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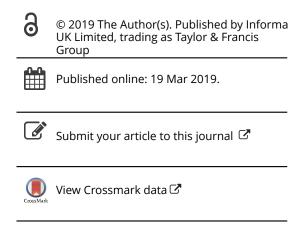
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Re-imagining global health through social medicine

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ABSTRACT

The conceptual and practical work done by social medicine and global health have often overlapped. In this paper, we argue that new efforts to apprehend 'the social' in social medicine offer important insights to global health along five lines of critical analysis: (1) reconfigurations of the state and new forms of political activism, (2) philanthrocapitalism and the economisation of life, (3) The economy of attention, (4) anthropogenic climate change, and (5) the geopolitics of North and South.

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Introduction

Social medicine, variously and broadly known as a field that focuses on the social basis of health and illness, has a long history. Before it became formalised as scholarly field and medical discipline in the mid twentieth century, social medicine was a topic of interest to social reformers, scholars and health professionals. In this paper, we argue for a re-imagining of global health in and through the conceptual work of social medicine – a task that draws our attention to the limitations of the field of global health as it is often conceptualised and practiced today.¹

Tracing the history of social medicine, one might say that it has developed differently in response to distinct challenges over the past several centuries. One might even talk about the history of social medicine in the UK, Europe, and later in the US, as having roughly three phases:

- The radical-for-the-time mid-nineteenth Century effort to recognise the social, political and economic conditions of health and illness, demonstrated in the work of Virchow (1849);
- The late nineteenth Century birth of public health institutions for social welfare in which the idea of the population emerged as a primary concern of governance, described carefully by Michel Foucault (2000, 2004, 2012) among others;
- The twentieth Century rise of social science critique concerning the social, cultural and political basis for medico-scientific knowledge and the uneven distribution of both health and illness, giving rise to a variety of social medicine commitments across scholarly expertise (from STS to Health Economics, in the work of Archie Cochrane, Thomas McKeown, Agnus Deaton, Michael Marmot to mention a few) and to policy practices across a variety of interventionist sites (from community clinics to national health programmes in a wide variety

of countries) (Gofin, 2006; Jones, Greene, Duffin, & Warner, 2014; Porter, 2006; Wilkinson & Pickett, 2009).²

Formal research and education programmes in social medicine today are positioned as an antidote to biomedicine's entrenched and often reductionist pull toward the pharmacological, molecular and genetic bases of disease and intervention, and social medicine scholars work (often alongside clinicians) to draw attention to therapeutic/preventive interventions that foreground the social conditions of life. New training programmes in both social medicine³ and in the more recent 'structural competency' (see Metzl & Hansen, 2014) agenda and accompanying publications (Stonington et al., 2018) are just some examples of this, building on many decades of scholarship that show the direct and indirect ties between social inequality and ill-health. Social medicine has been and continues to be promoted as a vast collection of institutional, intellectual and political efforts that are in some ways more prevalent and urgent than ever before.

At the same time, social medicine scholars seem always to remain in an uphill battle for recognition and influence (Waitzkin, 1991), as efforts to incorporate information about or concern with the social dimensions of health and healthcare continue to be seen as of limited and lesser importance against competing disciplinary perspectives. One can find scholars and activists relying on what are clearly identifiable social medicine genealogies across a wide array of social scientific and humanities disciplines (from history to global surgery) and yet they do not claim to be doing social medicine. Indeed, rather than being seen as foundational to emerging fields that offer approaches to the 'social', social epidemiology, social psychology, population health, health economics, etc. (Bell, 2018), these fields often ignore the fact that they are actually doing social medicine at all.⁴ Rarely is social medicine recognised as both primary and foundational to understanding and intervening in health (Stonington & Holmes, 2006). In this article, we focus on a particular set of ways that social medicine has been overlooked in one field in particular: the field of global health.

Working in this space, Holmes, Greene, and Stonington (2014) have identified four qualities that social medicine could bring to global health:

multidisciplinary methodologies, rooted in social theory, critically interpretive stance and proclivity to engage with social aspects of clinical and scientific problems. Crucial to all this work is a commitment to rigorous empirical research in the social world: ethnographic engagement, historical analysis, sociological and social epidemiological analysis and contextual ethics. (2014, p. 3)

Our article picks up where these authors have opened up a critical space for imagining how social medicine might be put in conversation with global health, starting with interrogating what we mean by both 'global health' and 'the social'.

Global health is not a given but rather a new regime of representation and intervention – a twentyfirst century imperative. As scholars have shown, the shift from international health to global health over the last few decades could be characterised by a number of large-scale changes: the weakening of the WHO; the rise of health interests at the World Bank (and IMF); the emergence of powerful new private actors such as the Bill and Melinda Gates Foundation and the quasi private Global Fund; the internationalisation of pharmaceutical research and Contract Research Organization (CRO) markets; the truncated success of International Health Development programmes; the shift in the morbidity profiles made visible by such instruments as the DALY, the QALY, and the International Burden of Disease index; and the rise of a 'commerce/security/disease' nexus (Adams, 2013a, 2016; Birn, 2009; Brown, Cueto, & Fee, 2006; Caduff, 2015; Erikson, 2016; Fassin, 2012; Gaudilliere, 2014; King, 2002; Béhague, Tawiah, Rosato, Some, & Morrison, 2009). While these changes have endowed global health institutions and expert-elites working within them with considerable traction, so have these scholars noted that these changes have led to a great many distortions and inequities in the way public health is practiced. This has added a layer of complexity to what has already been a vexed history of international health efforts that have been deeply entangled with colonialist and neo-colonialist ventures. It is also useful to remember that on the ground in many parts of the world, global health - like international health before it - is often either unfamiliar, of minimal influence, or actively resisted (Anderson, 2014; Dilger & Mattes, 2018; Hodges, 2012; King, 2002), making the work of global health an ongoing challenge despite the newness of its name and some of its constitutive elements.

As some scholars have shown, the shift from international to global health has tended to marginalise social medicine perspectives, undermining efforts to work through the social that had begun in the decades prior. Aggleton and Parker (2015) describe how biomedical reductionism was promoted by major global health players (including the WHO and Gates Foundation) in relation to HIV prevention and treatment, as pharmaceutical solutions supplanted calls for more community health efforts. Despite push back on this from Michael Marmot and his efforts with the WHO Commission on the Social Determinants of Health (2008), the even nonimal effort to include social medicine perspectives were largely dropped after the global financial crisis and since then the return to biomedical hegemony in both research and policy of the major global health institutions has lingered. One indication of this is the turn to both evidence-based science and the revitalisation of magic-bullet and often pharmaceutically-driven thinking as drivers of policy and planning (Cueto, 2013). Our notion of the limitations of global health points to these ongoing challenges and prompts our consideration of ways in which social medicine remains useful but, to be more specific, to a consideration of how the notion of the 'social' in that social medicine might be thoughtfully interrogated in new ways.

Our argument is that many global health programmes work with a very particular and limited conception of 'the social' - one that some endeavours in social medicine may also sometimes unwittingly reproduce such as in the 'social determinants of health model' adopted by the WHO's commission, mentioned above. Our goal is to map some of the ways that the social is being interrogated in social science these days and to set those interrogations in conversation with what is going on in global health rather than to provide an exhaustive index of what global health currently offers. In other words, this paper does not offer a list of current failures in global health so much as a constructive effort to set two fields of scholarship in conversation with one another. To be sure, our aim is not to argue that today's global health is entirely unconcerned with the social, or that it is the only task of social medicine to put the social more strongly at the centre of global health interventions. Rather, our motivation is in exploring how the particular notion of 'the social' currently used in global health needs reconsideration along the lines that are being redrawn in critical circles of social medicine today because failing to do so risks reproducing some important limitations to global health.

By this we mean that categories like gender, class, race, and power are used widely in global health but they are often taken as self-evident entities that exist in the word like trees or stones when, in fact, they are mutable, synergistic, and variable concepts that have a complex role in helping us understand people's lives. One cannot talk about gender, for instance, independent of the ways in which gender is understood and put into practice in everyday life in a multiplicity of ways across geographic and cultural places. Global health needs to move beyond a naturalised understanding of the social as either cause or context, and to recognise the analytic violence that scholars commit by simply assuming that certain people 'belong' to a 'family' or 'gender' or 'race' or 'nation'. As Das (2003, p. 101) underscores 'an individual cannot be said to "belong" to her kinship network, community or neighbourhood as, say, water belongs to the bottle or clothes belong to the wardrobe'. Any 'belonging' to the social is fraught with tensions, and the struggles that we witness are often struggles around normative sociality. The mechanical concept of the social that underlies much work in global health - for instance, in courses on the so-called 'social and structural determinants of health' and in textbooks on global health that refer to these categories with little exploration of how they diverge in practice – needs to be replaced with a far more flexible, intersectional and contingent reframing of the social. Given the amount of critical social science work that has gone into showing that none of these categories are self-evident, we are surprised at how often reference to social factors appear as mere background information as givens (for instance, as gendered, caste, class, ethnic identities that have no bearing on the analysis). Just as the mechanical application of the concept of 'cultural determinants of health' needed to be undone once it was reductionistically used to reproduce essentialist

notions of cultural difference in clinical care, so too might we need to undo the damage that reified notions of race, class, gender, nation, etc, – concepts that stand in for 'the social' – do in much global health work today.

In what follows, we consider five terrains in which new conceptualizations of 'the social' are unfolding in social theory that may be unfamiliar to some but of great use in global health. These are: (1) reconfigurations of the state and new forms of political activism, (2) philanthrocapitalism and the economisation of life, (3) the economy of attention, (4) the challenges of anthropogenic climate change, and (5) the geopolitics of North and South. We explore these terrains in relation to what we see as possible limitations of current global health work, and in so doing question what we identify to be a core biopolitical imaginary that underpins the social-as-site-of-intervention in much of this work. A social medicine approach that advances a more complex understanding of the social may even open up the black box of 'inequity' that has often been largely taken for granted across the social sciences, helping us to think about what methodologies work best for this reconceptualizing.

Reconfigurations of the state

Social medicine scholars have long relied on the assumption that in order to do social medicine, it helps to have a strong nation-state – a governing body that can attend to the health of the social body or, at a minimum, that can support the political will for such. Global health has recently called for the same, assuming the state must be involved in provisioning health infrastructure, manpower, political will. A good example of this is the Lancet's Global Health 2035⁸ manifesto calling for state subsidised universal health coverage in low to median income nations, replicating the successes of the '4 C' countries (Chile, China, Costa Rica and Cuba) where nationally subsidised health programmes have been strong (Jamison et al., 2013). This foundational biopolitical imaginary, and the nostalgia for the state as guardian of the social that it implies, needs critical re-evaluation given the fact that much global health work has had, as many have pointed out, a very ambivalent relationship with the nation state.

Thus, while on the one hand many global health programmes and agendas assume and promote the notion of a strong state that prioritises and invests in the health of its population, we also witness, on the other hand, a weakening of the state by de-territorialisations and dis-aggregations arising from intensifying political and economic processes of liberalisation and globalisation in global health work accompanied by the relative decline in bilateral and multilateral state aid, and the rise in support from NGOs and private philanthropies large and small. These institutional shifts, replicated in the production of the Global Health 2035 report itself (which included no state representatives), have enabled much of the work of global health to be done with less engagement with state agencies, sometimes without any communication with local or regional branches of countries' ministries of health whatsoever. The willingness and capacity of national governments to manage, coordinate or advise the work of diverse for-profit and not-for-profit NGO interventions has been truncated by these shifts in funding and prioritising, actually leaving many national health programmes underfunded and relatively undeveloped (Buse & Walt, 2009; Schrecker, 2018). Where private sector corporations, such as Contract Research Organizations, work alongside experimental research interventions funded by non-bilateral agencies like the Gates Foundation (for vaccine studies or antimalarial mosquitos for instance), funding is seldom routed through state health programmes or primary care operations (Petryna, 2009). Instead, research teams set up as independent centres for data generation and health care delivery, frequently in competition with state-funded institutions even while they still rely on such actors for support (Biruk, 2018; Crane, 2013; Geissler & Molyneux, 2017). Relying on NGO aid organisations leads to a patchwork of interventions that can produce radical inequalities and incoherent policy development within countries.

Thus, we need to pay closer attention to what all this means not for the *disappearance* of the state but rather for the *reconfigured role of the state* in health, starting with the fact that the state is by no means a homogenous entity that has been or is everywhere the same. ¹⁰ Global health's bifurcated

demands of the state to both fulfill dreams of national health while remaining mute (or invisible) while surpassing and succeeding where the state – and by extension where international health – has failed does not mean that the power of the state has vanished or that it could suddenly be materialised in robust health coverage programmes. On the contrary, in many countries, especially in Africa, the state may be weakening but it nevertheless remains present as a deliberate absence in what Geissler (2015) calls the *para-state*. The para-state forms a tandem shadow architecture made up of biopolitical, non-governmental and market institutions that depend on the ongoing fiction of the state but that escape its power. To be sure, no global health programme can work today without at least a minimal involvement of the state. As Geissler underscores, the state

remains tangible in the many people enrolled in its workforce, its buildings and circulations, and its habitual procedures and paper trails; it also remains present in people's claims for care, in state providers' determination to define policies and standards, and even in foreign donors' insistence on working through state "partners". (Geissler, 2015, p. 4)

At the same time, what that state is, specifically and variably, needs to be considered carefully in relation to the ways that global health programmes and funding streams bypass the channels of decision-making and power that lie traditionally in the governing institutions of states. How global health research projects both stand in for the state by provisioning health care while also undermining the state's authority by funneling most healthcare through the engines and infrastructures of data production offers an example of this social terrain of the para-state (Crane, 2013; Tichenor, 2016). This arrangement requires us to rethink what 'the social' means in relation to the nation-state. As Geissler notes, this is not the biopolitical state of the twentieth century, but rather a shadow of its imagined former self that is sutered together by new biopolitical formations that articulate interventions in new ways. In countries that depend more heavily on aid, global health actually renders ambiguous the state as the key guardian of the health of the social body, *questioning* the extent of its capacity to improve health even while *calling upon* it to act.

The key question to ask, thus, is what this deliberate absence both *enables* and *denies*. Rethinking the meaning of 'the social' in relation to the nation state offers a departure from normative understandings of the state based on the repetition of well-worn ideas of what the state should be, how it should 'make' the social and what it should do that, in the end, become utopian hopes. There is no point in continuing to reference Virchow's over-cited (but under-analysed) phrase of *Politik* as *Medizin im Grossen* when the very ideas of the social, the political, and the medical are rapidly changing, as the state itself is being dismantled and rebuilt as a series of public-private partnerships. We are pointing to the need to study the state as it is reconfiguring, exploring how it interweaves with a global health presence, or not, and investigating the practices of the social it upholds and denies. We must ask how the state materialises on the ground and in everyday life as both a deliberate absence and an imagined presence.

A good example of this conceptual work is in recent 'mutations in citizenship' (Ong, 2006) that have been identified as a consequence of the flows of markets, technologies and populations that call into question basic oppositions between citizens vs stateless, or territorialised citizenship vs deterritorialised human rights. Citizenship in relation to nation states is supplanted by criteria that are taken as universals: human rights and neoliberal values of flexibility, mobility and entrepreneurialism, biological make-up and the capacity for sheer survival in refugee camps. New claims are mobilised as basis for rights, entitlements and protection that erase old notions of the nation state, even while hardening a call for national borders. These 'mutations in citizenship' have also resulted in new arenas of (bio)political activism and citizenship formation (Rose & Novas, 2005; Vidal & Ortega, 2017), shifting boundaries between state and society, private and public, and promoting new objects of contestation, new forums for debate, new issues for democracy and new styles of political activism (Ortega, 2014; Rose, 2007). They achieve new sensibilities of care and survival in and through therapeutic belonging and rites (Nguyen, 2010; Ticktin, 2011). The fact that para-states often use

philanthrocapitalism as an engine for fuelling such politics, for instance, in view of our critique above, also deserves more close attention (which we offer, below).

The notion advanced by a more careful consideration of 'the social' offered by social medicine is one that is attuned to new politics and novel forms of activism that are emerging in domains that may not be identifiable at first glance as health or medical domains (from the Arab Spring to #metoo and #BlackLivesMatter). New social movements and new forms of biosocial activism that organise communities for social justice are able to reveal the worlds of suffering and injustice that have often been made invisible by more simplistic approaches to structural inequality often found in global health and by reference to a traditional notion of the nation-state (Schuller, 2016). Notions of sociality are themselves changing as citizenship, biology and community are conjoined in platforms for change. This, in part, also calls for a new kind of attention to media and social media, but also to the very conceptual work being done in these movements to move the bar forward on social justice.

In sum, while global health programmes typically call upon old notions of the nation state and rely on traditional notions of citizenship and social justice to advance health, the social medicine approach we advance in this paper calls for more attentiveness to all of these new state absences and presences in relation to calls for 'capacity building' or 'political will' to advance health. Specifically, how states are reconfigured by various actors who participate in global health as para-states, and how social justice efforts must be conceptualised by new notions of citizenship, biopolitics and community, all matter in ways that many global health programmes often overlook by assuming a nation state that may or may not exist in the ways it is often imagined.

Philanthrocapitalism and the economization of life

Global health programmes have had a tendency to turn all health problems into problems of economy, a pattern tied to the increasing presence of health economists in health planning, and the overarching pull of neoliberalism (McGoey, 2015; Sobo, 2016). Here, too, we argue that a social medicine approach helps us consider the ways that the social has been figured in relation to economics historically and in the present in ways that limit what can be done in global health work today.

Michelle Murphy demonstrates how much of the history of international health has entailed an *economization of life* –a process that began long before we had anything called global health, as the rise of an 'historically specific regime of valuation hinged to the macrological figure of the national 'economy'.... [by which] value could be generated by optimising aggregate life chances ... relative to the horizon of the economy' (Murphy, 2017, p. 6). Emergent during the nineteenth century, the economisation of life flourished in the postwar development era, especially in family planning and reproductive health where assigning value to specific gendered forms of life 'for the sake of the macroeconomy' (Murphy, 2017, p. 148) has been normative. Murphy traces these practices further, to their logical end-points under contemporary neoliberalism as big data and corporations now get looped into the phantasmagorical promise of investment in healthy populations: as *vulnerable girls* become rescripted as *emerging markets* and *the poor* are transformed into *microentrepreneurs* (see also Ferguson, 2010; Ong, 2006). Social medicine helps us pose questions about the value of life outside a framework dominated by naturalised ideas of the 'population' and the 'economy'. At stake here is how we want to understand 'the social' that gets caught up in these economics.

Philanthrocapitalism offers a good case in point of how what we mean by how 'the social' matters as it gets looped into efforts of 'demarcating human worth and exploiting life chances', as Murphy says. Philanthrocapitalism mobilises private wealth and corporate philanthropy for global health and healthcare by way of the model of the free-market, returning us (some would say) to the health aid reminiscent of the colonial era (Vaughan, 1991; Birn, 2009). But, philanthrocapitalism models tend to hold 'the social' as a constant rather than as a variable that must be deciphered in calculating success or failure. Thus, we hear about the *double bottom lines* of social benefit coming from philanthrocapitalism, in which health benefits are garnered alongside fiscal profits in a win-win scenario,

displacing older critiques of profits' inevitable trade offs for health (Adams, 2013b). We know that regimes of for-profit charity tend to favour technological and pharmaceutical interventions over interventions that cannot show a profit, and we also know that without evidence of fiscal benefits, perfectly good health projects often get scrapped (Kelly & McGoey, 2018). Thus, what work unexplored notions of 'social benefit' do in the double bottom line matters a great deal. What would it mean to unpack the notions of 'social good' that circulate in claims of success in these transactions?

Social medicine offers a way to interrogate how defining 'social benefit' might entail reliance on specific kinds of evidence while erasing others. For instance, global health community leaders rail against the lacklustre effort on the part of the WHO to convince governments to impose higher taxes on diabetes and other disease-causing foods and consumables (as if consumption depends only on cost). Our hunch is that few of the researchers involved in setting such agendas have any idea how these foods and goods make sense in the social milieus where they are consumed, or even what concepts of social value circulate in relation to their cost (Horton, 2018a, 2018b). Similarly, tracking technological fixes such as vaccines and drug distributions as win-win opportunities requires taking into account not just pharmaceutical profits alongside immunisation but also the perceived values and actual practices that are displaced by vaccine and pharmaceutical acceptance (Dumit, 2012; Hayden, 2003; Marglin, 1990; Peterson, 2014; Sobo, 2016). Here unpacking what is meant by 'social good' offers different ways of tracking benefit, generating insights that help us understand how and why global health programmes (even those with 'social determinants' awareness) often fail to achieve health targets even when they are considered successes. Understanding the mechanics of pharmaceuticalization as a set of social displacements and not simply as a sign of effective care is one line of analysis that could be recalled here (Van der Geest & Whyte, 1988; Whyte, Van Der Geest, & Hardon, 2003).

Attempts to decouple health from its micro- and macro-financial potentials means reading the social in non-instrumentalist (and non-financial) ways all the way up the line. Thus, the role that social medicine itself has played in the economisations of life needs to be reconsidered. Refusing to take the social as an attribute that is free-standing and yet pliable in relation to the generation of health statistics (showing, for instance, that something is cost-effective or not) opens up the space for thinking about how else we might measure outcomes, how else we might talk about fiscal good, and how we think about value in relation to health. To date, there is little effort to define how the social works in these spaces of financial health accountability, little intellectual rigour about the social in the kinds of work being done in these interventions in global health.

The economy of attention

One of the advantages of a social medicine approach is the use of a critical analytical repertoire to understand how some health problems are far from the site of sick or ailing bodies. This too, requires thinking in new ways about what constitutes 'the social' in global health. Rather than treating the social as the unopened black box of context where projects are done, this approach turns the focus on the social apparatus of attention – an *economy of attention* that is mobilised in global health. What we mean by this is that certain things get more attention than others as part of the advocacy machinery, while other problems go rather unnoticed if not entirely neglected (Ollila, 2005; Storeng & Béhague, 2014). This is partly a function of how funding for global health works but also a limitation imposed by its shallow understanding of the social. Global health interventions are constituted in and through social iterations that result in making some things visible and other things invisible.

For instance, violence is often overlooked in global health campaigns in lieu of more immediately solvable problems, even when both cause enormous physical suffering and morbidity/mortality. It does not take much to see how conditions of violence exacerbate problems of infectious diseases, interrupt prevention campaigns, and undermine health gains with a single machete, the shot of a single bullet, the urgent flight over deadly lands to escape persecution (De Leon, 2015). It is not exactly easy to motivate people who live with high levels of chronic violence to fight mosquitões (Löwy, 2017). At stake in this critique is the idea that suddenly funding will be made available for Malaria, for AIDS, for TB, and enormous resources are rolled out just for those problems while chronic and endemic violence is seen as unworthy of resources (if it is considered a health issue at all). Interventions that focus on singular problems have a tendency to disaggregate complex social conditions in ways that can undermine impacts. We are not talking about misplaced priorities here, so much as how treating social context as a black-boxed constant impedes priorities that do have value.

Scholars using social medicine approaches in global health have long noted the interconnectedness of social, institutional and physical health. We know that the structural effects of inequality on health are real (Wilkinson & Pickett, 2009), and that chronic stress produced by things like racism affects health outcomes (Bailey et al., 2017; Becker, 2004; Briggs, 2012, 2017; Geronumis, 2013). Thinking about the economy of attention helps us trace how the social makes health a consequence of multifactorial assemblages that weigh all conditions in some sense equally, and also how focusing on one (new and high-attention-getting) target is unlikely to reach the desired effects because of the many causal social pathways involved in health. Getting people to stop smoking or eating high calorie foods will not necessarily reduce their morbidities if they still live in environments of socioeconomic and racial precarity. This insight multiplies: epigenetics points to these causal pathways as indicators of how sociality or even racism create biological communities of illness that are passed on intergenerationally (Lock, forthcoming; Niewöhner & Lock, 2018), a point we will return to below. Our point here is that notions of the social that are currently in play need to be revised in order to consider not only how things like social inequality are as biological as they are 'social' but also to recognise that the social cannot be disaggregated in ways that 'attention-getting' priorities often require.

Social medicine approaches promote the need to make visible what is consistently made invisible by the way that the economy of attention generally commands attention to only one thing (and often the most easy thing, the low hanging fruit) (Caduff, 2015). Given this more wholistic approach, the focus on interconnections between health disease causation and larger social, biological, political and economic contexts that cause harms is useful here. Of course, there are initiatives within global health (and its predecessor international health) that have tried to tackle this, and long-standing critiques of donor-driven verticalization (including critiques of MDGs, 'Health system strengthening', etc. and consider the historic WHO's Alma Ata Conference and Primary Health Care initiative). The problem of course is that the structures tend to remain the same in all these initiatives, with little attempt to revise the methodologies along with a recurring tendency to hold things like 'the social' as a constant and a given rather than as the driving force behind linear and reductionistic approaches to problems that are complex and interconnected.

For instance, the World Mosquito Project, funded by Gates Foundation aims to eliminate diseases transmitted by the mosquito Aedes aegypti (such as dengue and Zika) by infecting the mosquito with a bacteria, Wolbachia, that limits the mosquitoe's capacity to transmit viruses. This technological solution was thought to be something that would bypass the need for scrutinising the social issues of poor sanitation and living conditions or the ways that these vary from place to place. However, researchers soon learned that approaches that worked well among middle class Australians worked poorly in Brazilian favelas where preoccupations with high levels of violence made implementation more difficult (Löwy, 2017). Similarly, media coverage of Zika in Brazil that has constructed imagery of a warlike crisis has not only overlooked actual violence in these communities but also masked gender and social inequalities (Ribeiro, Hartley, Nerlich, & Jaspal, 2018). Nading (2014) offered insights on how mosquito control worked and failed to work in Nicaragua where assumptions about the social entanglement of humans and mosquitos was grossly underestimated and where attention-getting campaigns misread the role of political instability making reduction of malaria risk uncertain. Here again, how the global health community turned its collective attention to the promise of a technological fix (or even a vector control fix) without considering more overarching impediments of social unrest and complex social milieus of everyday family routines suggests the need for more close scrutiny of the social and moving beyond its gloss as a complex yet static context. Efforts to trace the evidence for what has gone wrong with nearly every anti-malaria campaign since the dawn of international health itself (see Brown, 1981), points again to the oversight of assuming that the social is a constant rather than a complex interweaving of material and human conditions.

Paying attention to how the economy of attention works in global health may help avoid the reductionism that arises from ignoring complex relations of social causality while also reminding us of how often these relations exceed our taken-for-granted assumptions about the social that have dominated in the twentieth century.

Anthropogenic climate change

Anthropogenic climate change – also referred to as the Anthropocene, or the age of *human-made environmental precarity* – is arguably one of the most pressing global health concerns we face today. Global health efforts to map the contours of this precarity is already being done in terms of: health exposures and risks from environmental disasters; increased chronic exposures to toxicants; limitations in access to food; increased pathogenicity of viral strains; augmented spread and speed of pathogen transfer; and deficient health infrastructures for dealing with these changes. At the same time, global health programmes often rely on well-rehearsed languages – disasters, spread of viral, bacterial, parasitic infections – rather than reframing these problems in relation to how social medicine scholars are asking us to rethink what we mean by 'the social' in relation to the Anthropocene.

Consider cancer. Global health programmes have targeted specific sources of cancer by focusing on individual behavioural change, in part by way of local taxation on known carcinogens. Tobacco related cancer is prominent here and is treated as the primary culprit in rising cancer morbidities, as is the tactic of increasing taxation of tobacco sales as a means of reducing smoking (Global Health 2035). On the one hand, the focus on tobacco is important and promising: it pays attention to chronic forms of morbidity (tobacco cancers) and prevention (reducing smoking). On the other hand, global health's insistence on defining the problem of cancer narrowly and in terms of individual social behaviour reproduces the same dead ends we have seen in global health already where social behaviour, as usual, is treated as a matter of individual choice, rather than as the desired end point of various machineries of industrial capitalism that have increased exposure to many chemicals that cause many forms of cancer. Scholars of the Anthropocene are pointing to the ways that toxic exposures from the air, water, food form a larger corpus of human transformation that has now not only contributed to rising cancer rates of all kinds but also put the planet at risk (of which smoking and tobacco consumption forms just one thread) (Choy, 2011; Jain, 2013; Weston, 2017; Murphy nd). This perspective moves questions of behavioural change out of the realm of individual choice and into the realm of global geopolitical responsibility for removing petrochemical and other toxicants at their industrial sources. In this case, moving beyond notions of the social tied to individual choice toward a social that sees climate change from chemical overexposures as a geopolitical social problem is what is called for. The recent effort on the part of journals such as the Lancet to deal with the issues of climate change (in fact they offer a whole journal on Planetary Health) is enticing in its attempt to capture the scope of the problem, and yet most of the research and recommendations cleave to familiar and well-rehearsed messages in relation to infectious diseases, disasters, etc. without taking into consideration new models of sociality (Bizley, 2017; Landrigan, Fuller, Haines, & McCarthy, 2018). Our sense is that we need to consider the ways that these conceptual moves are being explored as fundamental alterations, rather than reiterations, of how we conceive of the social in times of predicted planetary demise.

Scholars of the Anthropocene use environmental decline, chemical exposures, and ecosystem relationships as prompts to rethink what we mean by the social in ways that distribute responsibility away from humans and toward ecosystems as a whole. In this move, what constitutes 'the social' is expanded considerably. For instance, mapping the dispersal of toxic substances invites us to think

about human-animal-environmental relations in ways that disrupt our understanding of where the 'social' begins and where it ends but certainly always beyond humans (Haraway, 2016; Kohn, 2013; Tsing, Swanson, Gan, & Bubandt, 2017 Viveiros de Castro, 2004;). Social relations here are not just human social relations, but rather relations among many ecosocial beings, including living environments, plant and bacterial systems, human technologies and animals – an approach that ultimately tasks us with rethinking our concepts but also our strategies for adaptation and survival. Symbiosis (over zero-sum combat), cohabitation (over displacement), and reconceptualizing the meanings of kin, not to mention engaging in a politics of acceptable levels of harm in order to *live with* our technology-laden chemicals are advanced as conceptual tools to help us reimagine life in ways that are both disruptive and sometimes restorative.

When the climate itself operates as an actor in the models we use to think about sustainability, what would it mean to attribute to climate, microbes, viruses and plants the capacity for sociality? Here calls for being attentive to *the social* means reimagining our notions of disease and illness, but even what counts as biology or 'life' in ways that can generate productive interventions (Paixão, Teixeira, & Rodrigues, 2017; Weston, 2017). Humans inhabit worlds that are shared living spaces - shared by microbes, plants, animals and infrastructures that they rely on for survival - that also constitute the social milieu, thus why would we not consider them kin-beyond-the-human? Ecosystem approaches open space for consideration of the symbiotic flow of viruses and bacteria as coinhabitants of the planet and fellow passengers in global transit rather than as mere (or always) obstacles to human survival. At the same time, mapping morbidities onto their logical end points in ecosystems offers opportunities for thinking about things like cancer and toxic exposures as trade-offs that must be calculated alongside individual decisions about things like smoking, driving cars, flying in planes, taking probiotics to undo the effects of spraying our foods with pesticides. Classic political economic analyses of harm and harm reduction in the face of daily chemical exposures can only go so far to remedy the situation because the lines of accountability include but also reach far beyond corporations and profiteering that make the chemicals, sell the gas, fuel the airplanes. We are all participants in this techno-chemically rich form of life. Deciphering lines of accountability for provisioning care for mutated bodies, for a life with rashes and allergies, for early deaths and childhood diagnoses of cancer is not so easy, but surely a global health that attends to these problems needs to consider how our current notions of the social, on which our political engagements have rested up to now, may have outlived their utility in helping us through these predicaments today.

Geopolitics of 'North' and 'South'

The social medicine approach we are proposing puts the geopolitics of 'North' and 'South' centre stage as ripe for critique. To be sure, the 'Global North/Global South' language constitutes one way to critique the long-standing colonial histories of health and development. These labels are in a sense attempted 'correctives' to other concepts that were perceived as problematic (First and Third World; Developed/Un- or Under-developed). At the same time, these categories replicate many of same problems of a tacit assumption about the social that we have seen above, built into the concepts themselves.

For instance, many have called attention to the engrained assumption that knowledge about health must come primarily from the Global North, countering assumptions that theory comes from the Global North while data comes from the Global South. Critiques of this state of play abound within global health institutions (e.g. the '10/90 gap') and among social scientists who have repeatedly accused powerful actors in the North of exporting 'Western' models of illness and treatment, underrating the role of practitioners of traditional therapies, ignoring cultural variability in comprehending and responding to suffering and ignoring its social and economic causes in low and middle-income countries (see Patel, 2014 for a critique). Social medicine has a long history of attempting to subvert these hierarchies, and several traditions of social medicine were developed in the Global

South to attend to this: the Latin American (including Brazilian Collective Health), South African and Indian traditions of social medicine (Kark & Steuart, 1962; Porter, 2006; Susser, 1993; Victora, 2003; Vieira-da-Silva & Pinell, 2014; Waitzkin, Iriart, Estrada, & Lamadrid, 2001). Many academics in the Global North take this tradition seriously as source of inspiration to revitalise social medicine in their countries. Yet, such efforts remain largely piece-meal and unknown to the broader community of public health practitioners and they have tended to not engage as deep a consideration of post-colonial scholarship as we suggest would be necessary. Shula Marks' work, a historically sensitive analysis of the long-standing neocolonial vested interests that account for the failures of community health today, is a notable exception (Marks, 1997).

The social medicine approach we are talking about considers the categories (and conceptual work done by) distinctions between North and South as problematic because they assume too much (and too much homogeneity) of the social. First, these categories have poor analytical power. Historically 'South' or 'tropical' became synonymous with poor or neglected, but these divisions, e.g. between privileged and neglected populations, are not necessarily geographic. For instance, nearly a hundred years ago Brazilian sanitarians explained that the 'sertão' (hinterland) starts 100 metres from the central avenue of the capital Rio (Peixoto, 1998); today neglected populations (the poor, the marginal, refugees, migrants) are everywhere, while 'intermediary' economies generate their own networks of power and domination, and their zones of neglect. Economic divisions exist within the Global North (the US South and rural states, Southern Italy, regions in North England, Wales and North Ireland, former Soviet states, etc.). Similarly, there are great swaths of wealth in the so-called South held by both states and private wealth individuals that get glossed over (if not ignored) in global health policy-making. Social Medicine has been traditionally attentive to the health conditions of the poor, excluded, marginal, migrants in the Global North and it remains equally suited to understanding the conditions and solutions to these problems in the so-called global South, but the distinctions between North and South dissolve as geographic or economic characteristics.

Second, the notion that global health arrives from the North with solutions that must be cleverly 'implemented' in the South is hugely problematic even before considering the disparities of resources and wealth where this model operates. Consider the role that China plays in delivering health aid, building hospitals, or the role that Cuba has played in educating doctors in many countries. These examples upset normative assumptions about where knowledge and strategy come from along the North-South axis, forcing us to reconsider the utility of the terms themselves along social lines.

A social medicine interrogation of the conceptual work that underpins many global health programmes relying on assumed North-South binaries offers yet another way to consider the need for rethinking 'the social'. If the categories of North and South no longer stand for the arrangements and circulations of knowledge, resources and health in the ways that we assume they should, perhaps it is because the categories themselves have come to be nothing more than placeholders in policy-making worlds. North and South are empty categories that get filled in with assumed relations of inequality, race, class, poverty, wealth, etc. and assumed modes of rectifying these inequities (e.g. better representation from the 'South' in major organisation such as the WHO), rather than as labels for things that are ambiguous and that require a good deal of ethnographic inquiry to understand, and that vary from place to place. Thus, rather than assuming that global health will always work to rectify the great divide between North and South, we might insist on figuring out what the actual conditions are in the places where global health gets done, including how knowledge, wealth and health circulate, how poverty is constituted and experienced, and who and what are already working to solve these issues, if anyone. Here, the social that circulates in Global Health could benefit a great deal from the conceptual work, particularly in relation to the taken-for-granted notion of 'social inequality'.

The tendency in much global health work is to treat all health inequality as the same (and rooted in social inequality in the same ways) which has hampered progress, even in the integrated complex models of intervention favoured by social medicine efforts. In contrast, we might consider alternatives to the frequent tensions within global health between the constellation of local conditions (interventions adapted to local cultural specificities; the characteristics of existing local health systems; the particular needs of given population groups) and efforts to 'scale up' and generalise those interventions as global strategy. The focus on local needs versus things like managing global pathogens by the WHO, and the regulation of food safety by the Food and Agriculture Organisation for instance, reveals complexities of causality that inform what constitutes health inequality and these complexities matter.

Human health and illness always take local form even while our models of them are enacted across both global and local spaces and epistemologies. We recall the lively literature on the concept of epigenetics and local biologies, for instance, that helps orient us to these differences. Not only are biological phenomena experienced differently in different places, in different socially, economically, racially or even religiously identified people, but one could argue that these differences are inextricably and at the same time biological, cultural, political, moral, etc. making the notion of 'the social' much more complex than has hitherto been assumed (Lock & Nguyen, 2010; Niewöhner & Lock, 2018). This complex rendering of the social (that blurs the biological, cultural, political, etc.) shapes not only the experience of health and illness but also the contours of inequality. Inequality is found simultaneously in one's epigenetics and one's environment, exploding notions of race, class and power that have dominated conversations of things like the social determinants of health inequality. We are not asking for a relativising of the notion of inequality, but rather for a recognition that different measures of inequality could co-exist, overlap and sometimes contradict one another. Here, a return to the conceptual work being done by scholars of the Anthropocene is helpful.

Suggesting that 'the local' warrants more conceptual space in global health work does not mean assuming that we know what the local actually is - something that is highly problematic in a globalised world. That is, even the categories of global and local (like North and South) are problematic. While the global and the local are often conceptualised as discrete spheres, the approach we advocate moves beyond the global/local divide by drawing from the rich theorisation in anthropology, as in Escobar's notion of 'glocality' (2001), Tsing's concept of 'friction' (2005) and Collier and Ong's notion of 'global assemblages' (Collier & Ong, 2005), as alternative frameworks. Analyzing the complexities of social inequality as formed by global assemblages, for instance, 'emphasizes their heterogeneity and perpetual movement and traces their limitations through "technical infrastructures, administrative apparatuses, and value regimes" (Bemme & D'souza, 2014, p. 853). Assemblages make tracing what is local and what is global less important than the fact that the forces coalescing and conspiring to produce inequality are complex and specific to particular histories, geographies, and social practices that are both local and global at once.

Our point is that apprehending 'the local' in time and space is problematic when it presumes certain things like social inequality or health inequality' as obvious and obviously situated in dichotomous relationship to the global, a habit that recurs when reference points like Global North and Global South are invoked. Again, while much social medicine work has tended to be more structural/Marxist in orientation, treating inequality as the root source of social and physical suffering, we are advocating a need to attend to specific conditions of pathogenesis and intervention, recognising that one size does not fit all, and thus to a breaking up of the stranglehold that the essential and uniform category of 'social inequality' has held on global health efforts. A renewed perspective on what Escobar has called a pluriverse design (Escobar, 2018) with its constant reflexivity regarding how 'the global' is at play in everything 'local' offers a vision of the social that moves far beyond North/South and Global/Local contours of social inequality. Along these lines, we would also argue that remapping the social in this way invites us to consider how social medicine is itself always already global in some sense, and thus global health might always already be doing a sort of social medicine. Our concern is what kind of 'social' that social medicine is doing.

Conclusion: a note on methodology

The social medicine we have mapped here draws from a long tradition of evidence that health interventions are often built upon flawed assumptions about the causes of disease and thus often lead to ineffective solutions. Historically, social medicine offered a concept of 'the social' that was attuned to the limitations of scientific medicine but also became routinised in ways that treated it as if it is basically the same thing in all places. Our effort has been to resist this in global health work - to resist the use of facile notions of the social, but also facile methods of apprehending the social. We have argued that exploring some of the new ways that 'the social' is being pursued across social science disciplines sheds light on some of the limitations seen in current global health work and points us in new directions that are worth considering. To deploy these expanded notions of the social in global health might require thinking further about what kinds of methods are best suited for this work.

Social surveys are often used in global health work to capture the 'social determinants of health'. Social surveys, however, frequently fail to grasp underlying pathways of pathogenesis that can only be mapped by tracing the myriad activities, relations and concepts held by community members – in short, a notion of the social that is not assumed. Among the methods useful for this work are the techniques of participant observation (from Anthropology), grounded theory (from Sociology), postcolonial studies (from History), gender complexity (from Women and Gender Studies), community participatory research (from Public Health), social constructionism and actor-network theory (from STS), various narrative approaches to data collection (from Medical Humanities) and even an approach that contemplates how the social may need to exceed the human (in Anthropocene studies). While these approaches have similarities and differences, they all generate opportunities for moving beyond facile notions of the social. And, while it is absurd to think that any scholar might be skilled in all of these approaches, let alone use all of them, we would argue that the activities, from fact-finding to intervention planning and implementation for global health might benefit from inclusion of work from any of these fields.

Often the very fact that the methodologies from these diverse social science and humanities fields are not all the same is overlooked by global health research teams who assume that 'social determinants' can be seen and studied in much the same way by anyone with social science training (and that surveys provide a shortcut to get at these things). Other global health methodologies fall into the same trap, including use of statistical and RCT-based interventions that tend to hold 'the social' as a constant, presuming that the social operates as a sort of background static in the system as opposed to a robust and teeming source of information that may be key to both efficacy and critique of the interventions being attempted. There is a robust literature on the complicated relationships between qualitative and quantitative methodologies in global health, particularly on the reductive tendencies emerging from qualitative research in global health in and around notions of the social (Geissler & Kelly, 2016; Smith-Morris, 2016). The assumptions and erasures of complex sociality in much global health work only bolster the ambiguous renderings of methodology as interchangeable and remind us how important it is to devote time and effort to deciphering what 'social' we are talking about at any time or place.

In this paper, our goal has been to open up space for rethinking concept work by challenging the meaning of 'the social' that is often used uncritically in global health. Building on what Holmes et al. (2014) called for in a multidisciplinary return to social medicine in global health, we call attention here to a more open ended and theoretically informed approach to knowledge-making and truthformation in relation to the social. In this sense, social medicine's contribution is not just in how we collect data (although that matters too) or that we have many different ways of doing so. Rather, social medicine's contribution can be aimed at revising how we think about data and what it means in ways that are differently informed by a notion of 'the social'. We have mapped just a few of these here.

Notes

- 1. This article is born from an international workshop at Kings College London (funded by the Wellcome Trust and organised by Jeremy Greene, Nikolas Rose, David Jones, and Carlo Caduff) held in May 2018.
- 2. This period could be broken into multiple subset eras, such as the interwar period in which the Society of Nations and the Rockefeller Foundation focused on vertical eradication public health campaigns (Weindling, 1995; Packard, 2016), and the post-war period that gave rise to various iterations of social medicine under the rubric of international health development (including the rise and funding of fields such as Medical Sociology and Medical Anthropology, International Health Development Studies as well as elements of the WHO's Alma Ata and the Primary Care movement).
- 3. Some other exemplary clinically-situated programmes are at Harvard University, the University of North Carolina Chapel Hill, University of Ontario, American University in Lebanon, The State University of Rio de Janeiro and many more.
- 4. One reason for this trend is likely a fear of the politics in the label: claims to be doing Social Medicine are seen as allied with political socialism. This discursive hangover from the Cold War still has more potent effects in some countries than others (the USA being a good example of a country with a serious hangover). There may, however, be other reasons. The active marginalisation of knowledge about the social (as opposed to the biological, the genetic, or the statistical) in many fields of science is another possible reason. Scholarship on the social is often set against (as if it is not even) science, therefore lacking some sort of credibility in both health sciences and health policy (we will say more about the issue of 'the social' below). Finally, we also sense that Social Medicine goes unrecognised in part because it is a victim of broader academic trends that have made 'old' fields of inquiry and intervention seem out of date and unhelpful. This particular tendency, resolutely neoliberal, has forced academic departments to splinter and silo themselves under the tyranny of demands for innovation to make their field seem new and different by giving it a new or more refined name, or merging it with other fields rather than simply sticking with the old rubrics (even if what has been done before in these fields still works). Thus Social Medicine may be a victim of political economic movements that have little to do with changes in the commitments of scholars, intellectually or practically.
- 5. The turn to Global Health was a complex consequence of the WHO crisis of the 80, the rise of neo-liberal policies, the growing influence private donors and public -private partnerships, and a new focus on emerging diseases above all AIDS and technological solutions to health crises (Birn, 2009; Brandt, 2013; Brown et al., 2006; Fassin,2012; King, 2002). This turn erased the earlier tensions between proponents of primary health care strongly advocated in the 1970s by WHO's directors Halfdan Mahler to its much more restrictive variant, the selective primary health. While advocates of primary health care stressed the importance of non medical determinants of health, advocates of selective primary health care, and later of access to essential drugs and universal health care, especially in its 'minimalist' version, eschewed issues such as inequality, violence or discrimination and accentuated access to health care structures and drugs (Cueto, 2004; Greene, 2011).
- 6. WHO Commission on the Social Determinants of Health. Final Report. 2008 http://apps.who.int/iris/bitstream/handle/10665/43943/9789241563703_eng.pdf;jsessionid= 810A3B28E546EAE9E42C2F29CAAB47B8?sequence=1.
- 7. We are inspired in part by Hacking (2000) undertaking in The Social Construction of What?.
- 8. Global Health 2035: http://dcp3.org/sites/default/files/resources/Global%20Health%202035%20Report.pdf.
- 9. This is not to say that the nation-state has lost all visibility. In fact one could argue that with the rise of right wing nationalisms, there is a greater presence of a menacing nation state than we have seen in nearly a century. However, we point here to the widespread decline of national commitments to health care in many regions of the world.
- 10. Indeed, some states have often abused power in the name of health. State-supported sterilisation campaigns, promoted as a 'solution' for the seemingly self-evident 'problem' of 'over-population' are only one example. The very concern with 'over-population' demonstrates how problematic it is to take understandings of the social for granted. What constitutes the social in the eyes of the state is itself an object of contestation.

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