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Health inequalities, fundamental causes and power: towards the practice of good theory

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Abstract Reducing health inequalities remains a challenge for policy makers across the world. Beginning from Lewin's famous dictum that "there is nothing as practical as a good theory", this paper begins from an appreciative discussion of 'fundamental cause theory', emphasizing the elegance of its theoretical encapsulation of the challenge, the relevance of its critical focus for action, and its potential to support the practical mobilisation of knowledge in generating change. Moreover, it is argued that recent developments in the theory, provide an opportunity for further theoretical development focused more clearly on the concept of *power* (Dickie *et al.* 2015). A critical focus on power as the *essential* element in maintaining, increasing or reducing social and economic inequalities – including health inequalities – can both enhance the coherence of the theory, and also enhance the capacity to challenge the roots of health inequalities at different levels and scales. This paper provides an initial contribution by proposing a framework to help to identify the most important sources, forms and positions of power, as well as the social spaces in which they operate. Subsequent work could usefully test, elaborate and adapt this framework, or indeed ultimately replace it with something better, to help focus actions to reduce inequalities.

Keywords: power, health inequalities, fundamental causes, democracy, health

Introduction

Health inequalities, as defined in this article and in many others, are the systematic, avoidable and unfair differences in health outcomes that can be observed between populations, between social groups within the same population or as a gradient across a population ranked by social position (McCartney *et al.* 2019a). They are not variations or differences that can be understood to result from 'natural' phenomena such as age, as might be the case with differences in the prevalence of dementia across age groups (something we describe as 'health inequities'). However, the terminology can be confusing because the terms 'health inequities' and 'health inequalities' are used in precisely the opposite way by many researchers, particularly in North America (McCartney *et al.* 2019b).

How and why health inequalities arise within populations has been extensively discussed, particularly since the publication of the Black Report in the UK (Black *et al.* 1988). The main theories identified by Black – namely artefact, selection, cultural-behavioural and structural – have subsequently been elaborated and refined, but the central conclusion that inequalities in health are caused by underlying structural inequalities in societies remains intact (CSDH 2008, Krieger 2001, Krieger 2011, McCartney *et al.* 2013, Navarro *et al.* 2006, Solar and Irwin 2007). These structural inequalities operate through a wide range of social and economic pathways, including employment, income, housing and education to generate unequal health outcomes (Solar and Irwin 2007). Despite greater acceptance of this evidence (CSDH 2008), health inequalities have persisted. Thus, health inequalities pose a profound challenge to policymakers and researchers, and indeed to whole societies, across the world.

This challenge has multiple dimensions, including those pertaining to politics, policy and practice – and also to theory. Theoretically, perhaps the most striking contribution has been the view, propounded initially by Link and Phelan (1995, p.80), that 'social conditions such as socioeconomic status and social support' should be seen as constituting 'fundamental causes' of health inequalities. Indeed, Freese and Lutfey (2011) have referred to 'fundamental causality' as an 'animating concept for medical sociology'.

Beginning from the dictum that 'there is nothing as practical as a good theory' (Lewin 1951), this article approaches the challenge of reducing health inequalities from an appreciative discussion of 'fundamental cause theory'. We then argue that the developments in the theory provide an opportunity for further progress focused more clearly on the concept of *power* (Dickie *et al.* 2015). A critical focus on power as *the essential* element in maintaining, increasing or reducing social and economic inequalities – including health inequalities – can both enhance the coherence and cogency of the theory, and, for that reason, also enhance the capacity of multiple actors and agencies to mobilise knowledge and action in challenging the roots of health inequalities at different levels and scales, in their own contexts, through their day-to-day actions.

This article aimed to describe how a focus on power could provide an overarching way of operationalising fundamental cause theory, and provide a means for identifying where to focus attention to reduce health inequalities. It achieves this task by reviewing recent developments in both fundamental cause theory and theories of power, before providing a framework for understanding power relationships and their impact on inequalities within society.

Fundamental cause theory

Fundamental cause theory focuses on the persistence of health inequalities despite progress in reducing or eliminating *particular causes of morbidity and mortality*. Thus, the theory attributes to exposures which are unequally experienced across populations and which continue to determine health inequalities despite improving average health outcomes. In this light, defining what constitutes a fundamental cause becomes very important. Various dimensions of *socioeconomic position*, including relative income, wealth and power, have been examined and confirmed as demonstrating a persistent relationship with health outcomes, and thus as constituting fundamental causes of health inequalities (Beeston *et al.* 2013, Link and Phelan 1995, Phelan *et al.* 2004, Phelan *et al.* 2010). More recently, there have been further proposals for consideration as fundamental causes, including stigma (Hatzenbuehler *et al.* 2013) and racism (Phelan and Link 2015).

Key support for fundamental cause theory comes from the evidence that greater inequality is demonstrated for causes of morbidity and mortality that are, or have become, more

avoidable or treatable (Link and Phelan 1995, Mackenbach *et al.* 2015, Phelan *et al.* 2004, Phelan *et al.* 2010, Scott *et al.* 2013). Better placed groups have better access to the means of avoidance or treatment, but how so?

'Metamechanisms' are the linkages which reproduce a particular relationship between fundamental causes on the one hand and specific, unequal health outcomes at particular times and in particular places (Freese and Lutfey 2011). The main 'metamechanism' which has been seen to connect socioeconomic position to unequal health outcomes lies in the access to 'flexible resources' which is associated with higher socioeconomic position, and which the better off 'can utilise for their advantage', including, crucially, for health advantage. These resources include having more 'money, knowledge, prestige, power, and beneficial social connections' (Phelan and Link 2005).

Fundamental cause theory, therefore, has highly important implications for politics, policy and practice. It suggests actions focussed on the more immediate mechanisms (i.e. more immediate than the aforementioned metamechanisms) linking underlying causes to outcomes (e.g. through policy actions on alcohol, tobacco or food), although they may have important impacts on *average* health outcomes, are likely to have only limited and transitory impacts on health *inequalities* and may in fact increase them (as advantaged groups may ultimately benefit more). In contrast, action on the fundamental causes, and indeed metamechanisms, notably to address income and wealth inequalities, would be likely to enable lasting impacts on health inequalities (and also a range of other social and economic outcomes, Wilkinson and Pickett 2006).

More recent contributions to fundamental cause theory have included the proposal from Freese and Lutfey (2011) for additional 'metamechanisms', beyond access to flexible resources, such as 'spillovers' (the positive impacts of participation in advantageous social networks); 'habitus', as a way of understanding the socially-shaped dispositions of different groups; and 'the way that social institutions process individuals' differently in the light of their socioeconomic position (Hastings and Matthews 2011, Hastings and Matthews 2015).

These developments reflect the way in which contributors continue to identify critical foci for action by policymakers and practitioners at the levels of both 'causes' and 'metamechanisms'. However, this in itself brings some challenges – conceptual as well as practical. The proliferation of proposed fundamental causes and metamechanisms perhaps threatens both the elegance and the clarity of the original theory since this makes it less clear what should be the priority for practical action. Nevertheless, these same developments perhaps help further to crystallise what is arguably the key insight underlying fundamental cause theory. This, we suggest, is that health inequalities are one particularly salient aspect of wider regimes of inequality that are in turn the products of continuously intersecting socio-political processes of power through which some groups persistently (though never uncontestedly or inevitably) gain at the expense of others.

By reframing power as the key fundamental cause, the theoretical discussion shifts away somewhat from concepts of 'status', 'stratification' and 'structures' as 'given' realities which need to be changed through the exercise of power by policymakers, towards seeing such phenomena as the causes and effects of ongoing, and contested power dynamics – in which policymakers themselves are situated and acting. In this way, each of the sources of power (economic, knowledge, etc.) is metamechanisms through which power inequality operates. For example, income inequality as a cause of health inequality is a metamechanisms which is shaped and generated by inequalities in economic power, operating in spaces such as the labour market, in which the economic relationship and power balance between owners of capital and workers determine the extent to which exploitation and domination occur and have consequences for social and health inequality outcomes. In turn, the focus of practical action

becomes one of contributing as actively collaborating participants, motivated by a clear and widely shared set of values and aspirations for equality and social justice, to the ongoing and continuously contested processes of change in our world (Collins *et al.* 2015). Consequently, it becomes increasingly important for those motivated to challenge inequality and injustice in health outcomes to have access to appropriate concepts and theories of power, and also to be able to grapple with the practicalities of translating and applying them in pursuit of desired changes in their own particular contexts.

Conceptualising power

Power is a contested concept (Morriss 1987). Any definition carries commitments in terms of ontology (what/who are the subjects/objects of power), epistemology (how can we know power) and axiology (what values underpin power). Three classic thinkers of modernity – Marx, Durkheim and Weber – laid the foundations for contemporary work on power. Broadly, they understood power inequalities as emerging primarily from economic relations (Marx), cultural relations (Durkheim) and the modes of socio-political organisation that (re)produce them (Weber) (Hearn 2012). Our starting point is the distinction between two broad contemporary schools of thought (Pitkin 1972), one that focusses on *power as domination* ('power over') and one that emphasises *power as empowerment* ('power to/with'). The former tends to be framed as a negative or repressive conceptualisation, whereas the latter presents what has been described as a more positive or generative perspective (Gohler 2009).

Working in the context of the western, liberal and capitalist democracies of the second half of the 20th century, Dahl, Bachrach and Baratz and Lukes described three dimensions of power as domination (Lukes 2005). The first is 'the ability of A to prevail over B, by making B do something which B would not otherwise have done' (Dahl 1957). Here, power entails an actor's ability to influence others through both action and non-action. The second dimension is the ability to control the agenda – determining what issues are to become a matter of public concern and action (Bachrach and Baratz 1962). What is 'off' the policy agenda can be as important as what is on it (Birkland 2011)? The third dimension of power (as domination) is added by Lukes (2005). Beyond the more or less overt forms of power outlined above, there is a more 'latent' dimension of power working at a deeper level in society whereby 'people's wants may themselves be a product of a system which works against their interests'. This view was later taken forward in the Bourdieusian approach to the reproduction of relations of power via cultural practices (Gaventa 2006, Hathaway 2016, Lukes 2005).

Theories of 'power as empowerment', in turn, offer a more positive conceptualisation of power that emphasises its generative qualities (power to/with). This school emphasises that power is not always a zero-sum game, but instead competing powers can be mutually supportive (Gohler 2009). For Parsons, power is, similar to money, a 'circulating medium by which obligations are exchanged within the political system' and which permits the mobilisation of resources for collective action (Gohler 2009). Arendt, as Gohler (2009) notes, adds a normative dimension, defining power exclusively in relational terms – as a collective property that emanates from group action: 'Power corresponds to the human ability not just to act but to act in concert. Power is never the property of an individual; it belongs to a group and remains in existence only so long as the group keeps together' (Arendt 1970). Arendt thus conceptualised power positively to advance a notion of politics as 'human self-creation and virtuous public engagement' (Hearn 2012). This view led later to the feminist development of the notion of 'power with' (Allen 1999) – the ability to 'act jointly and in solidarity' (Gohler 2009).

Conceptualisations of power as domination and empowerment are not, however, incompatible (Gohler 2009, Haugaard 2012). Campaigns for social justice can be seen as mobilising 'power to' and 'power with' in order to exert 'power over' dominant interests. Conversely, 'power over' in a context of domination entails 'power to' and 'power with', for those actors in control. Thus, power can be both enabling and constraining as per Giddens' 'structuration' theory, Bourdieu's notion of 'habitus' and Wright's description of how societies change (Bourdieu 1990; Giddens 1984; Wright 2010).

The opportunities and constraints offered by power relations at any point in time thus become central to understanding and identifying opportunities for reducing health and social inequalities (CSDH 2008, Luttrell *et al.* 2009). Wright, in his work to synthesise theories of social class, argues that four principal social processes operate to create inequalities in outcomes between classes – all of which relate to the exercise of power (Wright 2015). The 'individual attributes' approach, drawing on the work of Bourdieu and others, describes how living conditions differentially constrain or provide opportunities across society. The 'opportunity hoarding' or 'social closure' approach concerns how some classes are prevented from gaining advantage (particularly in the labour market, but also public services) by the creation of barriers, such as educational qualifications or other credentials. The 'domination and exploitation' approach describes how the ownership of capital, or the occupation of management positions, can place some social groups in a position to determine the work and activities of others and to extract economic rents. Of course, the balance of power between social classes is not fixed and can be changed by both political economy forces and the collective agency of classes (McCartney *et al.* 2019a; Wright 2010).

One means of summarising forms of power is to describe the different sources, positions and spaces in which power is wielded (Hunjan and Pettit 2011). This has similarities to an approach developed by Gaventa (and adopted by Oxfam and Carnegie UK Trust among others) to help community groups and others to identify and challenge the sources of 'domination' which they are subject to, and also to identify the opportunities for collective action and empowerment. Gaventa's 'power cube' model identifies three dimensions of power, each with three divisions (Gaventa 2006): first, the *places* in which power operates (local, national or international); second, in terms of *visibility*, power may be visible (conflicts are in public spaces), hidden (barriers prevent entry for particular actors or issues) or tending towards invisibility (e.g. when prevailing norms and patterns can be presented as 'natural' or 'common sense'); and third, in terms of the *spaces* in which power operates, these can be closed spaces (decisions are taken with limited wider involvement or consultation); invited spaces (people are selectively invited to contribute); or claimed spaces (people create their own spaces or collectively occupy existing spaces).

Power and democracy

There is a risk in invoking the concept of power that this is conflated with narrow democratic processes, and in particular elections. The following section distils theories of democracy in order to further contextualise theories of power, not least to ensure that a broad understanding of power and democracy is available to inform the practical endeavour to reduce health inequalities.

In democratic theory, the source of legitimate power is the 'demos' (people). The system is predicated on the premise that the 'people rule' (*demos–kratia*). But *who* are the people, and *how* do they rule? The expansion of legal and political rights as a result of struggles in the last two centuries massively expanded the franchise (Benhabib 1996, Young 2000). Yet, *how*

citizens may govern themselves remains central in ongoing debates. Three broad contemporary models are particularly relevant: representative, participatory and deliberative democracy.

Current understandings of representative democracy derive from mid-20th century scholars like Schumpeter (Schumpeter 1947), who argued that the best way of articulating the will of the people is through electoral competition to choose between representative elites. From this perspective, citizens have the power to express and aggregate their interests and preferences and to enable elected representatives to interpret and turn those preferences into decisions. Democracy is thus seen as a matter of competitive partisan politics and methods for 'selecting leaders, rather than about popular participation in politics as such' (Saward 2003). Dahl (1989) took this premise further, arguing that democracy featuring multiple centres of power (embodied by competing interest groups, not just parties) counters authoritarianism. From this perspective, power is exercised through bargaining and contestation amongst the leaders of competing groups (Barber 2003). Accordingly, the focus is restricted to only one of the aforementioned 'spaces' of power. The role of citizens in this conception is rather minimal. Citizens are seen largely as 'spectators in the game of politics' (Dryzek 1990). This remains the predominant way of thinking and enacting democracy today.

However, such views have increasingly been challenged. For Dalton (2004), the main challenge has come from citizens, who are increasingly 'distrustful of politicians, sceptical about democratic institutions, and disillusioned about how the democratic process functions'. In the last fifty years, governments and public agencies have sought to respond to this challenge with increased efforts to institutionalise new participatory and deliberative processes premised on new forms of power-sharing (Elstub and Escobar 2019). Accordingly, collaborative governance via cross-sectoral partnerships and public participation has been presented as the antidote to counter democratic deficits (Ansell and Gash 2008). Representative democracy has been increasingly infused with ideas and practices of participation.

Participatory democrats have argued that the dominant representative model 'supports and serves the powerful' (Barber 2003, Dryzek 1990, Mouffe 1992) and excludes the values and perspectives of marginalised and oppressed groups. Participatory democrats build on classic thinking by Tocqueville to envision a multiplicity of publics developed through processes of collective association, struggle and civic education (power with), extending participation in decision-making beyond the state (e.g. workplaces and the family) (Escobar 2017). From this perspective, substantive social and economic equality becomes central to democracy, alongside 'narrower views of political equality' based on voting rights (Saward 2003).

Moreover, a developmental understanding of citizen participation is a defining feature of participatory democracy. Pateman (1970) emphasised that participation not only produces outputs in the form of policies and decisions, but also educative effects that contribute to develop the social and political capabilities of citizens (power within). In sum, a participatory democracy is a system where:

> citizens govern themselves directly, not necessarily at every level and in every instance, but frequently enough and in particular when basic policies are being decided and when significant power is being deployed. This is carried out through institutions designed to facilitate ongoing civic participation in agenda-setting, deliberation, legislation, and policy implementation. (Barber 2003)

Since the 1990s, deliberative approaches have built on the ideals of participatory democracy, but with a stronger emphasis on communication – underpinned by the premise that decision-making should be 'talk-centric rather than voter-centric' (Elstub and McLaverty 2014). Accordingly, decision-making should be based on reasoned public deliberation, where no force

other than that of the better argument should prevail (Habermas 1975). Placing public deliberation at the centre seeks to improve the legitimacy of democracy by 'making democratic institutions systematically responsive to reasons, not just the weight of numbers or the power of interests' (Parkinson and Mansbridge 2012). Deliberative democracy does not treat 'the public' as a given, but emphasises that publics are developed through deliberation with others. This is a response to the view that most citizens cannot realistically be well informed on public issues and therefore are incapable of considered judgement. Deliberative democracy seeks to test and even transform citizens' under-informed views and preferences through open and inclusive deliberation, in contrast to the aggregative electoral procedures that merely register those views and preferences uncritically (Saward 2003). In doing so, we suggest, it can help to increase the variety of 'spaces' in which power operates, to render more visible its operation, and in turn improve understanding of the ways in which inequality is (re)produced and might be challenged.

In practice, deliberative democracy can be understood at a macro- or a microlevel. The former concerns the 'public sphere', understood as a space for political engagement distinct from the state and the market (Fraser 1990). This includes the 'ebb and flow of public debate carried on in the media, in private conversations, in formal and informal settings, from pubs to parliaments and back again' (Parkinson and Mansbridge 2012). In turn, the microlevel focuses on forums and processes emerging at the interface between official and public spheres, and exemplified in a range of democratic innovations such as mini-publics (e.g. citizens' juries, consensus conferences and citizens' assemblies) or participatory budgeting (Fung and Wright 2003).

Empirical research into participatory and deliberative practices demonstrate that, under the right conditions, citizens are capable problem-solvers and policymakers (Elstub and Escobar 2019, Smith 2009). In the last two decades, however, there have also been robust theoretical and empirical critiques of participatory and deliberative democracy, making apparent the challenges of turning their ideals into practices. Critics have increasingly been taking issue with the direction of what they term 'the empowerment project' (Eliasoph 2013), that is the proliferation of invited spaces that foster depoliticised forms of civic participation:

> . . . Robert Putnam, for example, cites Tocqueville to argue that volunteering promotes democracy. So far, so good. But then, citing Putnam's work, policy-makers have funded face-to-face volunteering, while simultaneously advocating cutbacks in social services on the assumption that volunteers should do the job of helping the elderly or the disabled, and that they can do the job in a way that will promote democracy better than trained social workers can. (Eliasoph 2013)

Such critiques have been present for some time in the context of participation in international development, where the 'tyranny of participation' has itself been criticised as a way for international agencies to exercise power over developing communities while seeming to 'empower' them (Cooke and Kothari 2001, Cornwall and Coelho 2007, Hickey and Mohan 2004). Foucauldian studies have also highlighted that 'the will to empower' (Cruikshank 1999) can place undue responsibility on citizens themselves to mitigate the ills of unjust and unequal societies, especially at a time when individualistic modes of citizenship systematically erode the capacity for collective action (Brown 2015). Furthermore, without corrective action, it is also argued that participation processes can simply amplify existing power inequalities (Eliasoph 2013, Lee *et al.* 2015, Ryfe and Stalsburg 2012).

In summary, despite a deepening in conceptualisations and experimentation with new forms of democratic practice, the extent to which they have meant a more egalitarian distribution of

power is at best questionable. In a recent international study, Dalton (2017) notes the growing participation gap between the 'politically rich' and the 'politically poor'. This is further aggravated by the proliferation of depoliticised forms of participation that divert attention and legitimate the underlying and continuingly – and perhaps increasingly – unequal power relationships. Identifying more concretely how power inequalities pervade societies, and recognising the limitations of current democratic processes, is therefore vitally important if health inequalities are to be successfully addressed.

Identifying power inequalities in relation to health inequalities

Some forms of power inequalities have been extensively studied in epidemiology and used to explain inequalities in health outcomes, although they have generally not been described using the conceptual vocabulary of 'power'. Historically, in industrialised societies, the inequality between the health of the working class and the rest of the population was explained variously as due to differences in behaviours, living conditions and position in the class system of capitalism itself – reflecting different understandings of the causal pathways in operation (Black *et al.* 1988). Social class was thereby codified in relation to occupation (or often for women especially, the occupation of a partner) based on the perceived educational or skill level involved in the occupation and the associated position in an occupational hierarchy. More recently, there have been attempts to update this classification system to reflect changes in workforce composition and the importance of changing education systems and credentials and management responsibilities in the processes of social closure and domination (Wright 2015). The consequences of ignoring the impacts of power dynamics on health are evident when they are 'explained away' by a focus on the behaviours of disadvantaged groups, entirely ignoring the fundamental power inequalities and thereby misdirecting policy focus (e.g. Gruer *et al.* 2009). This issue has been directly addressed by some epidemiologists who have sought to identify the agents and processes involved in the generation of health inequalities (irrespective of whether power dynamics specifically have been made explicit) (Krieger 1994; McCartney *et al.* 2013; McCartney *et al.* 2019a; Whitehead *et al.* 2016; Walsh *et al*. 2017), and to focus on corporate or political power (Beckfield and Krieger 2009, Hastings 2012, McCartney *et al.* 2019a).

Another form of power inequality that has been the subject of substantial epidemiological work has been discrimination (Krieger 1994, Krieger *et al.* 2014). However, as with social class and income, much of this work has been insufficiently theorised and limited to simply stratified social groups, comparison of outcomes between groups and exploration of potential factors which might 'explain' the differences. Inequalities in health by race (particularly when framed in terms of the shared experiences and discrimination faced by racial/ethnic groups and that experienced by First Nation peoples) (Richmond *et al.* 2005, Richmond and Ross 2009), sex (and increasingly self-assigned gender) (Dreger *et al.* 2016), sexual orientation and disability (West 1991) have all been described and to varying degrees framed in terms of agency, discrimination and structural dynamics (e.g. racism, misogyny and homophobia).

There has also been recent work to develop a human rights basis for reducing health inequalities, founded on the rights populations can demand from states in relation to health outcomes and access to key determinants of good health (Schuftan 2012). Framed as a basis for collective action, human rights approaches can be viewed as a means of foregrounding inequalities in power (Solar and Irwin 2007). However, if reliant on individuals to utilise the legal system for redress, this approach can serve to confirm how inequalities in access to such redress perpetuate health inequalities (MacKenzie *et al.* 2013). Similarly, the use of

voluntarism and civic organisations to meet public needs (as with so-called 'assets-based' approaches) may also exacerbate inequalities, as the resources required for the success of these approaches are unequally distributed among different groups (Friedli 2013).

Operationalising concepts and theories of power to explain health inequalities

In the preceding sections, we have provided an outline of contemporary social and political thinking on power and democracy as a way of beginning to better orientate understanding of the causation of health inequalities. In doing so, we have highlighted some of the complexities and challenges in making the required connections in the context of societies where power relations have been organised by 'a combination of capitalist economic structures, democratic political institutions and liberal cultural norms' (Hearn 2012). In this section, we seek to move further towards practice and to reflect on how an operational framework for the practical application of a critical conception of power might be provided to assist those seeking a reduction in health inequalities, by identifying, articulating and challenging the power dynamics prevailing in particular contexts, and so address health inequalities within them.

Our approach is to propose a framework for identifying important sources of power, and the spaces in which they operate, as well as the positions and the forms of power relationship involved. The framework is offered as a means of laying foundations for further work by a range of actors (including policymakers, practitioners, academics and public collectives) in a variety of contexts – including future avenues for change and areas for future research. The framework is context-specific (broadly high-income and 'western', with some examples being UK-specific) and may require substantial changes and different emphases for use in other contexts. It is offered as an initial proposal, based on extensive discussion amongst the authors (where we debated and tested different ways of classifying power relationships and looked for gaps) and some feedback from our peers within our respective organisations and networks, but may still omit, or insufficiently highlight, important aspects. The framework is shared here as a starting point for discussion and possible development and refinement, as appropriate (Table 1).

The first source of power described is economic. This refers to the power derived from the income and wealth people have, and arises within markets for goods, services and labour, with groups more or less able to buy within those markets, and being differentially paid for their labour. Who has ownership of economic assets is a critical means through which economic power is exercised, generating the ability to exploit and dominate labour, and to gain from the labour of others through rents and profits. Other groups benefit from economic power, such as high-income individuals (even when they are not necessarily capital owners), and managers within the economic system. On the other hand, regulators of economic power can mitigate the ability of the wealthy to exploit their power. It is also possible for collective action of people with less income and wealth to exercise economic power through collective decision-making and organisation, for example through employment disputes and strikes, consumer boycotts or the creation of cooperatives to reduce profit-making and to bargain for better prices. Income and wealth also, crucially, allow some people to acquire other forms of power, described in more detail below. Economic power can take various forms and be experienced in a variety of ways. Most obviously, it limits the opportunities and choices for some groups in what can be bought, the housing available, the degree to which work is an economic necessity (and the degree to which this is enforced through debt, mortgage or rental obligations), the experience of the labour market and the influence that groups have over decisions of what is funded and what is not (Table 1).

Table 1 *A proposed framework to assist operationalisation of salient concepts and theories of power as a means for identifying opportunities for action to address health inequalities*

Sources of power		*Spaces of power*	*Positions of power*	*Form of power*
Economic (income and wealth)		• Markets and trade rules for goods and services (local, national and international) • Labour markets • Ownership of corporations, businesses, housing and land	• Owners of capital (individuals, families, corporations and government) • High-income individuals • Managers within the economic system (e.g. bankers, investors) • Regulators (e.g. government, auditors, planning officials) • Collective consumer decisions	• Exploitation and domination of labour and the labour market • Rent and profit; housing options and choices • Debt and lending; household expenditure • Ability to 'buy' other sources of power • (Dis)investment • Ability to meet the costs of living
Knowledge	Knowledge generation	• Academia • Research funders • Lobbyists, charities and campaign groups • Government and civil service	• Academics • Research funders • Leaders within lobbying, charity and campaign groups • Officials	• Knowledge and ignorance • (Lack of) influence • Hierarchies of knowledge • Access to policy processes
	Knowledge media	• Print and broadcast media • Internet • Social media • Public space (e.g. advertising, entertainment)	• Owners of media (print, broadcast, social) including government • Advertisers (i.e. corporations and government) • Journalists and editors • Regulators	• (Lack of) control of the flow of information • Agenda setting • Representation and framing of public issues, social groups and policies • Capacity for mobilising publics and/or pressuring individuals and organisations
	Knowledge education	• Nurseries • Schools • Colleges and universities • Workplaces • Internet • Families • Sports	• Controllers of the curriculum (government, religious leaders) • Funders of education • Teachers, lecturers and professors • People with specialist knowledge (e.g. doctors, nuclear physicists, computer	• Agenda setting • (Lack of) access to knowledge and skills • Access to services and decision-making • Access to relatively privileged occupations

(continued)

Table 1 *(continued)*

Sources of power		*Spaces of power*	*Positions of power*	*Form of power*
			hackers) and credentials (e.g. degrees, training certificates) • People with pastoral or mentorship roles (e.g. family, sports)	• Framing of everyday values, choices and theories-in-use
Culture and belief		• Organised religion • Cultural norms and values	• Religious leaders • Elders • Well-connected and influential individuals • Media owners, advertisers, regulators, celebrities, presenters and editors	• Replication of rules and norms which are difficult to challenge • Access to networks of influence • Stigma, shame • Discrimination, exclusion • Framing of public values, choices and theories-in-use
Collective organisations	Political institutions	• Political parties • Parliaments • Privy Councils • Royal and Official Commissions	• Elected representatives, leaders and party officials • Party funders • Party members • Support professionals (e.g. researchers, advisors, lawyers, PR) • Voters	• Agenda setting • Public spending and legislative decisions • (Lack of) access to and control of state power • Representation and framing of public issues, social groups and policies • Elections (internal and public)
	Other collectives	• Workplaces and trade unions • Campaign groups • Democratic innovations • Charities and voluntary organisations • Clubs, societies and networks	• Trade union officials • Activists, organisers and their funders • Funders • Active citizens • Spokespeople • Support professionals (e.g. researchers, advisors, lawyers, PR) • Gangs and criminal organisations • Militia	• Collective labour action • Capacity for advocacy and campaigning • Collaborative or participatory decision-making • Boycotts and spending decisions • Creation and dissemination of information • Agenda setting and influence • Use of force or intimidation
State	Government	• Civil service	• Civil service hierarchy	

(continued)

Table 1 *(continued)*

Sources of power		*Spaces of power*	*Positions of power*	*Form of power*
		• Policing, legislation, treaties, regulations • Crown powers • Public services/social security system	• Aristocracy, elites and the 'establishment' • Ministers of state • Local government	• Facilitation or blocking of decisions and implementation • Crown powers • Positional/hierarchical • Tax, (dis)investment and spending decision
	Military, physical and legal force	• International use of armed forces • Policing • Industrial disputes • Legal processes • Prison systems	• Government • Armed forces chiefs and military leaders • Judiciary • Police	• Use of force or intimidation • Interpretation and application of the law • Stigma, shame, coercion • Discrimination, exclusion
Positional	Hierarchies and networks	• Workplaces • Domestic relationships and gender • Schools • Cultural activities and sports	• People in senior or management positions • Majority groups and historical 'victors' • Men • Fee-paying school alumni	• Discrimination and stigma • Workplace hierarchies • Social networks • Influence

Three sources of knowledge power are described relating to its generation, communication (i.e. the media), and the education system, each with their own spaces of operation. The power arising from knowledge generation does not only take place within academia and government, but also within lobby groups, charities and campaign groups, all of whom make knowledge claims through various processes and outputs. Another space in which knowledge generation power arises is in the funding of activities that set research agendas, whether this is by governments, by people with economic power or by collective funding from multiple small donations from across the population. Leaders and officials within each of these spaces (e.g. academics, funders) can be in positions to direct this power in different directions. The power of knowledge generation is closely tied to the communication of knowledge in different media spaces (print, broadcast, social, Internet, physical spaces). The ownership and control of the media spaces link to economic power, with the media owners, advertisers, journalists, editors and regulators of these spaces occupying positions of power. This power is exercised by controlling the flow of knowledge and information, the ability to set the policy agenda and frame public discussions, and to influence opinions and the mobilisation of groups. All of this in turn influences cultural power (discussed in more detail below). Arguably, the foundation of knowledge power is the education system, with nurseries, schools, colleges and universities as important formal spaces in which it operates, but education also takes place in families, workplaces and via the Internet. Those who control the curriculum, who fund education, who teach within those spaces and who have specialist knowledge and credentials all occupy positions of this form of knowledge power. As technological development accelerates, the potential for this to become a more concentrated and influential source of power, particularly to the exclusion of certain groups, is important. This is perhaps exemplified by the use of targeted and personalised advertising and (mis)information in relation to elections and referenda, a power controlled by a small elite group (Ward 2018). This power takes the forms of agenda setting, access to particular skills and services and informed decision-making and the ability to access other forms of power through privileged occupations (Table 1).

Culture and belief can be a source of power operating through the space of social norms and the shared values and understandings amongst populations, and in the space of organised religions. Religious leaders and elders have positions of power in the latter space (including in educational spaces), whilst those with highly developed social networks and reach (including those with power within the media as described above, but also those controlling advertising and entertainment) have marked power in the former. This power takes the forms of being able to influence social rules and norms, having access to networks and influence, creating opportunities and the ability to influence social relations through stigma, shame, discrimination and exclusion (Table 1).

Collectives are a source of power, with political institutions such as political parties, parliament, privy councils and commissions, and other collectives such as workplaces and trade unions, campaign groups, charities, voluntary organisations, clubs, societies and networks being the spaces in which it can operate. There are many positions within these spaces which can confer power including elected representatives, officials, funders, activists, voters and leaders within gangs and militias. This source of power can take many forms, including collective labour action, campaigning activities including all types of protest, and influence through a range of other power sources (e.g. spending decisions, agenda setting and the use of force) (Table 1).

The state, both through government and through military, physical and legal force, is another important source of power. Government power works in legal, regulatory and public service spaces, whilst the deployment of armed forces, policing and custodial spaces are important for military, physical and legal force. The positions of power here include the civil

service, elected officials, unelected figures within the aristocracy (e.g. who exercise crown powers and parliamentary influence), military leaders, the judiciary and the police. It takes the forms of decision-making and positional power (relating to the other sources of power), the interpretation and use of the law, and the use of force, intimidation, stigma, shame, coercion and discrimination (Table 1).

The last source of power described is positional power. This relates to the hierarchies and networks that operate within a wide range of spaces (e.g. workplaces, schools, domestic relationships and relations between genders) conferring power to those who can exercise influence or domination over others. This includes, but is not restricted to, people in senior or management positions, majority groups, historical 'victors' (e.g. in relation to colonialism or war), men and those who can use other forms of power (e.g. economic in the case of fee-paying school alumni) to gain positional advantage. This source of power can take many forms, including discrimination, stigma, workplace decision-making, social networks and influence (Table 1).

There are several ways in which this framework for understanding the fundamental causes of health inequalities in terms of power could be applied. One approach would be to take a single source of power as a means of analysing how policy and practice in that domain operates and how power inequalities could be addressed. For example, inequalities in income are often cited (rightly) as a cause of inequalities in health. However, less frequently are the causes of those inequalities in income understood and as a result, effectively tackled. By using this power framework, income (and health) inequalities are understood as an economic relationship in which the economic structures that direct income streams back to those with economic power (e.g. through rents) need to be remade (Sayer 2015). A second approach would be to take a geographic place or a community of interest, and to examine the ways in which power relations manifest for that population. For example, this could lead to a detailed understanding of the intersectional impacts of different sources of power and their root causes and help to identify common features, groups or loci for action. The framework could also be used by people in different positions in the system, including lay community members and activists, public health practitioners, people working in community development and policymakers at local, regional and national levels. It thus provides a heuristic that may help overcome fragmentation (silo-thinking) in analysis and action. By providing a set of pathways into a complex mapping of power, it seeks to enable collaborative analysis in order to inform action.

Discussion

Fundamental cause theory has been a very important and highly useful way to understand how and why inequalities in health have persisted over time, even as the proximal causes of mortality and morbidity change. We argue in this article that a greater focus on the concept of power can help identify and mobilise effective challenge towards the fundamental causes of health inequalities in different contexts. The currently predominant systems of representative democracy seem insufficient to meet this challenge (increasingly so, we propose), and participatory and deliberative models are yet to be fully developed, instantiated and assessed at the systemic level. We argue that a focus on power inequalities can help to critically orientate responses in this context – both theoretically and practically. Theoretically, health inequalities come to be seen more consistently as a persistent aspect of wider regimes of inequality. These regimes, and the inequalities they produce, are fundamentally the products of continuously intersecting socio-political processes of power and domination – but also of resistance, challenge and empowerment which help to create the possibility for change. Practically, the focus on power

opens up a critical perspective on the operation of democratic regimes and societies, such that actors may better orientate themselves as actively collaborating participants, motivated by values and aspirations for equality and social justice, to the ongoing and continuously contested processes of change in our world (Collins *et al.* 2015). Towards this end, we have sought to provide a framework identifying important sources of power (Economic, Knowledge, Culture and Belief, Collectives, the State, Position) and to illustrate the spaces in which these sources manifest and the positions and forms of power relationships.

The key strength of using power to understand the causation of health inequalities is that power is a social and relational concept, and different social groups come to be understood as actual or potential collective actors in social processes which influence their differential exposure and access to the social determinants of health. As such, income and wealth inequalities can be seen as important measures and reflections of differential economic power between groups at particular times in particular places. In this way, income inequalities (and the health inequalities that result) are reframed as not simply a problem of a lack of income for those in poverty, but as a problem that arises due to a deeply entrenched, though ultimately changeable, power imbalance in the economic relationship between different social groups. As such, it becomes important to understand how and why some people got rich and maintain that wealth, and who ultimately pays for that to be maintained, in order to effect change. Those inequalities can in turn be linked to other forms of power (e.g. the ability to own and control the media). Similarly, discrimination can be understood as a social process in which particular groups are oppressed or exploited by more powerful groups who hold power (of which there may be multiple sources, including democratic ones). Thinking of fundamental causes as stemming from power inequality also offers the opportunity to identify the range of spaces, positions and social processes in which causes operate and have effects. This may allow policymakers, practitioners, academics and activists to explore and address them more comprehensively and effectively.

Perhaps the central difficulty with using power in the way we are proposing is that it is a contested term and its everyday manifestations may appear invisible, particularly to those who wield it as part of systems or networks that normalise/routinise the unequal distribution of power, or to those for whom the status quo is so normalised that is taken as the natural order of things. To subsume or replace income and wealth inequality as an aspect of wider power inequalities carries the risk that effective policy focus on reducing income and wealth inequality might be supplanted by less clear actions, such as focusing on inequalities in 'social capital' – though, again, such interventions have been widely in evidence for many years (Feeney and Collins 2015). The proposed framework for operationalising power is context-specific and unavoidably incomplete. Further work to apply the framework is likely to generate amendments and developments that might improve its practical utility and conceptual parsimony. Nevertheless, using the power framework illustrated here to understand for example the behaviour and contexts of individuals and organisations who own and control capital (and the associated rents and perpetuation of income inequalities) is likely to help focus policy action on how change can be achieved. Or indeed, further work to apply the framework might lead to some qualitatively better way of approaching the matter. Furthermore, it should be noted that there are some outstanding health inequality paradoxes that remain unexplained by this framework. Perhaps the most tangible of these is that women have better health outcomes than men on many measures (most particularly mortality) despite their worse socioeconomic and power positioning (Masters *et al.* 2015). This is therefore an area which could usefully be the subject of further theoretical, analytical and practical work.

One area requiring particular attention is the reconfiguration of the economy, democracy and politics through the evolution of technology and the digital world – a world where 'code

is power' and advances in artificial intelligence, machine learning, robotisation and biotechnology are posed to transform humanity on an unprecedented scope and scale (Susskind 2018). Power inequalities stemming from multiple sources, and manifested in different spaces, positions and forms, are projected to exacerbate the unequal distribution of agency and resources in the kind of technological world posed to engulf life on the planet in the next few decades (Harari 2017).

Treating fundamental causes as stemming from power inequalities is consistent with the recent elaborations of further social processes that have been proposed as representing fundamental causes (Hatzenbuehler, *et al.* 2013, Phelan *et al.* 2010, Phelan *et al.* 2014). It also fits well with Wright's exposition of the different mechanisms – discussed above – through which social class leads to differential outcomes, thereby providing a concrete link back to the insights of Marx, Weber and Bourdieu (Wright 2015). Within the epidemiological and public health context, as noted earlier, many authors have described in detail the social processes that lead to health inequalities – most of which are entirely consistent with a fundamental causes and power inequalities understanding (Beckfield and Krieger 2009, Black *et al.* 1988, Krieger 2011, Navarro 2009, Solar and Irwin 2007).

Understanding the dynamics of power that give rise to inequalities, and the limitations of the democratic systems through which people may seek to tackle such inequalities, can be assisted by the identification of sources, spaces, positions and forms of power prevailing in particular everyday contexts. This, we propose, may help us to identify more consistently and effectively the most appropriate possibilities and opportunities for action to reduce health inequalities – not least those which seek to identify and support the scope for the collective agency of those who currently have least access to the social determinants of good health and a long life.

Author Contributions

The original idea for this paper was generated by Gerry McCartney and Elinor Dickie. Oliver Escobar, Chik Collins and Gerry McCartney drafted sections of the paper. All authors provided critical comments and approved the final draft.

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References

Allen, A. (1999) *The power of feminist theory: Domination, resistance, solidarity*. Boulder: Westview Press.

Ansell, C. and Gash, A. (2008) Collaborative governance in theory and practice, *Journal of Public Administration Research and Theory*, 18, 4, 543–71.

Arendt, H. (1970) *On violence*. London: Allen Lane.

Bachrach, P. and Baratz, M.S. (1962) The two faces of power, *American Political Science Review*, 56, 4, 941–52.

Barber, B. (2003) *Strong democracy: Participatory politics for a new age*. Berkeley: University of California Press.

Beckfield, J. and Krieger, N. (2009) Epi+demos+cracy: linking political systems and priorities to the magnitude of health inequities-evidence, gaps, and a research agenda, *Epidemiologic Reviews*, 31, 152–77.

Beeston, C., McCartney, G., Ford, J., Wimbush, E., *et al*. (2013) *Health inequalities policy review for the scottish ministerial task force on health inequalities*. Edinburgh: NHS Health Scotland.

Benhabib, S. (1996) *Democracy and difference: Contesting the boundaries of the political*. Princeton: Princeton University Press.

Birkland, T.A. (2011) *An introduction to the policy process: Theories, concepts and models of public policy*, 3rd edn. Armonk: M.E Sharpe.

Black, D., Morris, J.N., Smith, C. and Townsend, P. (1988) The black report. In Townsend, P. and Davidson, N. (eds) *Inequalities in health*. London: Penguin, pp. 31–216

Bourdieu, P. (1990) *The logic of practice*. Cambridge: Polity Press.

Brown, W. (2015) *Undoing the demos: Neoliberalism's stealth revolution*. New York: Zone Books.

Collins, C., McCrory, M., Mackenzie, M. and McCartney, G. (2015) Social theory and health inequalities: critical realism and a transformative activist stance?, *Social Theory & Health*, 13, 3/4, 377–96.

Cooke, B. and Kothari, U. (2001) *Participation: The new tyranny?* London: Zed Books.

Cornwall, A. and Coelho, V.S. (2007) *Spaces for change? The politics of participation in new democratic arenas*. London: Zed books, pp. 1–29.

Cruikshank, B. (1999) *The will to empower: Democratic citizens and other subjects*. Ithaca: Cornell University Press.

CSDH (2008) *Closing the gap in a generation: Health equity through action on the social determinants of health. Final report of the commission on social determinants of health (CSDH)*. Geneva: World Health Organization.

Dahl, R.A. (1957) The concept of power, *Systems Research and Behavioural Science*, 2, 201–15.

Dahl, R.A. (1989) *Democracy and its critics*. New Haven: Yale University Press.

Dalton, R.J. (2004) *Democratic challenges, democratic choices: The erosion of political support in advanced industrial democracies*. Oxford: Oxford University Press.

Dalton, R.J. (2017) *The participation gap: Social status and political inequality*. Oxford: Oxford University Press.

Dickie, E., Hearty, W., Fraser, A., McCartney, G., *et al*. (2015) *Power is a health and social justice issue*. Edinburgh: NHS Health Scotland.

Dreger, S., Gerlinger, T. and Bolte, G. (2016) Gender inequalities in mental wellbeing in 26 european countries: do welfare regimes matter?, *European Journal of Public Health*, 26, 5, 872–6.

Dryzek, J.S. (1990) *Discursive democracy politics, policy, and political science*. Cambridge: University of Cambridge Press.

Eliasoph, N. (2013) *The politics of volunteering*. Cambridge: Polity Press.

Elstub, S. and Escobar, O. (2019) *The handbook of democratic innovation and governance*. Cheltenham; Northampton: Edward Elgar.

Elstub, S. and McLaverty, P. (2014) *Deliberative democracy: Issues and cases*. Edinburgh: Edinburgh University Press.

Escobar, O. (2017) Pluralism and democratic participation: What kind of citizen are citizens invited to be?, *Contemporary Pragmatism*, 14, 416–38.

Feeney, M. and Collins, C. (2015) *Tea in the pot: Building 'social capital' or a 'great good place' in Govan*. Paisley: UWS-Oxfam Partnership.

Fraser, N. (1990) Rethinking the public sphere: a contribution to the critique of actually existing democracy, *Social Text*, 25/26, 55–80.

Freese, J. and Lutfey, K. (2011) Fundamental causality: Challenges of an animating concept for medical sociology. In Pescosolido, B.A., Martin, J.K., McLeod, J. and Rogers, A. (eds) *The handbook of the sociology of health, illness, and healing*. New York: Springer, pp. 67–81.

Friedli, L. (2013) 'What we've tried, hasn't worked': the politics of assets based public health, *Critical Public Health*, 23, 2, 131–45.

Fung, A. and Wright, E.O. (2003) *Deepening democracy: Institutional innovations in empowered participatory governance*. London: Verso.

Gaventa, J. (2006) Finding the spaces for change: a power analysis, *IDS Bulletin*, 37, 6.

Giddens, A. (1984) *The constitution of society: Outline of the theory of structuration*. Oxford: Polity Press in association with Basil Blackwell.

Gohler, G. (2009) Power to' and 'power over. In Clegg, S.R. and Haugaard, M. (eds) *The SAGE handbook of power*. London: SAGE, pp. 27–39

Gruer, L., Hart, C.L., Gordon, D.S. and Watt, G.C.M. (2009) Effect of tobacco smoking on survival of men and women by social position: a 28 year cohort study, *BMJ*, 338, b480.

Habermas, J. (1975) *Legitimation crisis front cover Habermas beacon press, 1975*. Boston: Beacon Press.

Harari, Y.N. (2017) *Homo Deus: A brief history of tomorrow*. London: Vintage.

Hastings, A. and Matthews, P. (2011) *"Sharp elbows": Do the Middle-Classes have advantages in public service provision and if so how?*. Glasgow: University of Glasgow.

Hastings, A. and Matthews, P. (2015) Bourdieu and the big society: empowering the powerful in public service provision?, *Policy & Politics*, 43, 4, 545–60.

Hastings, G. (2012) Why corporate power is a public health priority, *British Medical Journal*, 345, e5124.

Hathaway, T. (2016) Lukes reloaded: An actor-centred three-dimensional power framework, *Politics*, 36, 2, 118–30.

Hatzenbuehler, M.L., Phelan, J.C. and Link, B.G. (2013) Stigma as a fundamental cause of population health inequalities, *American Journal of Public Health*, 103, 5, 813–21.

Haugaard, M. (2012) Reflections upon power over, power to, power with, and the four dimensions of power, *Journal of Political Power*, 5, 353–8.

Hearn, J. (2012) *Theorizing power*. Basingstoke: Palgrave.

Hickey, S. and Mohan, G. (2004) *Participation – from tyranny to transformation*. London: Zed Books.

Hunjan, R. and Pettit, J. (2011) *Power: A practical guide for facilitating social change*. London: The Carnegie UK Trust & the Joseph Rowntree Foundation.

Krieger, N. (1994) Epidemiology and the web of causation: Has anyone seen the spider? [Electronic version], *Social Science & Medicine*, 39, 7, 887–903.

Krieger, N. (2001) Theories for social epidemiology in the 21st century: an ecosocial perspective, *International Journal of Epidemiology*, 30, 668–77.

Krieger, N. (2011) *Epidemiology and the People's health: Theory and context*. New York: Oxford University Press.

Krieger, N., Chen, J.T., Coull, B.A., Beckfield, J., *et al*. (2014) Jim crow and premature mortality among the US black and white population, 1960–2009: an Age–Period–Cohort analysis, *Epidemiology*, 25, 4, 494–504.

Lee, H., Kwak, N. and Campbell, S.W. (2015) Hearing the other side revisited: The joint workings of cross-cutting discussion and strong tie homogeneity in facilitating deliberative and participatory democracy, *Communication Research*, 42, 4, 569–96.

Lewin, K. (1951) . *Field Theory in Social Science: selected theoretical papers*. (pp xx-346). New York: Harper & Bros.

Link, B.G. and Phelan, J. (1995) Social conditions as fundamental causes of disease, *Journal of Health and Social Behaviour*, 80–94. https://www.jstor.org/stable/2626958?seq=1#metadata_info_tab_contents

Lukes, S. (2005) *Power: A radical view*. Basingstoke: Palgrave Macmillan.

Luttrell, C., Quiroz, S., Scrutton, C., and Bird, K. (2009). *Understanding and operationalising empowerment* (No. Working Paper 308). London: Overseas Development Institute.

Mackenbach, J.P., Kulhánová, I., Bopp, M., Deboosere, P., *et al*. (2015) Variations in the relation between education and cause-specific mortality in 19 European populations: a test of the "fundamental causes" theory of social inequalities in health, *Social Science & Medicine*, 127, 51–62.

MacKenzie, M., Conway, E., Hastings, A., Munro, M.,,,,,,, and *et al*. (2013) Is 'Candidacy' a useful concept for understanding journeys through public services? A critical interpretive literature synthesis, *Social Policy and Administration*, 47, 7, 806–25.

Masters, R.K., Link, B.G. and Phelan, J.C. (2015) Temporal changes in education gradients of 'preventable' mortality: a test of fundamental cause theory, *Social Science and Medicine*, 127, 19–28.

McCartney, G., Bartley, M., Dundas, R., Katikireddi, S.V., *et al*. (2019a) Theorising social class and its application to the study of health inequalities, *SSM Population Health*, 7, 100315.

McCartney, G., Collins, C. and Mackenzie, M. (2013) What (or who) causes health inequalities: Theories, evidence and implications?, *Health Policy*, 113, 3, 221–7.

McCartney, G., Popham, F., McMaster, R. and Cumbers, A. (2019b) Defining health and health inequalities, *Public Health*, 172, 22–30.

Morriss, P. (1987) *Power: A philosophical analysis*. Manchester: Manchester University Press.

Mouffe, C. (1992) *Dimensions of radical democracy: Pluralism, citizenship, community: Pluralism and citizenship*. London: Verso.

Navarro, V. (2009) What we mean by social determinants of health, *International Journal of Health Services*, 39, 3, 423–41.

Navarro, V., Muntaner, C., Borrell, C., Benach, J., *et al*. (2006) Politics and health outcomes, *The Lancet*, 368, 9540, 1033–7.

Parkinson, J. and Mansbridge, J. (2012) *Deliberative systems: Deliberative democracy at the large scale*. Cambridge: Cambridge University Press.

Pateman, C. (1970) *Participation and democratic theory*. Cambridge: Cambridge University Press.

Phelan, J.C. and Link, B.G. (2005) Controlling disease and creating disparities: a fundamental cause perspective. J Gerontol B Psychol Sci Soc Sci 2005; 60(2): 27–33. *Journals of Gerontology – Series B Psychological Sciences and Social Sciences*, 60, 2, 27–33.

Phelan, J.C. and Link, B.G. (2015) Is racism a fundamental cause of inequalities in health?, *Annual Review of Sociology*, 41, 1, 311–30.

Phelan, J.C., Link, B.G., Diez-Roux, A., Kawachi, I.,,,,,, and *et al*. (2004) "Fundamental causes" of social inequalities in mortality: a test of the theory, *Journal of Health and Social Behaviour*, 45, 3, 265–85.

Phelan, J.C., Link, B.G. and Tehranifar, P. (2010) Social conditions as fundamental causes of health inequalities: theory, evidence, and policy implications, *Journal of Health and Social Behaviour*, 51, S28–40.

Phelan, J.C., Lucas, J.W., Ridgeway, C.L. and Taylor, C.J. (2014) Stigma, status, and population health, *Social Science and Medicine*, 103, 15–23.

Pitkin, H.F. (1972) *Wittgenstein and justice*. Cambridge: Polity Press.

Richmond, C., Elliott, S.J., Matthews, R. and Elliott, B. (2005) The political ecology of health: perceptions of environment, economy, health and well-being among 'Namgis first nation, *Health & Place*, 11, 4, 349–65.

Richmond, C.A.M. and Ross, N.A. (2009) The determinants of first nation and inuit health: a critical population health approach, *Health & Place*, 15, 2, 403–11.

Ryfe, M. and Stalsburg, B. (2012) The participation and recruitment challenge. 43–56. In Nabatchi, T., Gastil, J., Leighninger, M. and Weiksner, G.M. (eds) *Democracy in motion*. Oxford: Oxford Scholarship Online, pp. 43–56.

Saward, M. (2003) Enacting democracy, *Political Studies*, 51, 1, 161–79.

Sayer, A. (2015) *Why we can't afford the rich*. Bristol: Policy Press.

Schuftan, C. (2012) Poverty and the violation of human rights: a proposed conceptual framework, *International Journal of Health Services*, 42, 3, 485–98.

Schumpeter, J.A. (1947) *Capitalism, socialism and democracy*. New York: Harper & Brothers Publishers.

Scott, S., Curnock, E., Mitchell, R., Robinson, M., *et al*. (2013) *What would it take to eradicate health inequalities? Testing the fundamental causes theory of health inequalities in scotland*. Edinburgh: NHS Health Scotland.

Smith, G. (2009) *Democratic innovations: Designing institutions for citizen participation*. Cambridge: Cambridge University Press.

Solar, O. and Irwin, A. (2007) *A conceptual framework for action on the social determinants of health discussion paper for the commission on social determinants of health*. Geneva: Commission on Social Determinants of Health.

Susskind, J. (2018) *Future politics: Living together in a world transformed by tech*. New York: Oxford University Press.

Ward, K. (2018) Social networks, the 2016 US presidential election, and Kantian ethics: applying the categorical imperative to Cambridge Analytica's behavioral microtargeting, *Journal of Media Ethics*, 33, 3, 133–48.

West, P. (1991) Rethinking the health selection explanation for health inequalities, *Social Science & Medicine*, 32, 4, 373–84.

Whitehead, M., Pennington, A., Orton, L., Nayak, S., *et al*. (2016) How could differences in 'control over destiny' lead to socio-economic inequalities in health? A synthesis of theories and pathways in the living environment, *Health & Place*, 39, 51–61.

Wilkinson, R.G. and Pickett, K.E. (2006) Income inequality and health: a review and explanation of the evidence, *Social Science & Medicine*, 62, 1768–84.

Wright, E.O. (2010) *Envisioning Real Utopias*. London: Verso.

Wright, E.O. (2015) *Understanding class*. London: Verso.

Young, I.M. (2000) *Inclusion and democracy*. Oxford: Oxford University Press.