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# Knowledge politics in global governance: philanthropists' knowledge-making practices in global health

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## ABSTRACT

Existing research points to the presence of philanthropists in global governance as funders of programmes and partners. Through an in-depth exploration of global health governance, we highlight that philanthropic organizations now shape governance by acting as producers of knowledge. Practicing 'knowledge philanthropism', they collect, produce and assemble the data, calculations and research which is used by International Organizations (IOs) to govern problems. In addition, philanthropies craft tools of interpretation, whether concepts, vocabularies, or concrete technological devices that embed these, which are being used for the treatment of the knowledge they themselves produce. While performing such activities, they reify their own role and enable their deeper entanglement in the knowledge machinery of global governance, fashioning data-centric activities as the solution to global health problems, and themselves as the necessary partners in this resource-intensive data collection effort. The epistemic power of philanthropists produces political effects, on health interventions and modes of governing, which deeply participate to the transformation of all matters into objects of investments for financial returns. We explore these processes in relation to global health governance, with a specific focus on medical hypertension, fashioned as a top global health priority and a necessary 'investment' by the World Health Organization (WHO) and other sites of global governance.

## KEYWORDS

Global governance; global health; philanthropic organizations; politics of knowledge; expertise; data

## Introduction

Private philanthropic foundations, together with the offspring organizations they create and fund, have become major actors and sites of global governance. Scholars have pointed to their ubiquity in a number of domains, from development, to education, or yet ecological projects (McGoey, 2014; Partzsch & Fuchs, 2012). In global

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health, the Bill and Melinda Gates Foundation (the ‘Gates Foundation’), the Clinton Foundation, and Bloomberg Philanthropies have their own health initiatives, fund biomedical research, or act as partners for International Organizations (IOs) (McGoey, 2014; Rushton & Williams, 2011; Youde, 2013). Philanthropists’ spending in global health has recently been surpassing that of most national governments, so that the WHO now obtains a significant portion of its budget from the Gates Foundation (Crawford, 2021). Naturally, ‘when a significant portion of [the WHO’s] budget comes from a private philanthropic organization with the power to stipulate exactly where and how the UN institution spends its money’, suspicions of conflicts of interest may arise (McGoey, 2015, p. 7). When philanthropists support global programs in health, agriculture, or else, at the same time as they invest in the pharmaceutical or agri-business industries, effects on IOs’ agenda-setting are likely.

But the power of philanthropists goes beyond the influence they may have on the prioritization of problems and interventions. The starting point of our contribution to International Political Economy (IPE) debates consists in shedding light on the way philanthropists have come to shape global governance by acting as producers of knowledge. Practicing what we call ‘knowledge philanthropism’, we argue that philanthropic foundations and their offspring organizations have come to sit at the core of the knowledge machinery of global governance—in health, but also beyond. Not only do they transfer their own practices of measurement to other sites of global governance; they also *collect, produce and assemble the data, calculations and research* which is used to govern problems. In addition, philanthropies *craft tools of interpretation*, whether concepts, vocabularies, or concrete technological devices, which are used to treat the knowledge they themselves produce. While performing such activities, they *reify their own role* and *enable their deeper entanglement* in the knowledge machinery of global governance, fashioning data-centric activities as the solution to global health problems, and themselves as the necessary partners in this resource-intensive data collection effort. Yet, these epistemic and knowledge-making roles, including their claims to ‘rational’ and ‘evidence-based’ interventions, remain underexplored. We set out, thus, to investigate how philanthropies produce knowledge that constitutes and delineates global issues and the ways they are governed.

We further contribute to debates in IPE by deepening existing understandings of how market ideologies come to permeate the everyday processes and practices of global governance below the surface, at the deeper level of knowledge-making. Shedding light on how philanthropic foundations produce material knowledge makes it possible to understand how broader ideologies or logics operate ‘in action.’ Existing works provide ample discussion of the macro-level analysis of the political and economic ideologies and institutions that shape policy-making in global governance, in the domain of health and beyond. By contrast, in-depth explorations of the ‘everyday’ mechanisms through which market ideologies manifest themselves in, and become entangled with, processes of global governance are still scarce (Guillaume, 2011; Kessler & Guillaume, 2012, p. 116; Nunes, 2020). In disclosing how philanthropists are involved in very concrete processes of knowledge-making, we provide a novel and textured understanding of how market logics (and associated frames, such as biomedicalism), are enmeshed with and operate in the health domain and, in turn, how global health governance becomes a site for the production of economic objects.

Third, and relatedly, we also contribute to existing insights on the financialization of global governance issues (Gill & Benatar, 2020). Scholars have argued that health is now increasingly financialised ‘through its abstraction into a sellable good’ and an investment (Kay & Williams, 2009; Gill & Benatar, 2020). Existing research has captured this discursive turn, where human lives and all matter of things are turned into assets (Martin, 2002; Langley, 2021), and global interventions are framed as ‘returns on investments’ (Mitchell & Sparke, 2016). Scholars in IPE have also noted how transformations in global trade and investments can have negative impacts on global health (Sell & Williams, 2020). However, what happens when global finance does not only *affect* health outcomes, but when health and disease themselves *become* objects of finance—to be invested in, calculated with macroeconomic tools, and delineated through economic logics? Our observations show how such transformation occurs in practice, as philanthropists sit at the core of processes and practices which monetise health interventions, transforming them into objects of investments for financial returns.

We explore ‘knowledge philanthropism’ in global health governance, through a close examination of knowledge-making processes on medical hypertension, a problem which has come to sit at the core of the global health agenda, and is now seen as the main ‘public enemy’ in global health. Medical hypertension is governed as part of the WHO’s agenda on Non-Communicable Diseases (NCDs), a grouping of diseases that includes cardiovascular diseases, cancers, chronic respiratory diseases and diabetes.<sup>1</sup> Yet, and despite the roots of NCDs in broader social and economic contexts, hypertension has come to be seen purely in biomedical terms, as a costly ‘risk factor’ which needs investing in. This approach has emerged and stabilized as the WHO developed a rhetoric catered to private investors, prompting Bloomberg Philanthropies to start partnering with the WHO, conceiving and implementing some of its ‘health packages’ related to hypertension. While doing so, Bloomberg has stimulated a shift towards a results-oriented policy approach, where policy ‘impact’ is measured in the number of ‘lives saved’, with some of its offspring organizations producing the calculations indicating how to achieve such results. In promoting the need to continuously showcase results, Bloomberg has also made monitoring and surveillance activities an absolute priority and placed *itself* at the core of this data-gathering effort, producing a set of technological devices that promise more accurate data. In the discussion section, we consider the effects of this approach: In particular, how it favours specific kinds of interventions—fashioned as ‘simple’ and ‘universal’—often at the expense of local specificities, as well as a specific way of governing problems where data-gathering becomes a solution in itself.

These findings result from in-depth case study work on the global governance of medical hypertension. Through immersion with the details of the case, we have mapped the relevant actors and sites that govern hypertension, focusing on the role of private philanthropists therein. Moving away from a strict definition of ethnography, we have strived for the nearest possible vantage point to our object of study (Gusterson, 1997), observing ‘at distance’ websites, documents, reports, scientific studies, and their relationships. Scholars in anthropology have indeed taken distance from the idea of fieldwork as direct participant observation. The ‘field’ can be observed by talking with people, looking at texts or data, considered as social processes, or yet, exploring websites.

Specifically, we have conducted, first, an analysis of the documents published by the WHO and Bloomberg Philanthropies and its offspring organizations, such as Vital Strategies and Resolve to Save Lives (RTSL). We have examined the core documents that these organizations have published on hypertension, such as all the documentation on the HEARTS package and its six modules by the WHO, and the WHO's guidelines for the treatment of hypertension. We have analysed the textual material using a particular brand of discourse analysis, 'critical framing analysis', which conceives discourses as frames. Frames are devices that actors use 'to interpret problems, to fashion a shared understanding of the world and to galvanise possible resolutions to current plights' (Barnett, 1999, p. 15). Examining how philanthropists frame problems provides crucial insight into 'embedded and tacit assumptions, meanings, reasonings and patterns of action and inaction' (Wengraf, 2001, p. 116). Second, we have conducted 14 interviews with officials and experts working for the WHO, organizations funded by Bloomberg philanthropies, in particular RTSL (which directly partners with the WHO to do its policy work on hypertension), and the Institute for Health Metrics and Evaluation (IHME). The interviews were central in helping us to understand the relationships between these organizations and processes of knowledge-making. Third, we have conducted an in-depth examination of the websites of the WHO (sections on hypertension), Bloomberg Philanthropies, RTSL, Vital Strategies and Simple (Bloomberg's special website dedicated to the Simple app, as well as other technologies that it uses). Fourth, we have mapped the data and research that sit at the core of how hypertension is known by the WHO. We have identified which metrics and data are mobilised, as well as the research that informs its agenda, paying particular attention to the authoring of documents, scientific studies, and the data upon which they rely. This has resulted in an examination of the scientific studies funded and conducted by Bloomberg Philanthropies and its research staff, as well as the research on hypertension funded by Bloomberg at Johns Hopkins University, and the way such research has been incorporated into the WHO's agenda. In doing so, we provide an empirically rich and detailed account of the often-black boxed processes through which philanthropies, their own visions, and neoliberal ideologies permeate knowledge-making in global governance.

## **The epistemic role of philanthropic organizations in global governance**

### ***Private actors, philanthropists and market logics in global governance***

Forces of globalization, neo-liberal ideology and disagreements for public rule-making have created new opportunities for private actors to exercise power in the global economy. Scholars have attempted to take stock of the increased presence of private actors in global governance, pointing to the multiple and sometimes hidden roles they perform, such as establishing norms, guaranteeing contracts, establishing standards, and carrying out product certification (Auld, 2014; Bütthe & Mattli, 2011; Graz, 2019; Green, 2013; Hall & Biersteker, 2002). Critical IPE, constructivist IR scholars, socio-legal scholars, and sociologists, have, for their part, engaged more deeply with the epistemic role of private actors, sites and logics in global governance. They have exposed the penetration of economic or corporate modes of thinking in IOs and other global governance fora, and their effects on

the construction of problems and arts of governing. A body of structurally inclined scholarship has revealed that neoliberalism and market ideologies are constitutive of how trade, food, education, and health are understood and governed (Demortain, 2015; Jarosz, 2011; Sell & Williams, 2020). From this perspective, neoliberalism and market logics shapes general understandings of problems, delineate what kind of language is permissible, and signal which governance techniques seem both legitimate and necessary (Seabrooke & Sending, 2020).

Given the pervasiveness of market ideologies, scholars have also emphasised that the line between the public and the private is becoming blurred, so that global governance increasingly resembles a 'patchwork' (Pouliot & Thérien, 2023). Indeed, IOs themselves promote a neoliberal agenda, in which economics-based standards are used to measure 'performance' (Merry, 2011; Uribe, 2015). The spread of 'evidence-based' policy-making, and the associated need to rank, measure, and quantify results, is an example of the dissemination of the corporate form of thinking into broader social spheres (Merry, 2011). In health policies, scholars have identified a shift towards a new form of 'rollout liberalism' 'that targets reinvestments, but only those that can bring measurable 'economic returns' (Sparke, 2020, p. 49). Yet, such approaches typically focus on changes at the discursive level, leaving us with a need to examine the micro-processes through which such logics operate in practice.

Scholars have also discussed the growing role of philanthropists in constituting and framing problems in global governance (McGoey, 2014). In global health, the way philanthropists push for 'biomedical and largely pharmaceutical-based responses to global health problems' has been emphasised (Rushton & Williams, 2011, p. 10). The presence of philanthropists in global health governance is not in itself novel. The Rockefeller foundation, for instance, has played a significant role since the beginning of the twentieth century, and the Wellcome Trust has an established history of funding research in the field (Birn, 2014). However, philanthropists are now performing new roles; they act as funders but also partners of IOs and their programs, and collaborate with the industry, governments, and NGOs, to operate and 'manage' health initiatives (McCoy et al., 2009; McGoey et al., 2011; Moran & Stevenson, 2013; Reubi, 2018). Crucially, as we argue, they also produce profuse data, metrics, and knowledge techniques.

While some enthusiasts have emphasised the genuine altruism in philanthropists' work, pointing out that they accomplish missions that serve the public good (Reich, 2018), their entanglements in governance processes, both globally and domestically, have also received a fair amount of criticism. Scholars have shed light on the sometimes harmful effects of philanthropists' programs in local contexts (Birn, 2014). Others have shown that philanthropists actually do policy *in lieu* of or through public institutions, often with detrimental effects, in what Roger's (2015) calls 'philanthro-policymaking'. We concur that such moves are problematic, as philanthropic organizations 'lack transparency and accountability' and, in effect, further the visions of the few US billionaires who fund them and their close advisors (McCoy & McGoey, 2011, p. 152). Indeed, and although philanthropic organizations fashion themselves as pursuing the public good, we see them as private entities due to their source of revenue, their lack of accountability, and the business logics and tools they mobilise and operate with.

Yet, although existing insights point to the prominence of philanthropists in governance processes, their epistemic role has been harder to decipher. There is a need, therefore, to open up the black box of *how* philanthropists come to shape the way problems are being known, and consequently, acted upon. To do so, we examine the novel and intricate roles that philanthropists perform, not only as funders and partners of global programs, but also as *producers of the material knowledge* that makes up the base for the governance of problems.

### ***Philanthropists' knowledge-making practices***

We explore the epistemic practices of philanthropic organizations in relation to the 'knowledge machinery' of global governance as a way of capturing the mundane, routinised, and dispersed epistemic functions they perform. Knowledge machineries have been defined as 'entire conjunctions of conventions and devices that are organised, dynamic, thought about (at least partially)' (Cetina, 1999, p. 11). They include ideational and material elements that intersect and are deeply enmeshed, and both deserve equal examination. Ideas, actors, material artefacts and their relationships, form a kind of ensemble, which both shapes and enables certain forms of knowledge and modes of governing (Bueger, 2018; Cetina, 1999; Littoz-Monnet & Uribe, 2023; Star & Ruhleder, 1996). Such ensembles do not only represent cultures, ideas, or discourses, but also make transportable, organize, and perpetuate certain ways of knowing (Star, 1999).

We therefore conceive a knowledge machinery as an infrastructure of knowledge *generation*, a kind of architecture comprised of sites, knowledge-making techniques, and artefacts that do not only act as fixed knowledge products but also shape and structure their own perpetuation as well as the production of further knowledge (Langevin, 2019). When they practice 'knowledge philanthropism', philanthropic organizations engage with the production of data, metrics, and research, techniques of interpretation, and even the design of technologies of data collection and assembling. With the continuous mushrooming of additional spaces for their involvement and participation, philanthropies can come to sit at the core of such machineries. While engaging with these mutually reinforcing epistemic practices, they sustain their own power and reproduce a certain form of politics.

### ***Producing data***

Private sites are increasingly involved in the production, collection, and circulation of data, particularly digital data. It can be difficult to trace the role of private sites in the production of data when knowledge is shared, negotiated, and transferred between different locations, obscuring the complex processes behind their production (Aue, 2021; Hansen, 2015; Musaraj, 2015; Pistor, 2012). Yet, philanthropists and their data centres have become increasingly involved in the production of metrics and estimates. When philanthropists take over the role of public statisticians, it opens new possibilities to produce certain forms of legibility that deeply shape the way in which problems are addressed and governed. Metrics, whether produced by private or public actors, are 'socially and politically constructed (and contested) phenomena that have many biases "baked" into them' (Aragao & Linsi, 2022, p. 2). But philanthropists' numbers are associated with novel kinds of claims; that of



complete, continuous, and instant knowledge. Philanthropists have indeed been able to fully capitalise on digitalization and modelling techniques, and thus produce profuse estimates on ‘everything,’ in contrast to traditional forms of statistics that to a greater extent acknowledge knowledge ‘gaps.’

In addition, philanthropists produce multiple ‘outspring’ studies based on their own data and producing recommendations on that basis, which make their way into prestigious scientific journals, giving further authority to their numbers. Such studies measure the ‘cost-effectiveness’ of specific interventions to address problems—for instance, giving micro-credits to people living under a certain poverty threshold, changing the size of school classrooms or making cancer screenings more frequent, thus privileging large N and econometric knowledge-making techniques (de Souza Leão & Eyal, 2019). When philanthropists and their offspring organizations produce such data, they are in a critical position to shape how objects are known, and even knowledge validation standards themselves, further cementing their role in global governance.

In addition, philanthropists also participate extensively in the assembling and production of data through their involvement in the implementation of programs, and the monitoring and evaluation activities therein, often in ways that are invisible. They have developed specific technologies to collect such data through mobile surveys, mobile phone apps, and the internet (Flyverbom et al., 2017). Existing research has shown that policy can be shaped and reshaped through implementation (Pressman & Wildavsky, 1973). When private sites—whether consultants, philanthropic organizations or corporate actors—are involved in the monitoring and evaluation of programs, they indeed collect and package new data that feed back into policy design (Leander, 2005; Reubi, 2018).

Monitoring and evaluation as a form of data collection are central elements of a mode of governance informed by the logics of cost-effectiveness and measurable results. In global health, the collection and exchange of biological data, which is central to surveillance and monitoring programs, is also a political-economic opportunity (Hester & Williams, 2020). As such, monitoring and evaluation are knowledge-making practices in themselves, providing the lubricant that keeps the machine running and reinforcing the epistemic position of philanthropists in the global knowledge infrastructure. This is questionable given that research on policy evaluation points out that failures are used to demonstrate the need for *more* of the evaluated policy, obscuring alternative possibilities (Ferguson, 2006; Mosse, 2011).

### ***Producing tools of interpretation***

Philanthropic actors are also involved in the production of specific concepts, models of calculations, and technological devices for IOs and other sites of global governance. As they are directly involved in the production of documents, briefs, and reports, they propose vocabularies, techniques of interpretation, and policy tools (Ban et al., 2016). Existing research shows how IOs increasingly rely on knowledge produced in private sites. The World Bank relies on methods of risk assessment initially developed by multinational corporations, although the origins of the methods and their normative purposes have been obscured (Pistor, 2012, p. 177). Consultants also increasingly produce the ‘policy scripts’ of IOs in domains such as development, health, and finance. In microfinance, the World Bank heavily relied



on consultancies, which established ‘accounting and reporting standards, the technological platform for investors to trade with location institutions, as well as the indicators used in social impact assessments’ (Seabrooke & Sending, 2020, p. 16). Similarly, as philanthropists are increasingly solicited (or increasingly ‘volunteer’) to produce the material knowledge for IOs, they do not only control the production of data, but also its *treatment and its interpretation*. Philanthropists and their offspring organizations produce and assemble such data through technologies which they design themselves. The introduction of mobile health (mHealth) has opened particular opportunities for the involvement of philanthropies in such activities. The concrete technologies of data collection designed by philanthropic organizations embody certain assumptions and theories. Their ideas and associated techniques become inscribed and perpetuated in the global knowledge-making processes in a way that discursive approaches have missed.

### **Normalizing participation**

While conducting these tasks, philanthropists work to naturalise their own epistemic role in the governance of specific sectors, feeding a political system in which they come to be seen as essential and desirable policy partners, experts, and program implementers. To this end, philanthropists use a diverse set of tactics (Lie, 2021). They can present their own participation as a necessity at a time when funding for public programs often is scarce. They can also portray their involvement in governance as a guarantee for its ‘effectiveness’, fashioning themselves as entrepreneurial managers, in contrast to supposedly slow and bureaucratic public institutions. As Leander (2005) argues in the field of security, private military companies ‘have been very effective in marketing their own activities as efficient and competent’ (p. 822). Philanthropists promote corporate modes of knowing and managing problems, which they fashion as more ‘effective’, ‘fast’, and ‘results-oriented’, in contrast to IOs, which are portrayed as heavily bureaucratic, cumbersome, and inefficient.

Today, philanthropists are involved in knowledge- and policymaking in multiple capacities. They participate as experts, produce data, co-write policy papers with public officials, act as partners in the provision or implementation of IOs’ programs, and design ‘effective’ technological infrastructures of data collection. Their presence has become increasingly embedded in global governance, where their participation appears common-sensical and necessary. We explore below these multiple yet mundane ways in which philanthropic actors are engaged in the production of knowledge on hypertension, fashioned as a top global health priority and an ‘investment’ by the WHO and other sites of global governance.

### **‘Investing now’ in NCDs: epistemic entanglements between the WHO and Bloomberg philanthropies**

Before exploring the epistemic practices of philanthropists in relation to hypertension, a brief contextualization of their involvement in global health is called for. The involvement of philanthropic actors in global health governance is not a recent phenomenon (Birn, 2014). Yet, the emergence of the ‘health is wealth’ narrative, and its adoption by the WHO in the early 2000s, paved the way for billionaire-owned

philanthropic foundations to further act as ‘funders’ and partners of global health programs, and as producers of the material knowledge through which global health problems are known. This shift took place as the WHO, concerned about the lack of financing for global health, framed its rationale for tackling NCDs (and thus hypertension) in terms of its negative ‘burden’ on income and productivity. This rationale, initially formulated by the World Bank, conceives the ‘loss of healthy life caused by disability or premature death as an impediment to economic productivity’ (World Bank, 1993, pp. 17–21).

In 2001, the WHO’s Commission on Macroeconomics and Health, staffed with econometric experts from the World Bank, the International Monetary Fund, and the private sector, and partially funded by the Gates and Rockefeller foundations, stabilised the ‘health is wealth’ narrative, making the case that health is one of the ‘cornerstones of human capital’ (World Health Organization, 2001, p. 21). Although the Commission’s report was criticised for ignoring the deeper causes of illness, the WHO embraced this rationale for addressing health concerns, launching its plea to ‘Invest Now!’ in NCDs, as a way to bring ‘substantial gains in countries’ economic growth’ (World Health Organization, 2005, p. 30). Since then, the WHO determines which interventions are cost-effective in terms of the DALYS (Disability Averted Life Years), its all-round metric that measures ‘the sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability’ (World Health Organization, 2011). Unsurprisingly, DALYS have been heavily criticised for their focus on years of productive work (Arnesen & Nord, 1999). Directly targeted at them, this language rapidly lured philanthropists that were looking for investment opportunities (Mathers, 2020, p. 2).

While the Gates Foundation is a prominent actor in the field of global health more largely, it is Bloomberg Philanthropies that has become heavily involved in the domain of NCDs. The entanglements between the WHO and Bloomberg Philanthropies take a variety of forms; from formal partnerships to hardly visible practices of collaboration. In the words of a WHO official, Michael Bloomberg ‘was looking for an investment case’ in ‘areas where there were proven interventions but there was underinvestment at the international level, so they felt that they could contribute best practice from New York.’<sup>2</sup> In 2007, Bloomberg started investing in NCDs with a \$125 million investment in tobacco control, to ‘scale up’ interventions that had been proven to have ‘saved lives’ in New York, where Bloomberg was mayor. At the same time, he brought his *own* work partners, the Johns Hopkins Bloomberg School of Public Health, the Centers for Disease Control and Prevention (CDC), and Vital Strategies, one of its offspring organizations, to work together with the WHO. Under Bloomberg’s impulse, the WHO launched the MPOWER package, targeting tobacco consumption, and establishing an official partnership between Bloomberg and the WHO.<sup>3</sup> It was through this partnership that the concept of the WHO’s ‘Best Buys’ emerged; interventions that would cost ‘one or less than 1 dollar spent per DALY averted in developing countries’ (World Health Organization, 2017a, p. 3).

As philanthropists started funding the WHO’s programs, they imported their own partners and work methods, but also began participating in the drafting of WHO programs on NCDs and producing their own infrastructures to calculate and measure the ‘burden’ of NCDs and the impact of global health interventions.<sup>4</sup> In 2007, the Gates Foundation had created the IHME, which now produces profuse

estimates on mortality and morbidity worldwide. In 2015, Bloomberg Philanthropies launched its own Data for Health initiative, co-funded with the Australian government and the Gates Foundation, to 'strengthen the collection and use of critical public health information.'<sup>5</sup> Vital Strategies, the CDC Foundation, and the Johns Hopkins Bloomberg School of Public Health, Bloomberg's work partners, all participate in the initiative, and so does the WHO. Vital Strategies, which describes itself as a 'global health non-profit organization', entirely funded by Bloomberg Philanthropies, acts as the implementing partner of Data for Health. In that capacity, Vital Strategies supports the WHO in its data collection and risk monitoring work, often relying on researchers from the Johns Hopkins Bloomberg School of Public Health, which carries out some of the data collection and research with Bloomberg's grants.<sup>6</sup>

In parallel, Resolve to Save Lives (RTSL), another Bloomberg offspring organization, also supported by the Gates and Chan Zuckerberg Foundations, is directly involved in funding, designing, and implementing the WHO's HEARTS package, which directly targets hypertension, as well as the WHO's SHAKE package on salt reduction.<sup>7</sup> In the framework of HEARTS, RTSL does 'the research, generating and assembling and revealing the evidence, sometimes the writing, sometimes the other parts', and more.<sup>8</sup> While conducting such activities, philanthropic organizations collect, assemble and produce data, estimates and calculations, that largely feed into the WHO's understanding of global health, as will be shown below.

## **Philanthropists as producers of knowledge on hypertension**

We now turn to our in-depth examination of the knowledge-making practices of philanthropic foundations in relation to hypertension. Hypertension is seen, by the WHO and other health actors alike, as the top risk factor causing the largest number of deaths today. As such, it has become an absolute priority in global health agendas and in the fight against NCDs more specifically. Bloomberg Philanthropies and its offspring organizations, often in partnership with the Gates Foundation and professional associations, produce a large amount of the data and research that sustains this agenda, as well as the concepts and technologies through which it is interpreted. In particular, philanthropists have sustained a policy-making mode, now adopted by the WHO, in which results, measured in 'lives saved', must be continuously 'evidenced', and monitoring and surveillance activities become the focus of global interventions.

### ***Calculating 'lives saved' and 'spending less'***

Bloomberg Philanthropies and its offspring organizations have, crucially, successfully prompted a certain way of conceiving the costs and impacts of health interventions, while also *doing themselves* the calculations for such measurements. As the WHO began working together with Bloomberg, as well as its offspring organization RTSL, it recentred its actions towards interventions seen as producing clear 'results', calculated in Bloomberg's theatrical language of 'lives saved'. A WHO official points out that 'there was a whole different management approach that we had to develop', through which 'we worked to focus on results actions.'<sup>9</sup> For Bloomberg

and RTSL, the problem was that ‘WHO’s staff has no concept of what delivery or population impact are.’<sup>10</sup> ‘Impact’, or ‘results’, in Bloomberg’s world, are not measured in DALYS any longer, but more dramatically in number of ‘lives saved’, a language the WHO has made its own.

Not only has the WHO adopted this vocabulary and measure for success, but it also relies on research produced by Bloomberg in order to identify *which* health interventions can be most cost-effective in terms of ‘saving lives’. Bloomberg’s offspring organizations have indeed invested massively in research, which itself is mostly based on estimates produced by the Gates-funded IHME. In the words of a RTSL official, ‘Mike Bloomberg is a complete rationalist. It’s about saving lives’; the next step, logically, consisted in producing the evidence on how to prioritise those interventions that could save the most lives.’<sup>11</sup> In 2018, Thomas Frieden, president of RTSL, together with Michael Bloomberg, argued in a high profile piece that sodium reduction, trans-fat elimination, and *mostly* hypertension control, can prevent millions of deaths globally (Frieden & Bloomberg, 2018). The same year, Frieden co-wrote another study titled ‘Saving 100 million lives by improving global treatment of hypertension and reducing cardiovascular disease (CVD) risk factors’, further establishing these numbers (Frieden & Jaffe, 2018, p. 210).

These claims were further substantiated by a series of studies by experts from RTSL and Vital Strategies, all funded by Bloomberg, which found that ‘[o]f all adult primary care interventions, improvement in the management of hypertension treatment can save the most lives’ (Jaffe et al., 2018, p. 834; Cobb et al., 2020). Another study, funded through a grant from RTSL, finds that sodium reduction and better hypertension treatment are ‘the single most impactful measures that can be taken to improve global public health’, dramatically concluding that such interventions ‘could prevent between 76 million and 110 million deaths from CVD and between 130 million and 200 million new cases of CVD between 2022 and 2050’ (Pickersgill et al., 2022, p. 1698). Explaining how hypertension was identified as a priority by Bloomberg Philanthropies, a health official responded:

How can you save the most lives through the healthcare system? And the answer came out very clearly, it’s hypertension control. And you can talk very sloppy fuzzy thinking about what is going to make a difference saving lives, but if you actually ask the simple question, what clinical intervention will save the most lives, nothing comes close to hypertension control, in adults.<sup>12</sup>

In addition, RTSL has actively contributed to developing the ‘business case’ for investing in hypertension, producing complex estimates on the costs of high blood pressure, claiming that it amounts to ‘370 billion per year, with the health care savings from effective management of blood pressure projected at roughly \$100 billion per year’ (Frieden & Jaffe, 2018, p. 208). To produce such calculations, Bloomberg resorts to the estimates produced by the Gates Foundation-funded IHME. The IHME metrics have become dominant in recent years as even the WHO has agreed to use the IHME’s Global Burden of Disease (GBD) data (World Health Organization & IHME, 2018). To calculate the burden of hypertension, the IHME correlates, with modelling techniques, specific biomarkers (levels of blood pressure) with the ‘risk’ of other health conditions developing. Given that hypertension is not seen as a disease in itself, but only as a *risk factor*, it becomes possible to correlate it with countless other health conditions and find that it is

accounting for the ‘largest’ burden of diseases and deaths in the world (James et al., 2018). It is on the basis of those same GBD estimates, that the WHO has identified hypertension as a ‘silent killer’ (World Health Organization, 2013) and RTSL has produced its own calculations on the cost-effectiveness of given interventions.<sup>13</sup> The ‘burden’ of hypertension, its cost, and the impact of hypothetical interventions, were all estimated within a privatised knowledge infrastructure, at the core of which sit philanthropists, their data, and their self-funded research programs.

In line with the research and numbers produced by Bloomberg and RTSL, the WHO has adopted two core technical packages directly targeting hypertension: The HEARTS package on CVDs, which directly targets hypertension as a risk factor, and the SHAKE package on salt reduction, which targets a number of other conditions. The HEARTS package was in fact co-signed by then-director of the WHO Margaret Chan, Michael Bloomberg himself, Tom Frieden, director of RTSL, and professional associations related to heart diseases. This included the CDC, where Tom Frieden also worked as director at the time during which HEARTS was designed. While HEARTS reiterates some of the recommendations formerly laid out by the WHO, it also adopts Bloomberg’s policy method, vocabulary, aesthetics, and preconised interventions. HEARTS reiterates that ‘hypertension is a major risk factor and key driver of CVD globally’ (World Health Organization, 2016, p. 12), and puts anti-hypertensive treatment at the core of its recommendations (World Health Organization, 2018).

The alignment between RTSL’s approach and that laid out in the HEARTS package is not surprising, given the direct involvement of RTSL in the *design* of the program. But while the WHO finds this approach ‘useful’ and welcomes Bloomberg’s investments, Bloomberg and its offspring organizations see this partnership as a way of benefiting from ‘the WHO’s brand’ while pursuing their own agenda, methods, and best practices from New York.<sup>14</sup> As the WHO has started to work with Bloomberg and its offspring organizations, not only has it adopted a ‘streamlined’ and *results-oriented approach*, where impact is measured in ‘lives saved’, but it has also adopted *the interventions identified by Bloomberg’s research as most effective*. In this mode of knowing, the collation and production of continuous data are seen as essential to ‘manage’ hypertension and ‘measure results’. This, naturally, places surveillance and monitoring activities at the core of hypertension management, as discussed below.

### ***Surveillance on the ground: ‘know your numbers’ and take your medicines***

RTSL has also been directly engaged in surveillance and monitoring activities for the WHO, producing evaluation data on its hypertension programs through its self-designed technologies. It has been pursuing such activities as part of the implementation of the WHO’s HEARTS package in particular. Portrayed as just a practical toolkit of ‘highly effective, scalable, sustainable and proven interventions’ (World Health Organization, 2016, p. 17), the HEARTS package, in fact designed by RTSL, embodies a specific way of knowing, managing, and predicting hypertension and its associated risks. While designing HEARTS, RTSL has indeed translated the WHO’s normative guidelines into simplified ‘step by step’ treatment and follow-up protocols, the adoption and pursuit of which it directly supervises on the

ground (World Health Organization, 2018).<sup>15</sup> Thus, RTSL directly executes HEARTS around the world, implementing treatment protocols, training local health staff, engaging in surveillance activities with its self-designed technological devices, and doing evaluations with its 'go-to' metric of 'lives saved'.

In HEARTS, the hypertension problem is equated to that of a lack of tracking and surveillance. Tracking 'unknown' cases of high blood pressure and following them until people are 'controlled' has, thus, become one of the core pillars of hypertension management. HEARTS differentiates between four categories of people: Those 'unaware' that they have high blood pressure (and need to be tracked); those who are 'aware but untreated'; those 'treated but not controlled'; and the success group, that is positively 'controlled'. 'Knowing your numbers,' Bloomberg's all-round mantra, is rehearsed in the HEARTS package, which makes it its golden goal that 'all adults should have their blood pressure checked' in a systematic fashion during routine medical visits (World Health Organization, 2016). Not only has RTSL written this narrative, but it also places itself at the core of its enactment. To that effect, it has developed a specific technological apparatus aimed at tracking and diagnosing people suffering from hypertension and overseeing their care. For a start, RTSL has created 'Simple', a user-friendly mobile application that allows healthcare workers to measure blood pressure and record prescribed medications 'at every patient visit in about 14s'.<sup>16</sup> As put by an official from RTSL, 'We're using the app in India, Bangladesh, Sri Lanka, and Ethiopia. It makes a huge difference to be able to have good quality data and timely data.'<sup>17</sup> Thus, RTSL uses the Simple app 'all the time' and sees it as essential to monitoring blood pressure, whether it has been controlled, and what medicines people have been taking.

Another RTSL mobile app is, for its part, specifically targeting treatment adherence and provides patients with daily medication reminders and other follow-up methods to 'keep patients on treatment' (Frieden et al., 2019, p. 1446). RTSL thus tracks 'unknown' cases of hypertension and watches whether people diagnosed actually *follow* their treatment protocol. As put by a Bloomberg official, 'these apps have been very instrumental in getting people followed up [...] it is really making a difference in blood pressure control and they have the data.'<sup>18</sup> In addition, RTSL directly trains doctors and nurses to 'correctly' measure blood pressure, initiate the treatment protocols preconised by HEARTS, use the Simple app, and populate a monthly reporting system so that local health staff is, in effect, able to support RTSL in program implementation (Husain et al., 2022, p. 2). As relationships of health, disease, patients, and medics have become mediated through mobile devices, program implementors are now able to monitor and follow users beyond the realm of the health centre.

Such data, of course, is not left inert; it feeds back into program evaluation.<sup>19</sup> RTSL has indeed built dashboards that help 'administrators to oversee their programs in close to real time', which essentially gather the data collected through the Simple app.<sup>20</sup> Such data feeds into monthly or quarterly regional reports, which summarise metrics on hypertension control, for the use of RTSL, as well as the WHO, to see whether a given program 'is working'.<sup>21</sup> The WHO explains that the aggregated reports from all the health facilities are a key tool for monitoring and evaluating the control of blood pressure (World Health Organization, 2018, p. 10). Thus, as put by a WHO official, 'we do get some information from reporting to



see what's going on in the program.<sup>22</sup> Data are collected at the facility level, before being aggregated and 'transferred up' the system (World Health Organization, 2018).

While reporting is a typical knowledge-making technique used by philanthropic foundations (Reubi, 2018), in this case, monitoring is not carried out only for their own purposes, but feeds back into the WHO to generate the evidence-base and 'lessons learned' used to evaluate its interventions. Thomas Frieden, for instance, published findings about the 'lessons learned in the first 2 years of the Resolve to Save Lives (RTSL) hypertension management program [referring to HEARTS], operated in coordination with the WHO and other partners' (Frieden et al., 2019, p. 1). The technological devices created by RTSL have made a certain kind of monitoring possible, one that is quasi-instant, continuous, and bears the promise of programs that can immediately adjust and respond to data. Gathering and assembling such data further legitimizes philanthropists' role, as seemingly the only ones to have the necessary kind of knowledge for effective tracking and monitoring.

### ***Monitoring and projecting at distance***

While being present on the ground, Bloomberg has also engaged with monitoring and projecting at distance, through the techniques of mobile health (mHealth) and projection devices. Bloomberg collects monitoring data primarily through the implementation of the so-called STEPs surveys, the population-based surveys used by the WHO to monitor NCDs risk factors.<sup>23</sup> The STEPs surveys, although technically part of STEPwise, the WHO's surveillance scheme, are now also conducted through Bloomberg's Data for Health Initiative in countries where Bloomberg Philanthropies and their partners operate. The surveys serve as an indicator for hypertension control at the *population* level and feed into the evaluation of the HEARTS package, as well as further studies and projections.

As run by the WHO, STEPwise essentially consists of household surveys; in effect, standardised questionnaires and physical measurements focused on blood pressure, blood glucose, blood lipids, and cholesterol (World Health Organization, 2017b, p. 5). Ever since Bloomberg got involved, though, it has entirely redesigned the data collection system around the use of mobile phone surveys.<sup>24</sup> Bloomberg has actively pushed for the development of mHealth, portrayed as a more timely and accurate data collection method. To do so, it has widely financed research on mHealth, in particular at the Johns Hopkins Bloomberg School of Public Health, which it largely funds.<sup>25</sup> In an effort to produce evidence for the use of mobile phones in the management of NCDs, Bloomberg has provided ample grants to research projects on mHealth at Johns Hopkins. Such research concludes that mobile surveys represent 'cost-effective methods to obtain timely and quality NCD risk factor data' (Hyder et al., 2017, p. 1), and an opportunity to ensure continuous surveillance and data flows (Ellis, 2017). To conduct the STEPS mobile phone surveys, Bloomberg relies on Johns Hopkins' researchers themselves, who run the STEPS questionnaires with Bloomberg's grants.<sup>26</sup> In effect, Bloomberg has become closely involved in the monitoring of hypertension, doing the surveillance work of the WHO through the more 'cost-effective' methods of mHealth. The data collected by Bloomberg and its offspring organizations directly feeds into the WHO's



interventions, but it also forms the database for the academic research and projections funded by Bloomberg (Frieden & Bloomberg, 2018).

STEPS data indeed serve to produce further estimates and predictions with the so-called Lives Saved Calculator, another technological device developed by RTSL. The Calculator relies on assumptions for effective blood pressure treatment coverage estimated using STEPS data, as well as GBD estimates for prevalence of disease. With the help of modelling techniques, it predicts how many lives could be saved through hypothetical health interventions, making it possible for Data for Health and RTSL to further position themselves at the core of the knowledge machinery through which hypertension is known by providing unique ‘anticipatory knowledge’ (Berten & Kranke, 2022). With its Lives Saved Calculator, RTSL has modelled three interventions: Antihypertensive pharmacotherapy; salt reduction; and pharmacotherapy and salt reduction together, de facto excluding all other potential health interventions from the realm of potential scenarios.<sup>27</sup> These predictions, measured in potential ‘lives saved’, are visualised in user friendly tables so that anyone can see and circulate them. Such estimates also inform new studies, which reiterate the health interventions that could save the most lives in the next 30 or 40 years (Kontis et al., 2019).

Through the techniques of mHealth, Bloomberg’s organisations have been gathering data at distance, promising more timely and accurate monitoring. While such promises are self-legitimising, this data gathering effort has also made it possible for Bloomberg to produce projections, and further research, that shape the governance of hypertension and NCDs more broadly. In addition, the data collected through STEPS are shared with the IHME, which uses it to feed into those very GBD metrics which, in a highly circular fashion, Bloomberg mobilises to make its own calculations.<sup>28</sup>

While becoming involved in the design and implementation of global health programs, philanthropists have sustained a mode of governing in which results, measured in ‘lives saved’, must be continuously showcased and the costs of specific interventions calculated so that ‘returns on investments’ can be computed. This mode of governing has rendered monitoring and surveillance activities the focus of global health governance, making it possible for Bloomberg and its offspring organisations to put themselves at the forefront of this data gathering effort. Not only has Bloomberg invested in the production of research, data and calculations, but also in specific technologies and devices of data collection and interpretation, thus enabling their deeper entanglement in the knowledge machinery of global health.

## Discussion

Although the prevention of diseases is a laudable objective to improve public health, we interrogate what the knowledge produced by philanthropic actors, largely rooted in for-profit strategies and logics, does to the way health conditions are known, treated, and governed. Given the focus on returns on investments and quantifiable results, there is a natural privileging of health interventions that can be tested and evaluated on large scales so that their impact can be weighed against their ‘cost’ and ranked accordingly. This has led to the favouring of interventions that are portrayed as ‘universal’, in that they target the highest possible ‘population

impact', and 'simple', in that they target hypertension as an isolated risk factor. At the same time, this has sustained a mode of governance that places data and measurements at the core of the policy apparatus of global health, and philanthropies as possessing the necessary expertise, resources, and know-how to produce these calculations.

The participation of philanthropists in knowledge-making has pushed, first, a move towards *population-based interventions*, which alone can be shown to be producing significant and measurable 'results'. This approach, which has been developed with, and is pushed for by philanthropists, relies on the 'population' as the unit of intervention. According to a WHO official, major diseases are 'mainly looked at by the size of the problem more than anything else'.<sup>29</sup> Seeing problems in terms of their *magnitude* makes, indeed, interventions aimed at quantitatively reducing the health burden seem most logical. As put by a Bloomberg official, an intervention needs to have 'scalability' and 'reach population impact'.<sup>30</sup> Such interventions are valued, for they make it possible for funders to calculate impact and returns on investment. Using the measure of 'lives saved', complex modelling, and lives saved calculators, produces dramatic figures or projections about which interventions save the most lives globally.

The WHO technical packages for hypertension, co-written with RTSL, are clear examples of the focus on population-wide interventions to save 'millions of lives'. HEARTS relies on standardised algorithmic care, a system that relies on standardising treatments to the entire population, regardless of local specificities (World Health Organization, 2016). Rather, it allocates care based on predictive algorithms that identify 'population groups' classified on the basis of their risk of developing CVDs (World Health Organization, 2016, p. 30). Yet, patients and causes of cardiovascular accidents are complex, so that 'there can be no single universal translation of clinical trial results' (Alderman, 2000, p. 3). Interventions tend to be universalising and homogenising, extrapolating a blanket treatment to an 'average person' in a given risk group (Camafort et al., 2020). Thus, an over-focus on a standardised understanding of what is a good blood pressure level obscures the 'biological heterogeneity' that leads to disease (Alderman, 2000, p. 3).

Needless to say, population-wide interventions, assumed to be universally applicable, also render invisible the ways in which the political economy, colonial legacies, structural discriminations, and poverty, are related to health and wellbeing. Such conditions affect who has access to healthy and nutritious foods or access to quality and affordable healthcare. Scholars in IPE have, in fact, revealed how capitalism is 'structurally pathogenic with negative impacts on human health' (Sell & Williams, 2020, p. 1), making it all the more imperative to investigate how it infiltrates, infuses, and is reproduced in the global governance of health, and in turn, how global health governance becomes a site where processes of capitalist accumulation and neoliberalization take place. Shedding light on 'knowledge philanthropism' helps us understand how global health has come to ignore factors 'relating to socioeconomic conditions and geopolitical structures and processes, let alone the behaviour of multinational corporations, banks, and financial institutions' (Katz, 2013, p. 443).

Second, this approach has further propelled the governance of hypertension towards interventions focused on *isolated risk factors* and 'simple' solutions, with anti-hypertensive therapy sitting at the core of its policy apparatus. The WHO also

promotes interventions that target salt intake and trans-fat in food, but these are less central and fashioned by philanthropists as ‘more complicated,’ since population-based impact measurements are unavailable. By contrast, interventions focused on isolated risk factors, rather than complex interventions, are logically favoured, as it is easier to produce evidence on their impact and economic returns.<sup>31</sup> This contrasts with earlier WHO approaches, which were critical of over-focusing on single risk factors, or concepts such as pre-hypertension, as potentially leading to ‘a very large segment of the population being labelled as high risk, most of them incorrectly’ (World Health Organization, 2007, p. 12). Yet, in its 2021 guidelines on hypertension, written by a steering committee which included Bloomberg experts from RTSL, the WHO focuses on hypertension as an isolated risk factor, also recommending the use of drugs for people with high *and* moderate risk of CVDs (World Health Organization, 2021). While earlier WHO guidelines recommended to start drug therapy for people whose risk of CVD is ‘higher than 20% when their blood pressure reached 140/90mmHg’ (World Health Organization, 2007, p. 24), the latest recommendations, reiterated in HEARTS, lowers this threshold, proposing anti-hypertensive therapy for people in this risk category when their blood pressure reaches 130/80 mmHg (World Health Organization, 2016, 2021). In addition, *immediate treatment* is preconised ‘where testing may not be possible because of additional costs and lack of access to laboratories and electrocardiogram,’ so that treatment is not delayed (World Health Organization, 2021, p. 8). Such moves are in line with RTSL’s concern for ‘pragmatic solutions’ and ‘simplicity.’<sup>32</sup> Yet, those ‘highest value interventions’ reduce the complexity of how hypertension can be approached, resulting in little funding for other interventions perceived as expensive or unmeasurable, and therefore ‘not a wise investment’ (Shiffman & Shawar, 2022, p. 1985).

In this system, hypertension is solely seen as a risk factor that needs to be kept under control, rather than a sign of ill health in itself, which would require a deeper investigation of its own causes.<sup>33</sup> This approach is highly simplifying, when debates around the definition of normal and abnormal blood pressure levels are not solved within the medical community, and some critics even argue that hypertension, defined solely as a blood pressure threshold, is in itself a limited diagnostic category (Alderman, 2000). But simple, technical, ‘magic bullet’ interventions make it possible to produce stagey figures that demonstrate results (Aue, 2021). They also fit right in line with the preferences of philanthropists, who themselves invest in the pharmaceutical industry and favour biomedical solutions (Elias et al., 2018; McGoey, 2014).

Critics have pointed out that lowering thresholds to start drug therapy is a goldmine for pharmaceutical companies, which are closely linked with those medical professional organizations that partner with philanthropists (Iriart et al., 2011; Kaplan & Ong, 2007; Moynihan, 2010). The involvement of philanthropists has therefore reinforced a vision of hypertension as an individual biomedical problem which drugs can fix, if a ‘proper’ lifestyle has not prevented it. It has also participated to an epistemic shift, by which ‘healthy behaviours are now related to the capacity of individuals to control their risk of becoming sick’ (Iriart et al., 2011, p. 6). This management of hypertension not only individualises responsibility for hypertension and its associated health risks, but also biomedicalises and pathologizes lifestyles based on *calculated levels of risk*. In this solutionist and biomedical

kind of approach, hypertension is seen as a biomedical biomarker and a risk factor, rather than a health condition necessitating an investigation of its own causes.

Third, the focus on demonstrable ‘results’, as well as ‘returns on investments’, has favoured a way of knowing and governing hypertension in which *continuous monitoring and surveillance* by philanthropists’ data centres become normal and desirable. Such activities are essential to monitor the ‘population-wide’ impact of an intervention, its ‘costs’ and the anticipated ‘returns on investments’. This mode of governing necessitates and justifies a constant inflow of data for the evidence-base and prioritisation of policy-making. At the same time, such data make it possible to provide the calculations, which further anchor the turning of health into an asset, a smart investment which brings calculable returns. Thus, Bloomberg Philanthropies eloquently explains that it ‘revolutionized the world of finance by making reliable market data available at the touch of a button [...], brought the same data-driven approach to New York’s City Hall [...] and continues that legacy, following the data to identify problems, target new solutions, and measure progress’ in global health.<sup>34</sup> In line with this vision, which extrapolates the methods and practices of the for-profit and financial sectors onto global health, Bloomberg’s Data for Health and the Gates-funded IHME produce profuse data and evidence for global health, often in partnership, exchanging STEPS data, GBD estimates, and so on, thus producing calculations in a circular fashion.<sup>35</sup> This ‘data stack’ largely serves to legitimise and sediment their presence in global health.

In addition, as philanthropists’ organisations have produced the technological apparatus through which data are collected and assembled, from mHealth devices to Lives Saved Calculators, they further legitimise their roles, evoking the simplicity and effectiveness of their data collection methods. The Simple app, for instance, is described as ‘free, fast, easy to learn, and quick to deploy’.<sup>36</sup> mHealth surveys are fashioned as less costly, of stronger quality, and permitting ‘more timely evaluation of implemented public health policies’ (Ellis, 2017; Hyder et al., 2017).<sup>37</sup> Their self-produced data gathering or calculation technologies make it possible to advance the claims of objectivity and timeliness of the data. The use of such data-based policy-making is framed as the rational, smart, and effective approach to address health issues, asserting its dominance over any other alternative. When hypertension is delineated in the financial, data-centred and market-based terms of the private sector, it follows that philanthropies, their expertise and their techniques appear crucial to craft the necessary solutions. In this knowledge machinery, with philanthropies at its core, hypertension, and NCDs more largely, are reshaped into objects of investment and economic calculation, requiring a mode of governing with continuous flows of data. As such, the active participation of philanthropists and their offspring initiatives is reinforced, thus opening further avenues for their involvement. As philanthropists have framed their own role in the governance of hypertension as an ultimate necessity, the WHO has come to take such arguments on board and supports their participation as an ‘opportunity’ not to be missed. In a piece co-written by WHO officials in charge of NCDs, the view that the private sector ‘can draw on its business and scientific expertise, focusing on strong results-based operations’ is made bare (Collins et al., 2019).

The work of philanthropists has clear political effects, both in terms of promoting certain kinds of interventions and ways of governing. Measuring a disease (and its ‘solutions’) in terms of risk, scale, population impact, and cost-effectiveness is

also essential to the financialization of health, and side-lines questions of the diseases' and solutions' impacts on quality of life and questions of who is more vulnerable and why. In their privileged role in data collection and measurement, philanthropies actively participate in delineating hypertension and other health conditions as objects that can be invested in, modelled for future risk, and calculated for returns on investment. As such, how hypertension is measured and made visible is not just a form of representation, but rather a new way of managing disease, investing in lives, and marketing global health goods that feeds into the assetization of all matters of life (Langley, 2021).

## Conclusion

Philanthropic actors and sites are at the core of the production and operation of the knowledge machinery through which hypertension, and NCDs more generally, are known, delineated, and acted upon. Practicing what we call 'knowledge philanthropism', they are entangled in knowledge-making in multiple ways, from designing some of the WHO's health packages, to producing data and estimates, designing econometric models that measure 'burdens' and 'impacts', and gathering monitoring data on the effectiveness of programs. In continuously promoting 'data-based' governance and monitoring, while developing themselves the concrete technological devices needed to collect, assemble, and interpret such data, philanthropists have further placed themselves at the core of the knowledge machinery of hypertension - and global health more generally. Thus, not only has the WHO adopted their theatrical vocabulary and aesthetics, now also counting in millions of 'lives saved', but it also relies on the material knowledge they produce to set its priorities. Philanthropists, their data centres, the research departments they fund, as well as their calculation techniques and technological devices, operate in an entangled fashion, deeply shaping the knowledge machinery of global health.

This has played a critical role in the entrenchment of market logics and their associated knowledge tools in global health governance, further intertwining the for-profit approach of billionaire-owned foundations with the ways global health is known. Health and illness are becoming another form of 'investment in the world's stock markets', echoing broader trends in the monetizing and capitalizing of the 'profitable aspects of human health' (Gill & Benatar, 2020, p. 174). Global health governance, but also other domains, increasingly become locations for the shaping of economic objects and processes, as health and disease are opened for investment and economic calculations. In this style of reasoning, only those interventions, the results of which can be isolated and measured, can ever be prioritised. The current approach therefore reproduces the biomedical, individualised, and risk-based logics that are favoured in neoliberalism, enlisting the problem to also be the solution. More structural factors, such as the proliferation of free trade agreements that funnel fast foods to low- and middle-income countries, or the aggressive marketing campaigns by food and beverage companies, also strongly associated with NCDs, are left aside. Our analysis contributes to debates in IPE by unpacking and making visible the 'everyday' concrete mechanisms through which market ideologies manifest themselves in and become enmeshed with knowledge-making processes of global governance.

This shift also signals a broader change in the politics of expertise, by which knowledge production is moving away from being located in academia, think-tanks, and IOs (Barnett & Finnemore, 2004; Haas, 1992; Stone & Denham, 2004), instead being produced ‘outside’, in private sites, such as philanthropists’ data centres, but also consultancies, or private companies’ research labs (Ban et al., 2016; Eckl & Hanrieder, 2023; Littoz-Monnet, 2022; Seabrooke & Sending, 2020). Private actors and sites have indeed moved beyond being simple ‘partners’ or ‘funders’ as the framing of multi-stakeholderism suggests, but routinely and mundanely produce the data, calculations, and tools of interpretation that shape how governance problems are understood in the first place. Ownership and control over knowledge and data have become, in global health and beyond, major sources of power (Rikap, 2021). This also triggers questioning in terms of transparency and accountability. The private nature of philanthropic foundations means that they are neither publicly accountable for their actions nor subject to any particular expectations in terms of transparency. As such, they are outside the scope of public oversight, and, increasingly so, of academic research, too.

## Notes

1. WHO Website, <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>
2. Interview with WHO Health Official, 21-01-2020.
3. Interview with WHO Health Official, 21-01-2020.
4. See for instance the WHO’s Guide on the prevention of drowning, also funded and drafted by Bloomberg: [9789241511933-eng.pdf](https://www.who.int/publications/m/item/guide-on-the-prevention-of-drowning)
5. ‘Data for Health’ website; <https://www.bloomberg.org/public-health/strengthening-health-data/data-for-health/>
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7. Interview with Health Expert, Organization funded by Bloomberg Philanthropies, 06-11-2020.
8. Interview with Health Expert, Health Organization funded by Bloomberg Philanthropies, 18-11-2022; interview with Health Official, civil society organization, 04-06-2020.
9. Interview with WHO Health Official, 21-01-2020.
10. Interview with Health Expert, Health Organization funded by Bloomberg Philanthropies, 06-11-2022.
11. Interview with Health Expert, Health Organization funded by Bloomberg Philanthropies, 06-11-2020.
12. Interview with Health Expert, Health Organization funded by Bloomberg Philanthropies, 06-11-2020.
13. RTSL website, <https://linkscommunity.org/about/#basis>
14. Interview with WHO Health Official, 27-10-2022.
15. See RTSL website, <https://linkscommunity.org/toolkit/hypertension-six-steps/>
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17. Interview with Health Expert, Health Organization funded by Bloomberg Philanthropies, 18-11-2022.
18. Interview with Health Official, Bloomberg Philanthropies, 03-10-2022.
19. Simple app website, ‘Background, Simple Docs’, <https://docs.simple.org/readme/background>
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23. Bloomberg Philanthropies website, <https://mobilesurveys.freshdesk.com/support/home> See also mobile phone survey questionnaire, file:///C:/Users/annab/Downloads/IVR.pdf
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25. 'Bloomberg Philanthropies Renews Grant with Johns Hopkins for Development of Mobile Phone Surveys in Low-and Middle-Income Countries', 2 December 2019.
  26. The D4H-NCD surveillance project conducted by Johns Hopkins Bloomberg School of Public Health, includes monitoring the STEPwise approach: <https://hopkinsglobalhealth.org/faculty-research/project-map/bloomberg-data-for-health--non-communicable-diseases-d4h-ncd-surveillance/>
  27. RTSL website, 'Calculating lives saved by cardiovascular health interventions': <https://resolvetosavelives.org/cardiovascular-health/lives-saved-calculator>
  28. Interview with IHME Researcher, 18-10-2022.
  29. Interview with WHO Health Official, 21-01-2020.
  30. Interview with Health Expert, Health Organization funded by Bloomberg Philanthropies, 06-01-2020.
  31. Interview with Health Expert, Health Organization funded by Bloomberg Philanthropies, 18-11-2022.
  32. Interviews with health experts, November 2022.
  33. Interview with WHO Health Official, 05-11-2020.
  34. Website of Bloomberg Philanthropies, 'Rely on Data', <https://www.bloomberg.org/approach/rely-on-data/>
  35. Interview with Health Official, Blomberg Philanthropies, 03-10-2022.
  36. Simple app website, <https://www.simple.org/simple-app/>
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