websense (York, 2011; Mayton, 2011). Recently, a group of Chinese citizens even filed a lawsuit against Cisco, claiming that the technology that allowed the government to setup the Great Firewall of China led to their arrest and torture (Abbott, 2011). That the US government pays lip service to the importance of a Free Internet (MacKinnon, 2011) and finances circumvention technologies (Glanz and Markoff, 2011) while supporting these companies through tax breaks and lax regulation is an unfortunate contradiction.

25 Second, inequality through participation can also be produced through the use of PSYOPs and propaganda. The US Army, for instance, is developing artificial intelligence agents that would populate social networking platforms and dispense pro-American propaganda (Fielding and Cobain, 2011). Dozens of these 'sock puppets' could be supervised by a single person, and their profiles and conduct would be indistinguishable from that of a real human being. A low-budget version of this strategy has already been put into action by the Syrian government, who apparently released an army of Twitter spambots to spread pro-regime opinions (York, 2011).

26 Loss of freedom of speech is another example of inequality through participation. Companies, unlike states, are not obliged to guarantee any human rights, and their Terms of Use give them carte blanche to curtail the speech of certain users. For instance, Facebook (one assumes under the direction of the British authorities) recently removed pages and accounts of various protesters belonging to the group UK Uncut just before the wedding of Prince William and Kate Middleton (Malik, 2011). UK Uncut is not a violent terrorist organisation, but a group that opposes cuts to public services and demands that companies like Vodafone pay their share of taxes.

27 Suspension of service is another issue to consider. States (in collaboration with corporations) can simply "switch off" internet and mobile phone services for whole regions, in order to terminate access to the resources activists have been relying on. Vodafone, for instance, complied with the Egyptian government's directive to end cell phone service during the Revolution of 25 January (Shenker, 2011).

28 Inequality though participation will also be evident in new technologies that will facilitate the remote control of mobile devices without the user's consent. Modern cell phones have, for some time, provided the authorities with the ability to use them as wiretapping devices without their owner's knowledge, even when the power is off (McCullagh and Broache, 2006). And they can also be used to track individuals and report their locations. An indication of what else we can expect in the future is a patent, filed by Apple, that allows for authorities to remotely disable a phone's camera (Mack, 2011). While this is intended to prevent illegal recording at concerts, museums, etc., we can imagine how effective it would be at protests.

29 The last example of inequality through participation I will briefly discuss is crowd-sourced identification. One reason why authorities may want, in fact, not to remotely disable phone cameras is because they can aid in the identification of activists. At the Vancouver riots of June 2011 (which had nothing to do with correcting social injustices, and everything to do with sports hooliganism), Facebook, Twitter and Tumblr users were enlisted in a crowd-sourcing attempt to identify miscreants using digital photos and videos posted by onlookers (Wong, 2011). Similar practices were employed by the Iranian government during the post-election riots of 2009. Websites like https://gerdab.ir were setup to allow regime sympathisers to identify protesters and report them to the authorities (Tehrani, 2009).

30 All of the practices described above confirm Morozov's observation that social media can be used by both sides, not just the side we agree with, and that the sacrifices in privacy may not be worth the gains (2009). Which perhaps explains why, at least in the Gulf Countries, Facebook usage seems to be diminishing (Khatri, 2011). But as regimes—repressive as well as democratic—learn how to use social media to influence the popularity of certain viewpoints, monitor communication, and detect threats, it seems as if dissent will become possible only in the excluded, non-surveilled spaces of what is outside the network, away from the participation templates of the monopsony. It is to this possibility that I want to turn next.

31 A typical drawing of a network depicts a series of nodes connected by lines, representing the links. As a mental exercise, I want to call attention to the space between the nodes. This space surrounding the nodes is not blank, and we can even give it a name: the paranodal. Because of nodocentrism we tend to see only the nodes in a network, but the space between nodes is not

empty, it is inhabited by multitudes of paranodes that simply do not conform to the organising logic of the network, and cannot be seen through the algorithms of the network. The paranodal is not a utopia—it is not nowhere, but somewhere (beyond the nodes). It is not a heterotopia, since it is not outside the network but within it as well. The paranodal is an atopia, because it constitutes a difference that is everywhere.

32 Broken Web links pointing to pages that no longer exist, or cached versions of pages no longer active are paranodal, because they represent phantom nodes. Signal obstructers such as RFID (Radio-frequency identification) blockers that prevent network devices from being found are examples of technologies that create paranodality. Public spaces without surveillance cameras are paranodal spaces. Pirate radio operators are paranodal, because they function without network registration. Any kind of space where signal reception cannot be established is paranodal. Digital viruses and parasites that obstruct the operations of a network are also examples of paranodal technologies. Obsolete technology is paranodal, because its usage is no longer required to operate the network. Digital noise and glitches are paranodal, because they interfere with the flow of data in the network. Paranodality is a lost information packet in the internet. Populations in a dataset that are excluded or discriminated against by an algorithm become paranodal. Punk or rouge nodes—nodes who belong to a network only in order to destroy it—are paranodal. The activist who does not use liberation technologies is also an example of a paranode. This does not mean that paranodes are completely off the grid and outside all networks; for instance, someone not on Facebook might still be on email, which means she is a paranode in relation to the former but a participant in relation to the latter. Thus, the concept of the paranodal can help us describe network exclusions as well as allegiances.

33 The reason paranodes are important in our discussion of liberation technology, monopsonies, and protest movements is because these peripheries represent the only sites from which to disidentify from the network. The paranodal, to paraphrase Jacques Rancière, is the part of those who have no part (1999), and it is the means by which things that are not nodes can claim difference from the network as a whole, refusing to identify with it.

34 While the study of resistance movements as networks continues and will continue to be useful, a framework for opposing the nodocentric ordering of these movements into privatised templates for participation is necessary. As activists continue to demonstrate to liberation technologists, the struggle must go on after the internet and other digital networks are shut off—if the fight can't continue without Facebook and Twitter, then it is doomed. This means that the struggle is in part *against* those who own and control the privatised networks of participation (and can thus switch them off). Consequently, we have to turn to the paranodal for the emergence of corresponding models of activism. Since the peripheries represent the only sites from which to unthink the network, it is in the paranodal where new strategies will emerge: strategies of obstruction, interference, and disassembly of privatised networks; strategies of leaking information or circulating misinformation in networks; and strategies of intensification: transforming action that begins in one kind of network into resistance and engagement with alternative forms of networks.

35 As we realise that many-to-many communication is becoming impossible without a for-profit many-to-one infrastructure, we must abandon the utopian fantasy that liberation technology, as currently envisioned, can increase democratic participation. Participation managed by monopsony can only increase inequality. In response, paranodality must provide an atopian way to challenge the network by serving as a method for thinking and acting outside the monopsony. As networks have become not just metaphors for describing sociality, but templates that organise and shape social realities, we must question our investment in corporate technologies as the agents of liberation.

Biographical Note

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