

# 'Anarchist technologies': Anarchism, cybernetics and mutual aid in community responses to the COVID-19 crisis

Organization  
2023, Vol. 30(1) 193–209  
© The Author(s) 2022



Article reuse guidelines:  
[sagepub.com/journals-permissions](http://sagepub.com/journals-permissions)  
DOI: [10.1177/13505084221090632](https://doi.org/10.1177/13505084221090632)  
[journals.sagepub.com/home/org](http://journals.sagepub.com/home/org)



Thomas Swann 

Loughborough University, UK

## Abstract

The COVID-19 pandemic that gripped the world since the end of 2019 has been felt most immediately both as a health crisis and an economic, social and political crisis. Secondary impacts of social distancing and lockdown in many countries have put strains on people's capacities to provide essential food and medicines for themselves and their families. In response, outside of centralised government and voluntary sector frameworks, local mutual aid groups have emerged around the world as a primary site of community resilience. Given mutual aid's strong links to the anarchist political tradition, for example in its identification by Kropotkin as a factor in evolution, this article suggests that these new mutual aid groups can be understood best through the related concept of self-organisation. Tying anarchist approaches to mutual aid and self-organisation together, it is argued that cybernetics and Stafford Beer's Viable System Model (VSM) offer useful tools in helping both academic analysis and on-the-ground practice assess and improve the effectiveness of mutual aid in and beyond the COVID-19 crisis. The article offers a qualitative thematic analysis of anarchist and related texts published during the pandemic that reflect on mutual aid practice. In doing so, it highlights some of the challenges and tensions such self-organised mutual aid practice might face and proposes a participatory research agenda drawing on Beer's VSM.

## Keywords

Anarchism, COVID-19, cybernetics, mutual aid, self-organisation

---

### Corresponding author:

Thomas Swann, International Relations, Politics and History, Loughborough University, Herbert Manzoni Building, Loughborough, LE11 3TU, UK.  
Email: [T.Swann@lboro.ac.uk](mailto:T.Swann@lboro.ac.uk)

As the world began to grapple with the multiple crises brought on by the COVID-19 pandemic – from the immediate health crisis to its exacerbation of existing crises in political, economic and social life – the concept of mutual aid gained traction in the popular imagination. Spade (2020a) defines mutual aid as ‘collective coordination to meet each other’s needs, usually from an awareness that the systems we have in place are not going to meet them’ (p. 7). During the first lockdown in the UK (March-May 2020), for example, there were over 4500 mutual aid groups operating in the UK and Ireland (COVID-19 Mutual Aid UK Groups, 2020) and organisers even appeared on prime-time national television (Donaghey, 2020). These mutual aid groups and others around the world saw communities cooperate to ensure that everyone impacted by the pandemic in whatever way (medical, economic, social) would be able to survive.

The day-to-day practice of general mutual aid groups included doing shopping and collecting medication for people unable to leave their homes, providing virtual or distance social contact, helping people access food banks and government relief packages, delivering meals, raising funds, organising education and arts and crafts activities and childcare, supporting individual and collective care, paying rent and utility bills, gardening to make sure people had access to safe outside space, domestic abuse support, dog-walking, pandemic safety advice (provided in multiple languages), running errands, mental health support and more (see Mao et al., 2021 for a UK survey). More specific mutual aid networks were set up, for example, by people recovering from alcohol addiction (Krentzman, 2021). In the UK, the Scrub Hub network was formed to produce medical scrubs and personal protective equipment for National Health Service workers, with volunteers ‘sourcing material, arranging deliveries, co-ordinating information, [ . . . ] sharing material and practical advice [ . . . and] producing the scrubs’ (Lachowicz and Donaghey, 2021: 2). As time went on, some groups also became involved in helping those without reliable internet access register for vaccinations and supporting Black Lives Matter and other social movements (Soden and Wood Owen, 2021).

Mutual aid has been a hallmark of anarchist political theory and practice since the start of the 20th Century. While the mutual aid groups that emerged in 2020 in the context of the COVID-19 pandemic were not all anarchist, at their most effective, I argue here, they resonate with the self-organisation that is integral to how mutual aid is (self-)governed in anarchism. A focus on anarchistic practices of mutual aid is also warranted by the recognition that politicisation may be key to the longevity of this form of community self-organising (Fernandes-Jesus et al., 2021: 14). In cybernetics – often defined as the science of self-organised systems – I contend that we might find some of the tools required to bolster mutual self-organisation now and in the future. Importantly, this means addressing common tensions and problems encountered in mutual aid organising.

The discussion below is based on the reports of and reflections on mutual aid practices during the first year of the COVID-19 pandemic (between February 2020 and the end of March 2021). Many of these sources have been collected by the Anarchist Library, an online archive that republishes anarchist texts already available elsewhere. Others were found on well-established anarchist publishing sites, such as CrimethInc. ([www.crimethinc.com](http://www.crimethinc.com)) and Freedom Press ([www.freedompress.org.uk](http://www.freedompress.org.uk)), while some are articles sympathetic to an anarchist politics of mutual aid published by mainstream news platforms like The Guardian. Because these texts are publicly accessible and in the interests of transparency, I include URL links to them in footnotes. My comments draw on the personal accounts of activists involved in practicing mutual aid during the pandemic, as well as critical and theoretical reflections on these practices. I include the examples in the discussion below as vignettes to help illustrate the applicability of an anarchist cybernetic framework to mutual aid self-organisation. Given the wide scope of mutual aid practice, it is not always possible to specify precisely what activities the authors are involved in when they are discussing mutual aid groups. The (non-exhaustive) list above of typical activities will, I hope, provided the reader with

a suitable picture of what mutual aid looks like in practice. With this in mind, it is my aim in the discussion that follows to shed a light both on the promise of bottom-up community organising and the tensions experienced by those active in it.

## Mutual aid networks and the COVID-19 crisis

The term ‘mutual aid’ was coined by the anarchist geographer Peter Kropotkin to show, contrary to the Social Darwinists, that cooperation was as decisive as competition in evolution. In *Mutual Aid: A Factor of Evolution*, Kropotkin (1902) demonstrated that to survive, members of a group often cooperate rather than only subjecting themselves to competition in which the strongest wins out. Although fundamental to anarchist politics, Kropotkin highlighted examples of mutual aid in humans outside of any conceptualisation of anarchism. Throughout history there are numerous instances of humans and non-human animals practicing mutual aid (Kinna, 2016: 147–149). It is this imperative to cooperate that Simon Springer maintains is present in COVID-19 mutual aid groups:

[a]s people reconnect in spite of the lockdowns and social distancing between us by lending a hand wherever it is needed most, we are bearing witness to and actively participating in the reconstruction of the unshakable and fundamental basis of all life on this planet: mutual aid. (Springer, 2020: 1)

As Rhiannon Firth points out, in anarchism mutual aid is both descriptive of this evolutionary tendency and normative: ‘it is something to be valued, nurtured, furthered, supported and promoted by anarchists as a fundamental part of their ideology’ (Preston and Firth, 2020: 69). Mutual aid is notable in indigenous societies prior to and in resistance to colonialism (Kaba, 2021; Samudzi and Anderson, 2018: 22; Spade, 2020a: 11; Welch, 2021) as well as in working class communities (White and Williams, 2014). It surfaces in response to disasters (Solnit, 2009), with the Hurricane Sandy relief efforts in 2012 linked to anarchism through the Occupy Sandy initiative, which grew out of Occupy Wall Street (Disalvo, 2015; Manski, 2013). Alternative organisations (Parker, 2020; Parker et al., 2014) – such as workers cooperatives (Kokkinidis, 2015; Sitrin, 2006) – have also been associated with mutual aid (Zebrowski and Sage, 2017). The explicit embrace of mutual aid language by many communities in the wake of the COVID-19 crisis, and the global scale of the practice – described by Sitrin and Colectiva Sembrar (2020) as ‘the largest, most diverse, mobilization of people [...] that has ever happened’ (p. xix) – makes this an incredibly insightful case study for the development of anarchist and related forms of self-organisation.

Much of the academic literature on mutual aid and COVID-19 has underlined the intimate connections between mutual aid and anarchism (Donaghey, 2020; Grubacic and Graeber, 2020; Jun and Lance, 2020; Lachowicz and Donaghey, 2021; Preston and Firth, 2020; Swann, 2020a; Travlou, 2021). What ties mutual aid to anarchism is, on the one hand, its role in resistance to the state and capitalism and, on the other, the focus on radical forms of democracy (Beacham and Willatt, 2020: 80–81; Ticktin, 2020) and conflict resolution (Melville and Wilkinson, 2020; Spade, 2020a: 75–84). Democratic governance is favoured because it preserves the autonomy of those involved in mutual aid organising, and of groups in wider networks (Jun and Lance, 2020: 371). In this respect, several authors (e.g. Springer, 2020) frame mutual aid as prefigurative, playing a role in creating a new world in the shell of the old (Gordon, 2018; Reinecke, 2018; Van de Sande, 2015). With this comes the hope that mutual aid might present a path out of not only the COVID-19 crisis but the other myriad crises facing the planet (e.g. Welch, 2021).

Mutual aid is regularly counterposed against charitable forms of support (Solnit, 2009: 86–87; Spade, 2020b), in terms of both the core dynamic of giver and receiver that is rejected by mutual

aid initiatives (McLafferty Bell, 2021; Preston and Firth, 2020: 66–67) and the top-down, bureaucratic, and elite control charities can reinforce (Samudzi and Anderson, 2018: 103–104; Spade, 2020a: 59–64). Some authors do, however, suggest pragmatic alliances with charities and NGOs, drawing on the notion of ‘diversity of tactics’ (Jun and Lance, 2020: 359), and even with government (Fernandes-Jesus et al., 2021; Soden and Owen, 2021). Furthermore, authors note the risk of mutual aid practices being co-opted, and Firth, for instance, cites evidence that ‘state workers, professional bureaucrats and party politicians are trying to co-opt and de-radicalise mutual aid efforts’ (Preston and Firth, 2020: 79). Like the tension with charity, this can introduce more hierarchical governance structures into what might otherwise be largely horizontal practices. Lachowicz and Donaghey (2021:7) highlight too the gendered and racialised dynamics of charitable and voluntarist action, with volunteers being predominantly women and with the hierarchical organisation of voluntary labour characterised by Shachar (2014) as ‘white management’. They go on to underline the results of institutionalisation into the charity model, with groups and individuals experiencing ‘alienation, disillusionment, burnout and even fear’ (Lachowicz and Donaghey, 2021: 15).

Exploring mutual aid groups and networks with a view to organisational structure and effectiveness, themes that recur in the literature centre around decentralised forms of self-organisation. Through democratic decision-making processes, these embody significant aspects of prefigurative, anarchist politics: the autonomy of individuals in groups and of groups in networks and federations and a rejection of imposed hierarchies of command. It is these qualities, identifiable in much of how mutual aid has been and continues to be realised during the COVID-19 crisis, that also open mutual aid up to an analysis grounded in cybernetics.

## **Autonomy and control in cybernetics and anarchism**

For cyberneticians like Stafford Beer, self-organisation is a concept that helps explain how systems regulate their own behaviour to find balance with their environments: ‘[a] system may be said to be self-organizing if it can alter its internal structure to increase its level of adaptation’ (Beer and Leonard, 2019: n.p.). Many systems do this through control being distributed throughout them, not housed in a central hub or at the top of a hierarchy. Beer (1981 [1994]) comments that the ecological system, for example, ‘has no programme; no planning department, no licenses to breed, no bureaucracy. It just works’ (p. 52). In strictly hierarchical social systems (i.e. organisations), so Beer’s argument goes, it would take too long for information to travel through the various levels of the organisation for a decision to be made and acted upon. By the time the decision came down the chain of command, the situation would have changed, and action taken would risk being irrelevant or counter-productive. Such organisational structures persist in part, Beer (1974 [1993]) claims, due to people in them finding their own ways to adapt in spite of strict managerial structures.

The distributed nature of control in effective self-organisation, as Beer saw it, is not control administered through coercion but ‘in a way that preserved a degree of freedom and autonomy for the parts without sacrificing the stability of the whole’ (Medina, 2011: 29; see also Gross, 2020a). This is echoed in some elements of classical anarchism, with order being achieved not through domination but, as Kropotkin (1898) put it, in ‘an ever-changing and fugitive equilibrium between a multitude of varied forces and influences of every kind, following their own course’ (p. n.p.). This also features in Pierre-Joseph Proudhon’s account of anarchy as the fullest expression of order (Colson, 2019: 41–45). This affinity between anarchism and cybernetics has been recognised in the past (McEwan, 1963; Walter, 1963; Ward, 1966; see Duda, 2013 for an overview) and more recently through a proposed *anarchist cybernetics* (Swann, 2018, 2020b) and in mathematical

modelling for scale in anarchist social organisation (Apolito, 2020). Responses on the COVID-19 pandemic by cyberneticians have tended to spotlight considerations of the adaptability of national healthcare systems (Espejo, 2021; Lassl, 2020) and mutual aid groups are conspicuous in their absence. Espinosa (2021) and Gross (2020b) apply cybernetics to community resilience and support networks, but neither mention mutual aid explicitly.

While cybernetics can be applied fruitfully in thinking about resilience and responses to disruptions like that caused by the pandemic, a specifically anarchist take on cybernetics has something more to offer mutual aid self-organisation. Key to Beer's cybernetics is a shift from first-order to second-order analysis of systems (Mead, 1968). In the former, the observer views the system from outside, as an object of study. The latter, in contrast, situates the observer within the system, and it brings with it an association with constructivist rather than positivist ideas about knowledge (Pickering, 2010; Von Glaserfeld, 1991). In practice, this is often taken up such that the analysis of a system is conducted by those involved in it, with a view to developing a shared understanding of how it functions according to the people that make up its parts. It is in this sense that Beer's cybernetics lends itself to being used as a diagnostic tool (Beer, 1985). In doing so, it is suggested, challenges to effective organisation can be identified and overcome, not as prescriptions from outside but as bottom-up processes of self-organisation. Mutual aid groups are often organised anarchistically, with decentralised and democratic structures of decision making. In this respect, a cybernetic methodology that takes seriously this organisational form – that is, an anarchist cybernetics – may prove useful as one tool among others that groups can use. This complements research (e.g. Fernandes-Jesus et al., 2021) that explores group processes and other strategies deployed by mutual aid groups.

Undoubtedly this is not the only possible reading of cybernetics, nor even of Beer's cybernetics, and there are certainly more positivist approaches that aim to 'fix' organisations from the outside. A number of authors who point out the relationship between anarchism and mutual aid in fact characterise cybernetics as authoritarian and technocratic. Firth writes that '[w]hile cybernetic systems appear decentralised, they in fact rely on a totalitarian social consensus and compliance' (Preston and Firth, 2020: 89; see also, Ferguson, 2020). This aligns with critiques of cybernetics in critical management studies (e.g. Burrell and Morgan, 1979; Willmott, 1997) and elsewhere (Medina, 2011; Ulrich, 1981). Here, however, I posit that Beer's cybernetics can be understood as a form of 'anticontrol' (Pickering, 2010: 31), corresponding to anarchist organisational principles that embed autonomy and decentralisation in democratic structures.

In this I am inspired by Walker's (1991 [2020]) efforts (see also Espinosa et al., 2005) developing cybernetics for workers' cooperatives, as well as the anarchist engagements with cybernetics mentioned above. These take cybernetics as a lens through which groups can understand their own organisational dynamics, and they show how Beer's insights can aid groups in making democratic and participatory self-organisation more effective. An exploration of mutual aid during the COVID-19 pandemic can go further than existing work on anarchism and cybernetics because of the never-before-seen level of involvement in mutual aid groups and networks, offering a chance to analyse commonalities across a wide range of cases to uncover conditions for effective self-organisation. While more focussed, participatory research with specific groups would yield in-depth answers to some of the pressing questions of self-organisation, casting our gaze across multiple experiences is vital to defining the broader terms of how self-organised mutual aid operates. The sheer number of mutual aid groups and networks that were set up during the pandemic and the volume of easily accessible reflection on people's experiences with them (much of it published online) provide an opportunity to explore the tensions and challenges that emerge in mutual aid organising.

## Viable systems of mutual aid

In reading anarchist and related reflections on mutual aid and COVID-19 through an anarchist cybernetic lens, there is a strong convergence between understandings of mutual aid and some of the key features of cybernetics. While unsurprising that anarchist and anarchist-leaning authors talk about the rejection of strict hierarchy and the importance of autonomy, cybernetic themes of effectiveness, complexity – and even seemingly technical facets such as recursion in systems and the separation between operational and metasystem functions – come through strongly in these texts.

### *Autonomy and effectiveness*

In several anarchist reflections on mutual aid, autonomy was related directly to organisational effectiveness. Mutual aid groups are frequently described as relying on the autonomy of individuals and sub-groups to handle situations in their own niches – either geographical areas or specific tasks. A mutual aid organiser in Poland comments that '[i]n keeping with the guiding principles of mutual aid, decentralizing this movement into autonomous local chapters allows neighbors to take care of each other's needs at the community level'.<sup>1</sup> Another text quotes a nurse in the US: 'We're not indebted to any particular authority or institution about anyone's particular approach to fighting [COVID-19]. We can be flexible and pick and choose different tactics and strategies that work for us, and I think that's something that we're going to have to keep on doing if we're going to fight this'.<sup>2</sup> The same nurse links this effective autonomy to the health side of the COVID-19 crisis:

The people that are closest to the problem are closest to the solution. And I think if frontline healthcare workers such as nurses and patient care techs and janitors were more included in the discussion of what the preparation and the response to this would look like, we would be seeing a lot more efficacy in people being protected, and we would be seeing less people dying, ultimately.<sup>3</sup>

Beer calls for a 'major devolution of power' to communities along these lines (1974 [1993]:79) and how these texts highlight autonomy reflects his insistence that '[i]t is necessary that large areas of any such complex organization should in fact be autonomous' (Beer, 1981 [1994]: 103). Organised in this way, mutual aid groups are described as 'agile and responsive',<sup>4</sup> with 'the best aid programs [being] the ones initiated by those in need, enabling them to define for themselves what their needs and priorities are'.<sup>5</sup>

Effective self-organisation is so closely linked to autonomy because it enables mutual aid groups to cope with complexity. One author writes: 'because mutual aid networks are horizontally organized and guided by continually shifting collectives of those involved, they tend to be adaptable and dynamic, changing shape to accommodate the desires and needs of the local communities participating in them'.<sup>6</sup> Another states: 'Only a federal system rooted in autonomy and initiative from below would be able to change the complexities of this challenge'.<sup>7</sup> A number of the texts even mirrored the concept of balance or harmony in cybernetics discussed above, with an organiser interviewed in one saying that '[o]nly a life in harmony with ourselves, with our community and with nature will save us'<sup>8</sup> and another text stating that '[h]armony is gained by emancipation'.<sup>9</sup> Mutual aid self-organisation can be seen, then, as fulfilling the criteria of viable systems of managing complexity through autonomy, and finding an equilibrium whereby 'the internal dynamics of the organisation and the external niche change in a never-ending dance' (Espinosa et al., 2008: 640). Self-organised mutual aid groups operate by guaranteeing autonomy to their parts – individuals or sub-groups – and, therefore, are able to survive and even thrive in complex environments.

Another significant aspect of autonomy highlighted in several texts is the idea of redundancy of activities, whereby multiple activities with the same or overlapping aims and areas of responsibility operate at the same time. Rather than a waste of resources, this creates back-up structures within the organisation so that if one activity becomes overloaded another can step in. One text speaks of this also in terms of a method of maintaining horizontality: '[mutual aid] will often duplicate efforts, but this is worth it in order to keep a horizontal, non-bureaucratic structure'.<sup>10</sup> Beer (1981 [1994]) writes that redundancy is 'the prerequisite capability of any self-organizing system' (p. 233). Autonomy may mean a replication of activities, but this increases the organisation's ability to adapt.

### *Operations and metasystem coordination*

Some texts expand on organisational effectiveness in terms reminiscent of Beer's Viable System Model (VSM). The VSM highlights the functions Beer thought to be essential to effectiveness, from the autonomous basic activities of the organisation to coordination, planning and policy. The model is divided into two broad sections: operations – the basic activities that are autonomous – and the metasystem – coordination functions that help the autonomous parts work under an overarching framework. A structural hierarchy dividing these functions is unnecessary. Walker (1991 [2020]) highlights how coordination functions can be performed by the same people involved in the autonomous basic activities, in decision-making forums that either everyone in the organisation or delegates take part in. While there is little space here to expand on the detail of the VSM (for more in-depth accounts, see Beer, 1981 [1994], 1985; Espejo and Gill, 1997); Swann, 2018), the separation between operations and metasystem functions, and how this can be realised democratically, is paramount to further understanding self-organised mutual aid.

What can be considered as the operational units of mutual aid self-organisation are typically described as small and intimate, ranging from apartment complexes, neighbourhoods<sup>11</sup> and villages<sup>12</sup> to even smaller units of one or two streets<sup>13</sup> or 'hyper-local' groups of neighbours<sup>14</sup> and affinity groups: 'a small – there's never been really a number to it in my mind, but I would say maybe three to seven – group of people who all share some kind of common beliefs and interests and ideas of action, of how to operate in a situation that could be potentially really dangerous'.<sup>15</sup>

On metasystem functions, there is a recognition of the role of coordination, in contrast to assumptions about anarchism and individualism:

The alternative to embracing technocratic top-down solutions is not to celebrate individual freedom on an isolated basis. Rather, it is to invest our energy in becoming more capable of sharing information and coordinating activity [...]. Coordination and centralization are two different things.<sup>16</sup>

The coordination at work here involves deliberation and collective, democratic agreement.<sup>17</sup> Beyond sharing information and resources, one example of the kind of coordination mutual aid groups deployed is the setting of safety protocols in the COVID-19 context. One of the nurses quoted above argued for 'a set security protocol' and 'establishing a set of shared expectations to minimize risk'.<sup>18</sup> When people involved in mutual aid are putting themselves and others at some level of risk, for example by delivering groceries to a person's home, then a policy that helps limit the potential spread of the virus is an indispensable coordination function. Here, metasystem functions are shaped collectively and democratically. Another core metasystem function identified by the VSM is future planning. One text asked, 'what happens if local supply chains are disrupted?': '[o]ur approach is to forecast the coming need for supplies and services and to build accordingly'.<sup>19</sup> The idea of supply chain planning is not unique to this text, with others drawing on concepts such

as ‘distributed factories’<sup>20</sup> and ‘counter-logistics’<sup>21</sup> to describe this kind of coordination (Lachowicz and Donaghey, 2021) bring to this an attention to political economy in their focus on autonomist Marxism’s concept of the ‘social factory’.

Additionally, metasystem coordination is illustrated in how groups navigate the complex information landscapes of the COVID-19 pandemic, ‘parsing the torrent of information and recommendations for ourselves and asking what is actually suitable for our goals and priorities’.<sup>22</sup>

It’s actually a time of collectivity in these decisions, because there’s such a massive onslaught of information, and the only way that we can do this is if we check in together and try to bounce off of each other the best information we have that makes sense for where you’re at and what kinds of risks and what kinds of interactions you and your loved ones need to have to survive.<sup>23</sup>

Ultimately, this coordination should be kept to the minimum that is required to allow operational activities to carry on autonomously. One text comments: ‘[i]f we keep the scale small, we can keep the admin minimal, visible and accessible and keep a space where more people can get on with the mutual aid they came to the group to be part of’. This was summed up as ‘more local = less coordination = greater distribution of power’,<sup>24</sup> but does not, importantly, demand *no* coordination. The operations-metasystem relationship functions in mutual aid groups much like how Beer (1973) defined ‘effective freedom’: a balance between autonomy and coordination. The collective author of one text puts this particularly well, linking it to complexity: ‘[t]he ability to adapt to new circumstances and resilience can be increased with a combination of decentralization and coordination’.<sup>25</sup> In relation to both operational units and metasystem, the VSM’s role is to pinpoint functions that can be realised in organisations in different ways. While there may be variation between mutual aid groups and networks in how they are structured, if they are self-organising effectively they will be finding ways to actualise the same functions of operational autonomy and metasystem coordination.

### ***Opposition to hierarchy***

Groups based on autonomy and democracy is contrasted in many of these texts with hierarchical structures, such as local and national government and charity organisations. The latter are seen as having less capacity for dealing with complexity:

So why is it that mutual aid groups often work more effectively and in a timely manner as opposed to government-run programs and charities? In short, the day-to-day of mutual aid groups is much simpler. The top-down, hierarchical decision-making present in charities is deemed obsolete in mutual aid groups, which instead are shaped by volunteers and those actually receiving the services. Essentially, the bureaucracy and the not-so-metaphorical strings attached to several charities are removed.<sup>26</sup>

The hierarchical arrangement of coordination functions risks making the autonomous action required in complex or uncertain environments difficult, or indeed impossible.

One of the tensions identified in the texts is how hierarchy is imposed when mutual aid groups are co-opted by government agencies, people with positions in established political parties and charity organisations. One author, outlining how a group in the UK was being co-opted by local government representatives and senior political party officers, noted how the hierarchy that developed resulted in the group moving ‘much, much slower than any of the truly horizontal groups I saw operating’. Due to ‘legitimate concerns’ (the author uses the inverted commas around the phrase) about taking the time to do things properly, centralised control of communication, and a seeming-obsession with bureaucracy and compliance with legislation, the group was ‘failing to

actually help anyone, while other groups are already packing up deliveries and delivering effective mutual aid on a non-hierarchical, non-bureaucratic basis'. The author writes that '[s]pontaneous, grassroots action was never celebrated as a good thing, but as a spanner in the works of the machine they were trying to create'. The centralisation of metasystem coordination functions also involved dividing geographical areas along local government representation boundaries rather than splitting up 'organically as networks linked up and new ones were formed, or at least as part of some participatory process'. With these areas then having appointed coordinators and representatives, the author complains of 'a semiparliamentary system at play in this group'.<sup>27</sup>

While this is a single case, it touches on many of the issues frequently discussed in the literature regarding mutual aid being co-opted. This is a feature of other texts, such as one that described how 'the crisis has enflamed the state's most fundamental inherent jealousies, evidenced in attempts to co-opt and suppress the upwelling of community self-help initiatives'<sup>28</sup> and even one that suggested police forces in the UK were co-opting mutual aid groups for surveillance purposes.<sup>29</sup> This was something seen around the world, with one text mentioning 'state efforts [that] were piggy-backed on self-organized peer-to-peer networks'.<sup>30</sup> The overall of many texts on this theme is that mutual aid groups are at their most effective, in the words of one author,

without the limitations of accountability to a larger organization's business plan and/or stakeholder requirements. This gives mutual aid groups freedom that many nonprofits and state agencies do not have and allows mutual aid networks to form direct relationships with, and organize directly around the needs of, those they benefit.<sup>31</sup>

This is not, however, to claim that all texts advocated a clean division between mutual aid and hierarchical institutions, and a small number spoke to more carefully negotiated relationships with both local government and charity organisations, with mutual aid even providing people with an 'understanding of bureaucratic and gatekeeping demands [that] enables us to act as an intermediary for those in need and help them receive support'.<sup>32</sup>

Interestingly, some texts warn of hierarchical dynamics developing within self-organised mutual aid groups.<sup>33</sup> One even went so far as to say that '[d]espite the name, mutual aid groups lacked mutuality and firmly followed the charity model of kind-hearted philanthropists serving the sick and deserving poor',<sup>34</sup> while another observes that mutual aid groups were dominated by an 'air of martyrdom and white saviorism' along with 'deeply problematic ableist and capitalist underpinnings'.<sup>35</sup> These concerns illustrate a tension in mutual aid organising in relation to the creep towards hierarchical organisational structures and decision-making processes, as well as the encroachment of moralising discourses common to charitable giving (see Soden and Owen (2021) for an elaboration on these and related mutual aid 'dilemmas'). In organisational terms, autonomy might be eroded not only through co-optation but in ways not dissimilar to the 'tyranny of structurelessness' (Freeman, 1972) long acknowledged in non-hierarchical organising. Spade (2020b: 143–145) underscores the importance of participatory decision-making and consensus-based democracy in preventing this.

### ***Recursion and federation***

The 'pandemic communalism' proposed in one text,<sup>36</sup> which draws on libertarian theorist Bookchin's (1971) work on social organisation (e.g. on the application of Bookchin's ideas in Rojava during the pandemic, see also Sahin and Abbas, 2020), maps particularly well onto Beer's understanding of viable self-organisation. It concentrates on 'empowering communities to advance their own organizational capabilities' in ways that require a 'high degree of commitment, responsibility, and creativity'.<sup>37</sup> This acknowledges the importance for redundancy of activities noted

above, describing self-organised healthcare as ‘embedded in self-governed communities [that] aim to teach everyone first aid and medical skills to create greater redundancy of skills’. It also expresses the need for coordination not just within groups but also between them:

different initiatives of mutual aid and community organizing link up with each other and relate to other initiatives of popular self-organization in a coordinated way. Federating different initiatives in a mutually beneficial, strengthening, and meaningful way is the real art of Pandemic Communalism.

This idea of federation is a mainstay of anarchist politics, but it also appears in cybernetics, in the concept of recursion, according to which viable systems are nested within one another. In Beer’s VSM, each viable system is composed of smaller viable systems. Each autonomous operating unit has its own internal collections of basic activities that are themselves autonomous, as well as its own metasystem functions. So operating units will have within them autonomous sub-groupings or individuals. Likewise, our original viable system will itself be an autonomous operating unit of a larger viable system (Beer, 1981 [1994]: 228). In the context of mutual aid groups this recursive or federal model works through geographical or task-specific groups coming together and forming a larger entity, such as a network covering a greater area.

Other texts articulate this federal feature of anarchist politics in a similar way. One, for example, proposes federating affinity groups ‘in a network of mutual aid, so that if any group in the network gets overwhelmed, the others can come to their aid’.<sup>38</sup> In the proposal of pandemic communalism, this ‘transcends the limits of single relief efforts and starts to take shape as an alternative communal fabric of everyday life and to reveal its systemic character’,<sup>39</sup> thus tapping into the prefigurative vein in mutual aid self-organisation. Pandemic communalism is further described ‘as a federative and ever-expanding system of interdependencies, offer[ing] a framework in which different initiatives can connect with each other and coordinate their activities through popular self-management’.<sup>40</sup> This is echoed in another text, whose authors speak of ‘a more resilient and connected mutual aid fabric consisting of the weft of local street groups and the warp of the city-wide groups and projects’.<sup>41</sup>

## Anarchist technologies

Although not all anarchist reflections on mutual aid speak of self-organisation in terms so familiar to cybernetic accounts of effective organisation, a focus on these same organisational forms runs through a far larger number than I have drawn on explicitly in this article. Whether they articulate ideas of complexity or effectiveness, or whether self-organisation is broken down into autonomous operations and metasystem coordination, the texts are fairly uniform in their descriptions of how mutual aid can be organised along anarchist lines. Many also share a concern about groups being co-opted and hierarchies being imposed as a result, making it harder for people to do the basic activities of mutual aid. One of the nurses interviewed in one text described these form of self-organisation as ‘anarchist technologies’. They articulated this in relation to collective community decision making and its importance not simply to mutual aid but also to surviving the virus itself:

I think it's really crucial to recognize how important that is, both as an anarchist technology that preserves the freedom of the individual within the community, but also as something that really does have proven track records in reducing things like infections.<sup>42</sup>

The anarchist technologies this nurse talks about are not those that involve fabricated, material devices, but are the organisational tools that communities can construct to be more resilient and

adaptive in complex scenarios. The effectiveness of these anarchist technologies is foregrounded by Lachowicz and Donaghey (2021: 9) in their discussion of Scrub Hub:

[G]roups made efforts to bring health workers into the production process by centring their designs around the immediate needs that the workers reported [ . . . ] or by circumventing the institutional scrub distribution hierarchy which left many social care providers ill-equipped.

Diagnosing systems according to the VSM is intended to be a participatory process. Resources for this exist, such as Beer's (1985) book *Diagnosing the System for Organizations* and Walker's (1991 [2020]) guide for using the VSM in co-operatives. For Walker, the starting point is defining the contours of the organisation in focus, highlighting the different parts of the organisation, identifying levels of recursion, and clarifying the organisation's purpose. Following Beer, Walker underlines the importance of honesty about what the organisation actually does, balancing this realism with what the people involved want the organisation to do. As Walker (1991 [2020]: n.p.) puts it, 'It's of no use having a purpose of "Bringing down the Capitalist Monster" if what you actually do is sit around and drink coffee all day. What matters is what actually happens'. This is followed by people collectively drawing out (literally, on large sheets of paper) the various systemic functions of the organisation, such as: the operational and metasystem activities; the niches different parts of the organisation work in; conflict resolution mechanisms; interaction and communication channels; future-planning and strategy; and policy. Those involved can gain a better understanding of what autonomy means in their specific context and how it can help them achieve effective self-organisation. A diagnostic process like this would happen over the course of one or more participatory workshops, depending on the size of the organisation and the scale of the diagnosis deemed necessary. This approach has been influential in permaculture movements and in explicitly anarchist methods of group forming and strategy development (e.g. Kinna et al., forthcoming 2022).

The discussion presented here, while not an example of this kind of diagnostic, suggests that there is a great potential in using the VSM in mutual aid groups and networks. The anarchist inflection I have given here helps frame this in relation to both democracy and effectiveness, but it also brings to the fore tensions involved in self-organised mutual aid. As well as the complicated issue of charity discussed briefly above, and the noted creep towards hierarchy and centralised coordination, there are other possible limitations of mutual aid self-organisation that I am unable to give due attention to here. One of the aims of a VSM diagnosis, however, is to allow participants to find these tensions and limitations themselves, and to develop collective responses to them. Further participatory research would need to go deeper, to explore the challenges such organisations will face and the conditions for success. This could involve running a VSM diagnosis alongside an attention to political economic factors, such as established structures of social reproduction and histories and presents of domination and exploitation (see e.g. Lachowicz and Donaghey, 2021; Milligan, 2020; Soden and Owen, 2021). While this article may serve a purpose in homing in on some key areas of concern, taking up the call for academic and intellectual involvement in mutual aid (Grubacic and Graeber, 2020; O'Dwyer et al., 2020) ought to be a participatory processes of co-production. Members of mutual aid groups must create their own diagnosis of what makes their organisation effective and what risks undermining it. Integrating this into an anarchist politics also requires consideration of how mutual aid self-organisation can go beyond effective stability in complex environments and be part of bringing about wider social transformation (Soden and Owen, 2021).

As discussed throughout this piece, mutual aid self-organisation takes place against a backdrop of state policy, local and national government action, and the power of charities and corporate

actors. A focus on the viability of mutual aid groups and networks should not occlude an appreciation of the sometimes-positive role of the state and related agencies. While at times government intervention in the pandemic was wanting, in many places financial and other forms of support from the state were undoubtedly a much-needed lifeline. More directly, the centralised international coordination of vaccination development, production and distribution by the World Health Organization (WHO) has perhaps shown the immense value of not only the national state but the idea of world government. In contrast, however, one could point towards the ‘everyday communism’ (Graeber, 2011) of scientific cooperation that made COVID-19 vaccines possible (Rahman-Shepherd et al., 2021; Swaminathan, 2020). Coordination of the sort provided by the WHO does not necessitate top-down hierarchy. While a full discussion is required, it could be argued that the coordination of scientific efforts during the pandemic owe more to the kind of self-organisation anarchist cybernetics highlights than centralised, hierarchical organisation. Bjork-James and Munsen (2014) outline an anarchist response to the 2013–2016 Ebola outbreak along these lines, writing that ‘health care systems, scientific research, and community systems of care reflect anarchist traditions of mutual aid, free association, and care for all people regardless of status or class’.

The global inequality in vaccine distribution may in fact cast doubt upon claims about the indispensable role of centralisation and government. At time of writing in mid-January 2022, less than 12% of the populations of low-income countries have received at least one dose of a vaccine, compared to almost 68% in high income countries (UNDP, 2021). This inequality can be understood as the failure of a charitable approach in contrast to one grounded in solidarity (Brown, 2021), and the voluntary collaboration and cooperation manifest in the WHO has in many ways been undermined by state interests (Bump et al., 2021).

Acknowledging the challenges centralised vaccination production and distribution faced during the pandemic, there have been calls for ‘platform vaccine technologies, acceleration of flexible manufacturing capabilities, [and] flexible distributed manufacturing technologies’ (Sell et al., 2021: 1668). Some have proposed ‘an open and decentralized platform model, which connects various actors and enables them to involve, conduct, and track the vaccination process’ (Radonjic-Simic et al., 2021: 23). These models, it must be noted, are proposed to increase the effectiveness of a state-organised or otherwise centralised vaccination programme. Nonetheless, they do suggest that an anarchistic vaccination strategy – particularly one supported by an appropriate IT infrastructure (Ng et al., 2021) – should not be ruled out as unrealistic without due consideration. As Bjork-James and Munsen (2014) note, public health crises like COVID-19, Ebola and HIV/Aids raise a challenge that anarchism must rise to meet:

What organizing mechanisms can we put in place to make [grassroots] efforts function at the scale of the problems they confront? [. . .] If the scale of liberatory institutions is limited, how do we instill a capacity to multiply such institutions rapidly in response to urgent needs? How might we fund science, including medical research, and mass public services outside the current profit-driven system?

If autonomous, self-organised mutual aid has the potential to provide effective responses to public health and other crises, such as looming environmental catastrophe, then those seeking solutions ought to consider seriously the radical promise of anarchism.

## **Acknowledgements**

The author would like to thank Gavin Brown, Janet Brown, David Harvie and Ruth Kinna who kindly commented on early drafts of this article and the reviewers and associate editor for their constructive and invaluable suggestions and patience in reviewing the article.

## Funding

The author disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the Leverhulme Trust [grant number ECF-2017-596] at an early stage although the empirical research process itself received no financial support.

## ORCID iD

Thomas Swann  <https://orcid.org/0000-0001-9997-6166>

## Notes

1. [crimethinc.com/2020/08/25/doing-what-state-and-market-cannot-the-visible-hand-how-a-mutual-aid-network-serves-tens-of-thousands-in-poland](http://crimethinc.com/2020/08/25/doing-what-state-and-market-cannot-the-visible-hand-how-a-mutual-aid-network-serves-tens-of-thousands-in-poland)
2. [theanarchistlibrary.org/library/crimethinc-interview-with-two-anarchist-nurses-in-new-orleans](http://theanarchistlibrary.org/library/crimethinc-interview-with-two-anarchist-nurses-in-new-orleans)
3. [theanarchistlibrary.org/library/crimethinc-interview-with-two-anarchist-nurses-in-new-orleans](http://theanarchistlibrary.org/library/crimethinc-interview-with-two-anarchist-nurses-in-new-orleans)
4. [cooperation.town/from-mutual-aid-to-food-co-ops/](http://cooperation.town/from-mutual-aid-to-food-co-ops/)
5. [theanarchistlibrary.org/library/crimethinc-the-anarchists-versus-the-plague](http://theanarchistlibrary.org/library/crimethinc-the-anarchists-versus-the-plague)
6. [blog.aponline.org/2021/01/25/solidarity-not-charity-mutual-aids-an-archic-history/](http://blog.aponline.org/2021/01/25/solidarity-not-charity-mutual-aids-an-archic-history/)
7. [theanarchistlibrary.org/library/anarcho-anarchy-and-the-coronavirus](http://theanarchistlibrary.org/library/anarcho-anarchy-and-the-coronavirus)
8. [theanarchistlibrary.org/library/komun-academy-mutual-aid-and-solidarity-against-covid-19](http://theanarchistlibrary.org/library/komun-academy-mutual-aid-and-solidarity-against-covid-19)
9. [theanarchistlibrary.org/library/sissy-doutsiou-tasos-sagris-coronavirus-and-mutual-aid](http://theanarchistlibrary.org/library/sissy-doutsiou-tasos-sagris-coronavirus-and-mutual-aid)
10. [freedomnews.org.uk/2020/03/21/mutual-aid-in-london-a-cautionary-tale/](http://freedomnews.org.uk/2020/03/21/mutual-aid-in-london-a-cautionary-tale/)
11. [theanarchistlibrary.org/library/jean-desta-is-another-world-possible](http://theanarchistlibrary.org/library/jean-desta-is-another-world-possible); [theanarchistlibrary.org/library/adam-weaver-coronavirus-stories](http://theanarchistlibrary.org/library/adam-weaver-coronavirus-stories)
12. [theanarchistlibrary.org/library/komun-academy-mutual-aid-and-solidarity-against-covid-19](http://theanarchistlibrary.org/library/komun-academy-mutual-aid-and-solidarity-against-covid-19)
13. [www.theguardian.com/world/2020/may/14/mutual-aid-coronavirus-pandemic-rebecca-solnit](http://www.theguardian.com/world/2020/may/14/mutual-aid-coronavirus-pandemic-rebecca-solnit); [www.brightonmutualaid.co.uk/wp-content/uploads/2020/07/MA-Newsletter-Issue-1-Online-Copy.pdf](http://www.brightonmutualaid.co.uk/wp-content/uploads/2020/07/MA-Newsletter-Issue-1-Online-Copy.pdf)
14. [www.urbanleague.ca/new-blog/2020/5/18/mutual-aid-asking-is-as-important-as-giving](http://www.urbanleague.ca/new-blog/2020/5/18/mutual-aid-asking-is-as-important-as-giving)
15. [theanarchistlibrary.org/library/crimethinc-interview-with-two-anarchist-nurses-in-new-orleans](http://theanarchistlibrary.org/library/crimethinc-interview-with-two-anarchist-nurses-in-new-orleans)
16. [theanarchistlibrary.org/library/crimethinc-and-after-the-virus-the-perils-ahead](http://theanarchistlibrary.org/library/crimethinc-and-after-the-virus-the-perils-ahead)
17. [freedomnews.org.uk/2020/03/21/mutual-aid-in-london-a-cautionary-tale/](http://freedomnews.org.uk/2020/03/21/mutual-aid-in-london-a-cautionary-tale/)
18. [theanarchistlibrary.org/library/crimethinc-interview-with-two-anarchist-nurses-in-new-orleans](http://theanarchistlibrary.org/library/crimethinc-interview-with-two-anarchist-nurses-in-new-orleans)
19. [theanarchistlibrary.org/library/woodbine-from-mutual-aid-to-dual-power-in-the-state-of-emergency](http://theanarchistlibrary.org/library/woodbine-from-mutual-aid-to-dual-power-in-the-state-of-emergency)
20. [www.theguardian.com/world/2020/may/14/mutual-aid-coronavirus-pandemic-rebecca-solnit](http://www.theguardian.com/world/2020/may/14/mutual-aid-coronavirus-pandemic-rebecca-solnit)
21. [theanarchistlibrary.org/library/jean-desta-is-another-world-possible](http://theanarchistlibrary.org/library/jean-desta-is-another-world-possible)
22. [theanarchistlibrary.org/library/anonymous-ask-a-different-question](http://theanarchistlibrary.org/library/anonymous-ask-a-different-question)
23. [theanarchistlibrary.org/library/crimethinc-interview-with-two-anarchist-nurses-in-new-orleans](http://theanarchistlibrary.org/library/crimethinc-interview-with-two-anarchist-nurses-in-new-orleans)
24. [www.urbanleague.ca/new-blog/2020/5/18/mutual-aid-asking-is-as-important-as-giving](http://www.urbanleague.ca/new-blog/2020/5/18/mutual-aid-asking-is-as-important-as-giving)
25. [theanarchistlibrary.org/library/jean-desta-is-another-world-possible](http://theanarchistlibrary.org/library/jean-desta-is-another-world-possible)
26. [www.architecturaldigest.com/story/how-to-help-your-local-community-in-times-of-crisis-and-beyond](http://www.architecturaldigest.com/story/how-to-help-your-local-community-in-times-of-crisis-and-beyond)
27. [freedomnews.org.uk/2020/03/21/mutual-aid-in-london-a-cautionary-tale/](http://freedomnews.org.uk/2020/03/21/mutual-aid-in-london-a-cautionary-tale/)
28. [anarchiststudies.noblogs.org/article-callous-incompetence-corrupt-cronyism-jealous-repression-one-year-on-what-is-the-covid-state/](http://anarchiststudies.noblogs.org/article-callous-incompetence-corrupt-cronyism-jealous-repression-one-year-on-what-is-the-covid-state/)
29. [theanarchistlibrary.org/library/the-road-to-hell-is-paved-with-good-intentions](http://theanarchistlibrary.org/library/the-road-to-hell-is-paved-with-good-intentions)
30. [theanarchistlibrary.org/library/kevin-carson-pandemics-the-state-as-cure-or-cause](http://theanarchistlibrary.org/library/kevin-carson-pandemics-the-state-as-cure-or-cause)
31. [blog.aponline.org/2021/01/25/solidarity-not-charity-mutual-aids-an-archic-history/](http://blog.aponline.org/2021/01/25/solidarity-not-charity-mutual-aids-an-archic-history/)
32. [anarchiststudies.noblogs.org/article-experiences-of-mutual-aid-organising-in-glasgow-and-brighton/](http://anarchiststudies.noblogs.org/article-experiences-of-mutual-aid-organising-in-glasgow-and-brighton/)
33. [freedomnews.org.uk/2020/04/14/mutual-aid-groups-five-reflections-for-activists-going-local-for-the-first-time/](http://freedomnews.org.uk/2020/04/14/mutual-aid-groups-five-reflections-for-activists-going-local-for-the-first-time/)
34. [cooperation.town/from-mutual-aid-to-food-co-ops/](http://cooperation.town/from-mutual-aid-to-food-co-ops/)
35. [theanarchistlibrary.org/library/mutual-aid-dispatch](http://theanarchistlibrary.org/library/mutual-aid-dispatch)
36. [theanarchistlibrary.org/library/jean-desta-is-another-world-possible](http://theanarchistlibrary.org/library/jean-desta-is-another-world-possible)

37. [theanarchistlibrary.org/library/jean-desta-is-another-world-possible](http://theanarchistlibrary.org/library/jean-desta-is-another-world-possible)
38. [theanarchistlibrary.org/library/crimethinc-surviving-the-virus](http://theanarchistlibrary.org/library/crimethinc-surviving-the-virus)
39. [theanarchistlibrary.org/library/jean-desta-is-another-world-possible](http://theanarchistlibrary.org/library/jean-desta-is-another-world-possible)
40. [theanarchistlibrary.org/library/jean-desta-is-another-world-possible](http://theanarchistlibrary.org/library/jean-desta-is-another-world-possible)
41. [www.brightonmutualaid.co.uk/wp-content/uploads/2020/07/MA-Newsletter-Issue-1-Online-Copy.pdf](http://www.brightonmutualaid.co.uk/wp-content/uploads/2020/07/MA-Newsletter-Issue-1-Online-Copy.pdf)
42. [theanarchistlibrary.org/library/crimethinc-interview-with-two-anarchist-nurses-in-new-orleans](http://theanarchistlibrary.org/library/crimethinc-interview-with-two-anarchist-nurses-in-new-orleans)

## References

- Apolito, A. (2020) 'The Problem of Scale in Anarchism and the Case for Cybernetic Communism'. Retrieved May 7, 2021, from c4ss.org/content/52970
- Beacham, J. and Willatt, A. (2020) 'New Foodscapes', in M. Parker (ed.) *Life After COVID-19. The Other Side of Crisis*, pp. 73–82. Bristol: Bristol University Press.
- Beer, S. (1973) 'Fanfare for Effective Freedom. *Cybernetic Praxis in Government*'. Retrieved May 7, 2021, from [https://kybernetik.ch/dwn/Fanfare\\_for\\_Freedom.pdf](https://kybernetik.ch/dwn/Fanfare_for_Freedom.pdf)
- Beer, S. (1974 [1993]) *Designing Freedom*. Toronto, ON: Anansi.
- Beer, S. (1981 [1994]) *Brain of the Firm*, 2nd ed. Chichester: Wiley.
- Beer, S. (1985) *Diagnosing the System for Organizations*. Chichester: Wiley.
- Beer, V. and Leonard, A. (2019) *Stafford Beer. The Father of Management Cybernetics*. Altendorf, Switzerland: Fondation Oroborus.
- Bjork-James, C. and Munsen, C. (2014) 'An Anarchist Response to Ebola. *Visions and Questions*'. Retrieved December 17, 2021, from <https://theanarchistlibrary.org/library/carwil-bjork-james-chuck-munson-an-anarchist-response-to-ebola>
- Bookchin, M. (1971) *Post-Scarcity Anarchism*. Berkeley, CA: Ramparts.
- Brown, S. (2021) 'Covid Vaccine Apartheid and the Failure of Global Cooperation'. In: *The Loop*. Retrieved November 25, 2021, from [theloop.ecpr.eu/covid-vaccine-apartheid-and-the-failure-of-global-cooperation](https://theloop.ecpr.eu/covid-vaccine-apartheid-and-the-failure-of-global-cooperation)
- Bump, J. B., Friberg, P. and Harper, D. R. (2021) 'International Collaboration and Covid-19: What are We Doing and Where are We Going?', *BMJ* 372: 180.
- Burrell, G. and Morgan, G. (1979) *Sociological Paradigms and Organisational Analysis*. London: Heinemann.
- Colson, D. (2019) *A Little Philosophical Lexicon of Anarchism From Proudhon to Deleuze* (trans. J. Cohn). Colchester: Minor Compositions.
- COVID-19 Mutual Aid UK Groups (2020) 'COVID-19 Mutual Aid UK Groups'. Retrieved April 24, 2021, from [docs.google.com/spreadsheets/d/18P898HWbdR5ouW61sAxW\\_iB13yiZlgJu0nSmepn6NwM/htmlview#](https://docs.google.com/spreadsheets/d/18P898HWbdR5ouW61sAxW_iB13yiZlgJu0nSmepn6NwM/htmlview#)
- Disalvo, J. (2015) 'Occupy Wall Street: Creating a Strategy for a Spontaneous Movement', *Science and Society* 79(2): 264–87.
- Donaghey, J. (2020) "It's Going to be Anarchy" (Fingers Crossed): Anarchist Analyses of the Coronavirus/COVID-19 Pandemic Crisis'. In: *Anarchist Studies Blog*. Retrieved May 7, 2021, from [anarchiststudies.noblogs.org/article/its-going-to-be-anarchy-fingers-crossed-anarchist-analyses-of-the-coronavirus-covid-19-pandemic-crisis/](https://anarchiststudies.noblogs.org/article/its-going-to-be-anarchy-fingers-crossed-anarchist-analyses-of-the-coronavirus-covid-19-pandemic-crisis/)
- Duda, J. (2013) 'Cybernetics, Anarchism and Self-Organisation', *Anarchist Studies* 21(1): 52–72.
- Espejo, R. (2021) 'Covid-19', *Systems Research and Behavioral Science* 38(1): 184–6.
- Espejo, R. and Gill, A. (1997) 'The Viable System Model as a Framework for Understanding Organizations'. Retrieved April 14, 2022, from <http://syncho.com/documents/VSMREandTG.pdf>
- Espinosa, A. (2021) 'Sustainable Self Governance: Alarms From COVID19'. Retrieved May 7, 2021, from [youtu.be/5NCMgNmI3h8](https://youtu.be/5NCMgNmI3h8)
- Espinosa, A., Harnden, R. and Walker, J. (2005) 'Cybernetics and Participation: From Theory to Practice', *Systemic Practice and Action Research* 17(6): 573–89.
- Espinosa, A., Harnden, R. and Walker, J. (2008) 'A Complexity Approach to Sustainability – Stafford Beer Revisited', *European Journal of Operational Research* 187: 636–51.
- Ferguson, K. E. (2020) 'Anthropocene Alerts in the Covid-Scene', *New Political Science* 42(4): 631–6.

- Fernandes-Jesus, M., Mao, G., Ntontis, E., et al. (2021) 'More Than a COVID-19 Response: Sustaining Mutual Aid Groups During and Beyond the Pandemic', *Frontiers in Psychology* 12: 716202.
- Freeman, J. (1972) 'The Tyranny of Structurelessness'. Retrieved May 7, 2021, from www.jofreeman.com/joreen/tyranny.htm
- Gordon, U. (2018) 'Prefigurative Politics Between Ethical Practice and Absent Promise', *Political Studies* 66(2): 521–37.
- Graeber, D. (2011) *Debt: The First 5000 Years*. New York, NY: Melville House.
- Gross, J. (2020a) 'Stafford Beer: Eudemony, Viability and Autonomy'. *Red Wedge Magazine*. Retrieved May 7, 2021, from www.redwedge magazine.com/online-issue/stafford-beer-eudemony
- Gross, J. (2020b) 'Beer's Principles for Good Government in the COVID-19 Crisis'. Retrieved May 7, 2021, from vsru.org/articles/5-principles-covid.html
- Grubacic, A. and Graeber, D. (2020) 'Introduction to Mutual Aid. An Illuminated Factor of Evolution'. Retrieved May 7, 2021, from theanarchistlibrary.org/library/andrey-grubacic-david-graeber-introduction-to-mutual-aid
- Jun, N. and Lance, M. (2020) 'Anarchist Responses to a Pandemic: The COVID-19 Crisis as a Case Study in Mutual Aid', *Kennedy Institute of Ethics Journal* 30(3–4): 361–78.
- Kaba, M. (2021) *We Do This Til' We're Free. Abolitionist Organizing and Transformative Justice*. Chicago, IL: Haymarket Books.
- Kinna, R. (2016) *Kropotkin. Reviewing the Classical Anarchist Tradition*. Edinburgh: Edinburgh University Press.
- Kinna, R., Prichard, A., Swann, T. and Seeds for Change (Forthcoming 2022) *Anarchic Agreements. A Field Guide to Collective Organizing*. Oakland: PM Press.
- Kokkinidis, G. (2015) 'Spaces of Possibilities: Workers' Self-Management in Greece', *Organization* 22(6): 847–71.
- Krentzman, A. R. (2021) 'Helping Clients Engage With Remote Mutual Aid for Addiction Recovery During COVID-19 and Beyond', *Alcoholism Treatment Quarterly* 39(3): 348–65.
- Kropotkin, P. (1898) 'Anarchism: Its Philosophy and Ideal'. In: *The Anarchist Library*. Retrieved May 7, 2021, from theanarchistlibrary.org/library/petr-kropotkin-anarchism-its-philosophy-and-ideal
- Kropotkin, P. (1902) 'Mutual Aid: A Factor in Evolution'. Retrieved May 7, 2021, from theanarchistlibrary.org/library/petr-kropotkin-mutual-aid-a-factor-of-evolution
- Lachowicz, K. and Donaghey, J. (2021) 'Mutual Aid Versus Volunteerism: Autonomous PPE Production in the Covid-19 Pandemic Crisis', *Capital & Class*. Published online before print November 21, doi: 10.1177/03098168211057686.
- Lassl, W. (2020) 'Covid-19: Why Did the Virus Take Us by Surprise?' Retrieved May 7, 2021, from www.researchgate.net/publication/342735281\_Covid-19\_why\_did\_the\_virus\_take\_us\_by\_surprise\_What\_we\_can\_learn\_from\_Covid-19\_about\_the\_control\_of\_systems\_and\_organizations\_based\_on\_the\_Viable\_System\_Model
- McEwan, J. D. (1963) 'Anarchism and the Cybernetics of Self-Organising Systems', *Anarchy* 31: 270–83.
- McLafferty Bell, F. (2021) 'Amplified Injustices and Mutual Aid in the COVID-19 Pandemic', *Qualitative Social Work* 20(1–2): 410–5.
- Manski, R. (2013) 'Beyond the Box. The Occupy Movement's New Vision for Disaster Relief', *The Humanist* 73(1): 6–8.
- Mao, G., Fernandes-Jesus, M., Ntontis, E., et al. (2021) 'What Have We Learned About COVID-19 Volunteering in the UK? A Rapid Review of the Literature', *BMC Public Health* 21(1): 1470–84.
- Mead, M. (1968) 'Cybernetics of Cybernetics', in H. von Foerster (ed.) *Purposive Systems. Proceedings of the First Annual Symposium of the American Society for Cybernetics*, pp. 1–11. New York and Washington: Spartan Books.
- Medina, E. (2011) *Cybernetics Revolutionaries. Technology and Politics in Allende's Chile*. Cambridge, MA: MIT Press.
- Melville, E. and Wilkinson, H. (2020) 'From Conflict to Collaboration', in M. Parker (ed.) *Life After COVID-19. The Other Side of Crisis*, pp. 31–42. Bristol: Bristol University Press.

- Milligan, R. T. (2020) 'Covid-19 and Social Reproduction'. In: *Anarchist Studies Blog*. Retrieved May 7, 2021, from anarchiststudies.noblogs.org/article-covid-19-and-social-reproduction/
- Ng, W. Y., Tan, T. E., Movva, P. V. H., et al. (2021) 'Blockchain Applications in Health Care for COVID-19 and Beyond: A Systematic Review', *Lancet Digital Health* 3: e819–29.
- O'Dwyer, E. J., Beascochea-Seguí, N. and Souza, L. S. (2020) 'Rehearsing Post-Covid-19 Citizenship: Social Representations and Social Practices in UK Mutual Aid Groups'. Retrieved May 7, 2021, from psyarxiv.com/v84mr/
- Parker, M. (ed.) (2020) *Life After COVID-19. The Other Side of Crisis*. Bristol: Bristol University Press.
- Parker, M., Cheney, G., Fournier, V., et al. (2014) 'The Question of Organization: A Manifesto for Alternatives', *Ephemera: Theory & Politics in Organization* 14(4): 623–38.
- Pickering, A. (2010) *The Cybernetic Brain. Sketches of Another Future*. Chicago, IL: The University of Chicago Press.
- Preston, J. and Firth, R. (2020) *Coronavirus, Class and Mutual Aid in the United Kingdom*. Cham: Palgrave McMillan.
- Radonjic-Simic, M., Mahrt, C., Niemand, S., et al. (2021) 'Decentralized Open Platform for Vaccination—A German Example: COVID-19-Vacc', *Journal of Open Innovation* 7(3): 186.
- Rahman-Shepherd, A., Clift, C., Ross, E., et al. (2021) 'Solidarity in Response to the COVID-19 Pandemic. Has the World Worked Together to Tackle the Coronavirus?' *Chatham House*. Retrieved November 25, 2021, from www.chathamhouse.org/2021/07/solidarity-response-covid-19-pandemic/about-authors
- Reinecke, J. (2018) 'Social Movements and Prefigurative Organizing: Confronting Entrenched Inequalities in Occupy London', *Organization Studies* 39(9): 1299–321.
- Sahin, E. and Abbas, K. (2020) 'Communal Lifeboat: Direct Democracy in Rojava (NE Syria)', in M. Sitrin and S. Colectiva (eds) *Pandemic Solidarity. Mutual Aid During the COVID-19 Crisis*, pp. 3–17. London: Pluto Press.
- Samudzi, Z. and Anderson, W. C. (2018) *As Black as Resistance. Finding the Conditions for Liberation*. Chico, CA: AK Press.
- Sell, T. K., Gastfriend, D., Watson, M., et al. (2021) 'Building the Global Vaccine Manufacturing Capacity Needed to Respond to Pandemics', *Vaccine* 39(12): 1667–9.
- Shachar, I. Y. (2014) 'The White Management of "Volunteering": Ethnographic Evidence From an Israeli NGO', *Voluntas* 25: 1417–40.
- Sitrin, M. (2006) *Horizontalism: Voices of Popular Power in Argentina*. Oakland, CA: AK Press.
- Sitrin, M. and Colectiva Sembrar (eds) (2020) *Pandemic Solidarity. Mutual Aid During the COVID-19 Crisis*. London: Pluto Press.
- Soden, R. and Wood Owen, E. (2021) 'Dilemmas in Mutual Aid: Lessons for Crisis Informatics From an Emergent Community Response to the Pandemic', *Proceedings of the ACM on Human-Computer Interaction* 5(2): 1–19.
- Solnit, R. (2009) *A Paradise Built in Hell. The Extraordinary Communities That Arise in Disaster*. New York: Penguin Books.
- Spade, D. (2020a) *Mutual Aid. Building Solidarity During This Crisis (And the Next)*. London: Verso.
- Spade, D. (2020b) 'Solidarity Not Charity', *Social Text* 38(1): 131–51.
- Springer, S. (2020) 'Caring Geographies: The COVID-19 Interregnum and a Return to Mutual Aid', *Dialogues in Human Geography* 10(2): 112–5.
- Swaminathan, S. (2020) 'The WHO's Chief Scientist on a Year of Loss and Learning', *Nature* 588: 583–5.
- Swann, T. (2018) 'Towards an Anarchist Cybernetics: Stafford Beer, Self-Organisation and Radical Social Movements', *Ephemera: Theory & Politics in Organization*, 18(3): 427–456.
- Swann, T. (2020a) 'Cybernetics and Mutual Aid in the Coronavirus Crisis'. In: *Anarchist Studies Blog*. Retrieved April 14, 2022, from anarchiststudies.noblogs.org/article-the-anarchist-cybernetics-of-mutual-aid-self-organisation-in-and-beyond-the-coronavirus-crisis/
- Swann, T. (2020b) *Anarchist Cybernetics. Control and Communication in Radical Politics*. Bristol: Bristol University Press.
- Ticktin, M. (2020) 'Building a Feminist Commons in the Time of COVID-19'. In: *Signs*. Retrieved May 7, 2021, from signsjournal.org/covid/ticktin/

- Travlou, P. (2021) 'Kropotkin-19: A Mutual Aid Response to COVID-19 in Athens', *Design and Culture* 13(1): 65–78.
- Ulrich, W. (1981) 'A Critique of Pure Cybernetic Reason: The Chilean Experience With Cybernetics', *Journal of Applied Systems Analysis* 8: 33–59.
- UNDP (2021) 'Global Dashboard for Vaccine Equity'. Retrieved November 25, 2021, from data.undp.org/vaccine-equity
- Van de Sande, M. (2015) 'Fighting With Tools: Prefiguration and Radical Politics in the Twenty-First Century', *Rethinking Marxism* 27(2): 177–94.
- Von Glaserfeld, E. (1991) *Radical Constructivism in Mathematics Education*. Dordrecht: Kluwer.
- Walker, J. (1991 [2020]) *The VSM Guide*, 3rd edn. Retrieved April 14, 2022, from <http://vsmg.lrc.org.uk/>
- Walter, W. G. (1963) 'The Development and Significance of Cybernetics', *Anarchy* 25: 75–89.
- Ward, C. (1966) 'Anarchism as a Theory of Organization'. In: *The Anarchist Library*. Retrieved May 7, 2021, from [theanarchistlibrary.org/library/colin-ward-anarchism-as-a-theory-of-organization](http://theanarchistlibrary.org/library/colin-ward-anarchism-as-a-theory-of-organization)
- Welch, A. (2021) 'Root Networks of Radical Care: Mutual Aid in Minneapolis' Abolitionist Movement', *Tapestries* 10(1): 1–9.
- White, R. J. and Williams, C. (2014) 'Anarchist Economic Practices in a "Capitalist" Society: Some Implications for Organisation and the Future of Work', *Ephemera: Theory & Politics in Organization* 14(4): 951–75.
- Willmott, H. (1997) 'Management and Organization Studies as Science?', *Organization* 4(3): 309–44.
- Zebrowski, C. and Sage, D. (2017) 'Organising Community Resilience: An Examination of the Forms of Sociality Promoted in Community Resilience Programmes', *Resilience* 5(1): 44–60.

## Author biography

Thomas Swann is a Lecturer in Political Theory at Loughborough University researching the connections between anarchist and cybernetic theories of organisation and their application to co-operatives and other alternative forms of organising. His book, *Anarchist Cybernetics. Control and Communication in Radical Politics*, was published by Bristol University Press in 2020.