

RETHINKING THE HUMAN:
THE WORLD HEALTH ORGANISATION, THE WORLD BANK, AND THE
TRANSITION FROM INTERNATIONAL TO GLOBAL HEALTH

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Introduction

Global health has been defined as the ‘consideration of the health needs of the people of the whole planet above the concerns of particular nations’ (Brown et al. 2006: 62).¹ It differs from the earlier concept of international health, which refers primarily to disease- and epidemic- control across national boundaries (i.e. ‘inter’ + ‘national’), carried out by the governments of sovereign nation-states (ibid.: 62). International and global health are not mutually exclusive frameworks, but they have been differentially dominant at various points in time, with global health emerging and predominating from the 1980s onward. The aim of this article is to investigate, from an anthropological perspective, the concept of ‘global health’ as an emergent form of knowledge about health, humanity, and life itself that has been shaped by historical, economic, and political processes.

An anthropological approach to the field of global health is unique in that it may investigate the ways in which this framework represents a newly emergent form of thinking about the human subject and its fundamental problems of existence. I will carry out this investigation by focusing on the primary organisations that have been involved in international and global health, respectively the World Health Organization (WHO) and the World Bank (WB). My aim is to examine the discursive and non-discursive practices and policies of these dominant organisations in world health aid and to show how the operational shift from international to global health has been accompanied by a conceptual shift that has altered the ways in which ‘the human’ is conceived. In that regard, I will attempt to show that the understanding of human life that is embedded in the epistemic frameworks of international and global health may have a tangible and important impact on to whom vital healthcare is provided and how.

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The orientation in this article toward the production of the human through health policy and agencies is grounded in Foucault's theories of 'governmentality,' and 'subjectivation' (1982, 1988a). Governmentality refers to the means, or 'technologies of control,' by which states or institutions exercise power over and govern a body of subjects (Foucault 1991: 88). Subjectivation refers to the creation of subjects through the internalisation of the techniques, mentalities, and rationalities of control, thereby enabling self-discipline through these 'technologies of the self' (Foucault 1984b: 67-8; Foucault 1988b: 253; Mosse and Lewis 2006: 6). In this way, governmentality operates not through the negative power of compulsion, but by regulating and producing forms of subjects (Foucault 1982: 221), who constitute themselves 'in terms of the norms through which they are governed' (Shore and Wright 2000: 62). These Foucauldian theories have often been used by contemporary anthropologists to describe the influence of decentralised and neoliberal forms of government and of such non-state actors as WB, which 'govern at a distance' (Miller and Rose 1990: 8; Anders 2005: 39; Mosse 2005: 13).

The implications of the theory of governmentality and subjectivation for health and development organisations have been explored by anthropologists in ethnographies of aid agencies (Goldman 2001, Sridhar 2008; Redfield 2013; Mosse and Lewis 2005; Anders 2005; 2010), health aid policy (Shore and Wright 1997; Sridhar 2007; Lewis and Mosse 2006), and the way health interventions are carried out 'on the ground' (Rossi 2006; Sariola and Simpson 2011; Harper 2006). Some investigators have focused on how these health organisations and policies explicitly create forms of human subjects, often focusing on the lived experience of the governed or subjugated individuals (Shore and Wright 1997; Gould 2005; Petryna 2009; Sariola and Simpson 2011). The anthropological contribution of these authors has been significant in this new field of research and has importantly this article. However, I will focus, instead, on the 'epistemological unconscious' workings and implicit conception of human life of organisations involved in world health aid (Foucault 1980: 197-8). My emphasis is not on the way in which these conceptions do or do not map on to the lived experience of those who are governed. Rather, I will explore the variety of factors that allow certain ways of thinking and kinds of practices to win legitimacy and to establish a 'regime' or 'game of truth' (Foucault 1982: 221; Shore and Wright 1997: 9).

The approach of this article shifts the gaze from the dyadic relationship between the governing and the governed, or the subjugator and the subject, to the ways in which organisations operate as part of particular epistemic frameworks. In this way, such

organisations develop a negotiated vision of ‘reality,’ which recognises certain knowledge, discourse, and practices as ‘true’ or ‘valid,’ while overlooking or rejecting others. This perspective allows me to explore the subtle, implicit, or even unconscious ways in which the provision of healthcare aid shapes and is shaped by a particular conception of human life, health, and disease. This process will be examined in relation to the concept of global health, which emerged as a departure from the earlier ‘international’ view.

From the perspective of international health, health is regarded as a ‘social’ issue requiring ‘national’ or ‘governmental’ reform. From the global health perspective, health is viewed as ‘a problem that unfolds (and hence needs to be addressed) beyond... national and social state paradigms’ (Rees 2010: 161). This global health framework is supported by a wide array of players, which may be multilateral, bilateral, non- or inter-governmental, non-profit, public, or private. My focus on health aid organisations allows me to demonstrate changes in the balance of power in the world health domain and to show how the health interventions that these organisations design, promote, and fund implicitly generate particular ways of thinking of the human.

This article will be distinctly anthropological, in that it will focus on the interconnected relationship between the production of *anthropos* (man) and *logos* (knowledge, or rationality) (Cambridge Dictionary of Philosophy 1999: 15, 434) in the shifting power dynamics of global health aid. The point of departure for my discussion of ‘the human’ is based on an anthropology of knowledge and thinking and so will not take particular ethnic or national groups as the primary object of study (Rabinow et al. 2008). In that regard, I will not examine the large body of anthropological research related to ‘biosociality’ or ‘biological citizenship’ (Petryna 2002; Rose and Novas 2008), which examines subjects and the ways in which they engage with personal biological conditions in order to negotiate new social and/or national identities for themselves. In line with Rees (2010: 161), I will consider ‘less a foreign group of people and the way they find themselves living in the world than, for example, an emergent form of knowledge that escapes in its specificity our established categories of thinking.’ More specifically, I will focus on the way the human is conceptualised and embedded in practice and knowledge among global health policy-makers and organisations and show how this differs from those in international health. This will be demonstrated using the examples of health interventions and metrics associated with the international health approach of WHO and the global health approach of WB.

In essence, I will show how a ‘problematization’ (Foucault 1984a: 11-14) of health policy and ideology contributed to the declining adherence to the notion of the human as ‘social citizen’ and created new conceptual space for the global health thinking of the human in ‘economic-biological’ terms. ‘Problematization,’ according to Rabinow, ‘is the ensemble of discursive and nondiscursive practices that make something enter into the play... and constitute it as an object of thought’ (2009: 18). Foucault suggests that, for problematisations to occur, something prior ‘must have happened to introduce uncertainty, a loss of familiarity,’ due to ‘difficulties in our previous way of understanding, acting, relating’ (Foucault 1994: 598). In the present context, the prior ‘loss’ and ‘uncertainty’ refers to the practices and beliefs of international health and WHO. This problematisation of health policy provides my starting point for a genealogical study of the changing conception of the human in the field of health.

The ethnographic data in this investigation are derived from: 1) documents published by WHO and WB, including reports, policy notes, resolutions passed, and, 2) secondary ethnographic sources from anthropologists who have conducted fieldwork at WB or in the field of global health. The global health focus on WB is justified on the grounds that WB has become the largest financial contributor to global health projects, allocating over US\$1 billion annually to its Health, Nutrition, and Population sector. The WB is also the most prestigious player in global health in terms of its intellectual, research and programmatic leadership and as a norm-setter (Sridhar 2007: 499; McCoy et al. 2009: 407, 411).

1. International health, WHO, and the ‘social citizen’

WHO is a multilateral and international health organisation of the United Nations (UN) that works with the governments of its member states by recommending health interventions. It is an acknowledged world leader and authority in international health, developing and coordinating projects to be adopted and funded by host governments and other donor countries or agencies (WHO 2007: 2) (see Appendix A below). However, since WHO’s establishment in 1948, it has faced crises related to its status, power, and finances. More recently, it has begun to regain its authority on the global health stage through its alignment with the World Bank.

In what follows, I will show how WHO’s Malaria Eradication Programme (MEP), adopted by hundreds of nations in the 1950s and 1960s, initially consolidated WHO’s power and authority as a leader in international health. The implementation of MEPs further

highlighted the role of local governments in maintaining the health of their populations, since they paid all local MEP-related costs. However, the disastrous environmental effects and the obstacles to the implementation of the MEP caused it to be an embarrassing failure, initiating a decline in the symbolic power of WHO. Furthermore, the critique of the MEP as a disease-focused, technically oriented, ‘vertical’ approach to disease control paved the way for the emergence of a different ideology of health and humanity within the WHO. The latter ideology involved a community-based, ‘horizontal’ approach to disease, emphasising WHO’s values of social welfare and universal access to health as exemplified by the Primary Health Care (PHC) campaign and the Alma-Ata Declaration.² The impetus for these projects and the way in which they were organised illustrates how health came to be regarded primarily, at that time, as a social issue closely linked with politics and biology, and requiring national social reform.

1.1 Malaria Eradication Programme (MEP)

The state delegates at the 1948 World Health Assembly (WHA) meeting identified malaria as one of WHO’s top priorities (WHO 2007: 4). The importance of malaria on the WHO agenda was further strengthened by the election in 1953 of a Brazilian malariologist, Dr. Marcolina Candau, as Director-General (AF-WHO 2003: 9). At the 1955 WHA, he presented the case for vector elimination strategies, advocating a highly technological approach focused on using chemicals to fight the malaria mosquito vector (Packard 2007: 138).

With the help of dichloro-diphenyl-trichloroethane (DDT), a long-lasting and highly effective insecticide, and an American willingness to fund foreign health aid in Third World countries, WHA voted to launch the MEP in 1955, to be led by WHO (Staples 2006: 162-6) (see Appendix B below). By 1965, more than a hundred countries had signed on to implement the four stages of MEP (see Appendix C below). While host governments were responsible for covering all local costs of the four phases, some financial aid could be obtained through a special fund set up by WHO to provide bilateral aid from individual donor nations, the largest donor being the United States (Packard 2007: 157).

² Health services (preventive and curative) can be delivered in two modes: vertical and horizontal. Horizontal programs provide services through publicly financed health systems (i.e. social welfare). Vertical programs deliver health services through free-standing programs, that address a particular disease or condition using specific technology (Oliveira-Cruz et al. 2003: 68; Msuya 2004: 2).

Malaria eradication efforts in the MEP were noticeably and surprisingly absent in sub-Saharan Africa, an area with the highest levels of malaria morbidity and mortality (Greenwood 2009: 53). This unfortunate omission resulted from the belief of many at WHO that eradication was unachievable in that region in the near future due to the lack of medical and scientific infrastructure, high vectoral capacity, and limited financial resources (WHO 1969: 114). This exclusion of sub-Saharan Africa from the MEP highlights a limitation of the primary orientation of WHO and the international health framework to a nation-state paradigm, approaching health and disease along state lines. In this model, health care, in the form of programs such as MEP, could only be delivered by nations whose governments were willing and able to adopt such programs. As a result of this inter-national dependency, WHO's framework subtly created a demand to conceive of the beneficiaries of health aid – ailing human beings – according to their national citizenship.

As an international health program, the MEP was significantly influenced by the political whims and financial conditions of nation states, particularly the United States, the largest individual contributor to MEP, which donated US\$490 million of the US\$1.4 billion spent on the eradication program from 1955 until 1969. However, access to United States aid for malaria control was limited to recipient countries that not only adopted eradication (as opposed to control) strategies, as outlined by WHO, but which also abstained from promoting communist policies. In some instances, such as with Sri Lanka in 1963, the United States actually withdrew all foreign aid because of perceived socialist tendencies in that nation's politics (Packard 2007: 171). As a result of these conditions, many impoverished nations were forced to abandon their own control strategies in favour of eradication ones that they would be unable to support on their own (*ibid.*: 158-9). Eventually, the United States stopped all contributions to the WHO Malaria Special Account, which had accounted for more than 85% of its total, thereby drastically reducing WHO's capacity to provide assistance for MEPs (Nájera et al. 2011: 4).

Although approximately US\$1.4 billion would be spent on the eradication program over the next fourteen years, the program was abandoned by WHA in 1969 because of serious technical, operational, and financial obstacles (see Appendix D below) (Brown et al. 2006:65). Ultimately, what many considered to be the embarrassing failures of the MEP undermined the professional authority garnered by WHO. The limitations and perceived failings of the MEP prompted a strong reaction among the international health community against the MEP's vertical, curative, disease-specific, and high-tech approach to medicine

and health (McKeown 1976). For example, John Bryant, at the Rockefeller Foundation, argued that ‘the most serious health needs cannot be met by teams with spraying guns’ (1969: ix-x). This negative reaction to MEP programs in the 1970s initiated a shift in health policy and ideology that would more firmly establish the national society-building project of the WHO. This new project would emphasise grassroots, or ‘bottom-up,’ initiatives to build or strengthen national health systems and to focus on preventive, rather than curative, health care (Staples 2006: 178).

1.2 Primary Health Care (PHC) and the social approach to disease

The shift in attitude following the abandonment of MEP is evident in the increased number of ‘basic health services’ projects undertaken by WHO in the late 1960s and early 1970s (from 85 in 1965 to 156 in 1971) (Djukanovic and Mach 1975: 110). These programs, the predecessors of PHC, emphasised long-term socioeconomic change, rather than specific technical interventions to promote health (Cueto 2004: 1866). These ideals were further reflected in WHA’s 1973 adoption of resolution WHA26.35, which affirmed that ‘each Member State should develop a health service that is... suited to the... socioeconomic conditions of the country, and... [designed] to deal with their long-term health problems’ (WHO 1985a: 18). These policy developments demonstrate that the values of governmental responsibility for health were retained and were coupled with newer ones regarding strengthening of health systems and national social reform (WHO 1969: WHA22.39; Nájera et al. 2011: 5).

Accompanying the general shifts in health policy and ideology in the 1970s was the election in 1973 of a new WHO Director-General, Halfdan Mahler, who was zealously motivated to pursue ‘social justice,’ which he regarded as a ‘holy’ objective (Cueto 2004: 1865). This vision of social justice and welfare was strengthened by the acceptance of new theories regarding the social origins of health and disease, such as those put forward in WHO’s influential 1975 report, *Alternative Approaches to Meeting Basic Health Needs* (Djukanovic and Mach 1975). The term ‘alternative’ in that document signals the rejection of earlier vertical, disease-specific policies, citing malnutrition and communicable diseases, as conditions that are ‘the results of poverty, squalor and ignorance,’ and as the primary causes of morbidity in developing countries (ibid.: 14, 193). This acknowledgement by WHO that most diseases in the developing world are fundamentally caused by poor conditions of living, rather than by infectious agents and vectors, facilitated the linkage of health to social

development, in place of its former linkage to chemical agents (e.g. DDT). These considerations are relevant to understanding the international health conception of the human subject, to which I will return.

Changing attitudes in WHO about population health and the new leadership of Halfdan Mahler helped to transform health into a social justice issue to be remedied by national social reform. In the spirit of this new prevailing ethos, in 1975 Mahler developed the PHC initiative, a grassroots program focusing on preventive medicine. PHC was later defined as ‘essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community’ (WHO 1978: VI). In 1976 at the 29th WHA, Mahler delivered a speech, entitled ‘Social Perspectives in Health,’ in which he proposed the goal of ‘Health for All by the Year 2000,’ which would become the slogan of primary health care (Mahler 1975: 2). This slogan was later included in the main document from the Alma-Ata Conference in 1978, the ‘Declaration of Alma Ata’ (WHO 1978), which clearly outlines the goals and ideology of PHC and international health.

The Declaration of Alma-Ata differs in several respects from many other documents or negotiated resolutions of health agencies. The term ‘declaration’ signals importance and implies moral obligation, much like in other significant declarations of human rights and independence. In that regard, the Declaration of Alma-Ata presents a universal rights-based argument for national social welfare to achieve social justice. Primary health care was viewed as essential to achieve this ‘world-wide social goal’ of universal health, which was linked to socio-economic development (WHO 1978: I). In this regard, the Declaration states,

The promotion and protection of the health of the people is essential to sustained economic and social development and contributes to a better quality of life and to world peace... Primary health care is the key to attaining this target as part of development in the spirit of social justice.
(WHO 1978: III, V)

Additionally, the Declaration stressed the importance of a multisectoral approach to health, including improving conditions and the quality of life, such as “education...; promotion of food supply and proper nutrition; an adequate supply of safe water and basic sanitation’ (WHO 1978: VII.3). This was to be accomplished using low-tech methods, which are

‘appropriate’ to the health needs of the common poor in the developing world.³ Furthermore, the Declaration asserted the primary role of governments in the provision of primary health care and the achievement of ‘health for all,’ stating that ‘[g]overnments have a responsibility for the health of their people which can be fulfilled only by the provision of adequate health and social measures’ (WHO 1978: V).

The Declaration of Alma-Ata, the PHC initiative, and the general trend toward improving quality of life through health promotion are emblematic of the international health framework, as advanced by WHO. They all share a particular vision of ‘reality’ and an implicit conception of humanity viewed through the international health care lens. Using rights-based discourse, these trends and initiatives present health as a fundamental human right and ‘the human,’ in whom these rights inhere, as what I have termed a ‘social citizen.’ The latter term is used to signal WHO’s perception of health aid beneficiaries primarily in terms of their national citizenship. Further, the notion of a governmental having responsibility for providing health to its population supports the identification of human beings with citizenship, since access to such health care is most often limited to tax-paying citizens.

WHO and the ideology of international health aim, in general, to promote health for all members of a unified humanity world-wide, to be accomplished on a country-by-country basis and to be provided through a relationship of nation state to citizen. This is exemplified in the Alma-Ata Declaration, stating that ‘[a]ll countries should... ensure [PHC] for all people since the attainment of health by people in any one country directly concerns and benefits every other country’ (1978: XI). In this way, national citizenship is taken to be the primary identifying feature of human beings in determining their access to foreign health aid. This is not to say that humans are defined in terms of their *particular* nationality – i.e., an *Indian* human – but, rather, to be identified more generally in terms of state-sanctioned social membership in a country.

From the international health perspective, social membership refers both to being human, *qua* citizen, and to being part of a national society. In other words, humanity is conceived within, and compartmentalised into, societies that follow national boundaries. In another sense, international health frames the human as being fundamentally connected to the social domain because the existential problems of morbidity and mortality are considered to arise from causes that are ultimately social in nature. Thus, not only the existential *problems* but

³ For example, body-scanners and heart-lung machines were considered to be too sophisticated, expensive, and ill-suited to the needs of the common poor (Cueto 2004: 1886). In that regard, Mahler used the story of the sorcerer’s apprentice to show how complex health technologies are out of ‘social control’ (Mahler 1978: 4).

also their *solutions* – i.e. universal welfare, social justice, and adequate living conditions -are defined in social terms, requiring national social reform. In fact, this sociality is so deeply rooted in the ideology and policies of international health that the term ‘social’ is used sixteen times throughout the Alma-Ata Declaration, a document just over two pages in length. It seems evident that the underlying rationality and knowledge structure of this document was constituted in a way that suited the national society-building project of WHO.

2. The problematisation of international health: neoliberalism, economic crises, and the rise of WB

The period leading up to, and including, the PHC movement and Alma-Ata Declaration was characterised by the dominance of the ideals, scientific beliefs, and methods of disease prevention and health promotion of the international health framework and WHO. However, only one year after Alma-Ata, criticisms of the WHO PHC campaign became increasingly common, presaging the declining power of WHO and the international health movement. The downfall of WHO will be examined and followed in this section through the course of changing leadership within the organisation, the growth of extra-budgetary funding, and the context of worldwide financial crises. At the same time, the process by which these trends gave rise to the biotechnology industry, neoliberal politico-economic ideology, and WB as a powerful leader in global health will be considered.

2.1 SPHC versus PHC

Worried about the feasibility and cost-effectiveness of PHC, the Rockefeller Foundation and the World Bank, sponsored a conference in 1979 in Bellagio, Italy to consider a reform of PHC; this reform was referred to as Selective Primary Health Care (SPHC) (Walsh and Warren 1979: 145). Unlike PHC, SPHC emphasised specific, attainable and cost-effective interventions to address the main diseases of poor countries. The many proposed reforms were eventually reduced to four, best known by the acronym GOBI (growth monitoring to address childhood malnutrition, oral rehydration to control diarrheal diseases, breastfeeding in the first six months of life, and immunisations) (Cueto 2004: 1868). These four interventions seemed relatively easy to monitor and evaluate, had clear and measurable targets, and seemed likely to attract funding because positive indicators of success could be produced with relative speed (Cueto 2004: 1867). In this way, those at the Bellagio

Conference helped transform the idealism of Alma-Ata into a practical set of technical interventions that could be feasibly implemented and measured.

The Bellagio Conference sparked a massive debate between the PHC and SPHC approaches (see Appendix E below). While some at WHO responded to criticisms from SPHC supporters by proposing specific ‘health for all’ goals and indicators (e.g. % GNP devoted to health, infant mortality rate, life expectancy), most supporters of PHC rejected such indicators because of their unreliability and failure to account for inequalities between social groups and countries (WHO 1985b: 6-9; Venediktov 1981: 336). Ultimately, American agencies, UNICEF, and WB prioritised GOBI, focusing on immunisation and oral rehydration strategies. They also increasingly emphasised cost-effectiveness and quantifiable indicators and metrics in health intervention strategies (Cueto 2004: 1871).⁴ This public debate between PHC and SPHC demonstrates how WHO health policies, goals, and social approach to disease treatment became a ‘problem,’ necessitating a change in these domains. The following paragraphs describe the factors driving this problematisation and change in health policy, the downfall of WHO, and the rise of new health aid leaders, such as WB.

2.2 Declining power of WHO

The declining symbolic power of WHO after MEP and PHC can be traced, in part, to two major changes within the organization: 1) Mahler’s resignation and the subsequent election in 1988 of a Japanese physician, Hiroshi Nakajima, as Director-General, and 2) the rise of extra-budgetary funding. While Mahler was viewed as a likeable and charismatic personality, Nakajima was generally disliked by the United States and other countries because of his nationality, autocratic style, poor management skills, and, most importantly, alleged corruption and cronyism (Brown et al. 2006: 68). The leadership transition to Nakajima’s technocratic and disease-oriented approach is often identified as the end of PHC and of the dominance of international health and the authority of WHO (Walt 1993: 138; Cueto 2004: 1872; Brown et al. 2006: 68).

In addition to changes in leadership, major shifts occurred in WHO’s sources of funding,⁵ from a predominant reliance on the core budget to a hugely increased dependence on extra-

⁴ The growing uncertainty about the financing of PHC and the economic appeal of SPHC led health aid organizations and countries to support SPHC over PHC, leaving PHC without significant resources (Rifkin and Bichmann 1988).

⁵ WHO’s funding is derived from two main sources: 1) regular ‘dues’ paid by member states, according to population size and gross national product (GNP), which represents core funding; and 2) voluntary contributions, largely provided by member states, but also by other agencies and private partners, such as United Nations (UN) agencies, intergovernmental organizations (IGOs), and NGOs. The latter comprises WHO’s extra-

budgetary funding from multilateral donors (see Appendix F below). While the priorities and policies of the WHO continued to be set by the member states, Executive Committee, and Director-General at the annual WHA meetings, their authority was limited to control of the core budget. However, the core budget had been frozen by WHA since 1982 – another sign of WHO’s diminishing prestige (Godlee 1994: 1491). As a result, the major activities of WHO came to be determined by the interests of the main extra-budgetary donors, including the United States and the World Bank. However, these interests clashed with those of WHA due the changing membership of that organization, beginning in the 1960s, with newly independent Third World states joining the UN. Therefore, although extra-budgetary growth made more funds available, the conflicting interests within WHO resulted in a lack of coordination, cooperation and authority, which limited the promotion of Mahler’s international health ideals.

A series of major global economic disasters in the 1970s left much of the world, including the United States (the largest bilateral donor nation to WHO), in economic peril. This period was characterised by widespread stagflation, or high inflation and unemployment rates and low economic growth, which can be partly attributed to Western foreign and economic policy during the 1970s. Two events that were importantly responsible for these fiscal troubles were the oil embargo of 1973 and the energy crisis in 1970 (Arrighi 2010: 30; Harvey 2005: 12; Cotoi 2011: 113). It was unfortunate, or at least ill-timed, that the Declaration of Alma-Ata, which called for increased state-spending on national health and social welfare services, was issued at this time. The discrepancy between the goals and vision of WHO and the economic reality in both developed and developing nations contributed to world-wide disillusionment with the framework of international health.

The economic challenges that undermined the international health approach of WHO were amplified by the oil embargo, but they had begun to emerge even before then. Fiscal crises were escalating in various nation states, as tax revenues plummeted and social expenditures rose (Harvey 2005: 12). In the first half of the decade, the combination of ‘warfare-welfare’ policies in the United States, supporting both the Vietnam War and domestic social welfare services, created an unsustainable economic burden (Arrighi 2010: 29-30). The financial consequences of these policies were worsened by the abandonment by the United States in 1971 of the Bretton Woods system of fixed exchange rates, a system that

budgetary funding (Sridhar 2012: 2; WHO 2007: 20). The core budget is proportional to the number of member states and therefore has been relatively stable since 1998, while extra-budgetary funding has fluctuated (Sridhar 2012: 3).

was based on the stable convertibility of United States dollars to gold. That decision led to a significant devaluation of the American dollar and, in the context of the energy crises, caused many Western nations to choose neoliberal leadership and policy changes as a remedy for these financial woes (Harvey 2005: 10-12).

2.3 Neoliberalism and the demise of the social citizen

Neoliberalism, or renewed market liberalism, has been defined as ‘a theory of political and economic practices that proposes that human well-being can be best advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterised by strong private property rights, free markets, and free trade’ (Harvey 2005: 2). From this perspective, the role of the state is ‘to create and preserve an institutional framework appropriate to such practices’ and to promote privatisation and market competition to achieve economic success (ibid.: 2). According to this theory, state intervention should be minimised, except to create the necessary privatised markets. When these markets do not exist, as in social or environmental sectors such as health, social security, education, and water, then state intervention may be permitted, but only to establish a framework for subsequent privatisation (Fulcher 2004: 50).⁶ Put into practice, such neoliberal policies and the withdrawal of the state from social sectors led to major tax cuts, particularly for those in upper-income brackets, and effectively destroyed the preceding Keynesian system of economics that was based on the welfare state and universally provided social services (Harvey 2005: 3, 22).

The election of Margaret Thatcher as Prime Minister of Great Britain in 1979 and of Ronald Reagan as President of the United States in 1980 ushered in a new political era of neoliberalism, promoted as an antidote to the stagflation of the 1970s. These neoliberal policies and ideology had a profound impact on the political, economic, and even moral domains. However, they also shaped the conception of ‘the human,’ implicitly rejecting the notion of the social citizen. This is well-illustrated by Thatcher’s statement in 1981, that while ‘economics are the method[,] the object is to change the soul’ (Butt 1981: 1). In another interview, she hinted at this new form of the human ‘soul’ when she famously declared, ‘there is no such thing as society! [O]nly individual men and women’ (Keay 1987: 8-9).

⁶ Such imposed privatization is referred to as ‘compulsory competitive tendering’ (Fulcher 2004: 50). For example, while it was not politically possible at the time to achieve total privatization of health, market dynamics could be established by forcing hospitals into competition with one another. In addition, many elements of health, such as hospital laundry and catering services, could be privatised without having to establish total privatisation (Harvey 2005: 3-20).

These statements indicate a rejection of the ‘societal’ view of humanity, based on social solidarity and welfare, and emphasise instead a radically individualistic conception of human beings.

The impact of these neoliberal notions of individualism, or individual responsibility, and of marketplace entrepreneurship on the view of the human are further emphasised in the way such discourse was intertwined with that of ‘life itself.’ In this regard, Thatcher stated, ‘life is a reciprocal business’ and ‘the quality of our lives will depend on how much each of us is prepared to take responsibility for ourselves’ (Keay 1987: 11). The outline of ‘the human’ that was being developed during this neoliberal ascendancy is a striking departure from that of the social citizen, who is ‘societal’ and whose well-being is protected by the state, through tax-funded social services. These sentiments were broadly aimed at general domestic politics, but they have important and relevant implications for conceptualising the human in global health.

In the United States, Reagan governed from a neoliberal framework, implementing policies to privatise public enterprises (e.g. health and social housing), reduce taxes, encourage entrepreneurial initiatives, and create a favourable business climate to induce foreign investment (Harvey 2005: 23). Even in cases in which total privatisation was not politically possible, as in health and education, his government imposed the creation of internal markets and promoted private alternatives in health, such as private health insurance and privatised health research (Fulcher 2004: 51). As I will demonstrate, such privatisation of biomedical health research played an important role in creating a system that was increasingly irrelevant for nation-state governments, whose financial ability and desire to provide healthcare services to their populations had already diminished.

2.4 Privatised biotechnology and the redefinition of health and disease

What would become known as the ‘biotechnology industry’ emerged during the 1980s in the context of private investment and commercial interest in scientific and technological advancement (Rabinow 1996: 18-21). Factors that allowed this new industry to develop include: 1) greatly enhanced technical skill and bio-scientific knowledge; 2) changes in patent laws that encouraged utilisation of research to applied problems and commercialisation of inventions in industrial and academic settings; and 3) the eventual merging of university- and state-funded research with venture capital looking to invest in biological research and development (Rabinow 1996: 18). These developments highlight the increasing role of

private financing in place of national public funding at that time, the economisation of the bio-scientific and biotechnological domains, and the trend toward producing biotechnical solutions to problems of disease and health.

Until the 1980s, patents had been granted only in applied domains and were often available only for protection of a manufacturing *process*, rather than of the active agent or molecule itself (Ecks 2008: 7). This created intense pharmaceutical competition, since thousands of companies could reverse-engineer a generic form of the active ingredient of a patent-protected drug and thereby drive down market prices for those pharmaceuticals (ibid.: 7, 24). However, in 1980 (the same year as Reagan's election), the United States Supreme Court decided that patents could apply to 'anything under the sun that is made by man' (OTA 1988: 50). That same year, Congress passed the Patent and Trademark Amendment Act in order to 'encourage cooperative relationships between universities and industry' (Ibid.: 7). These developments ultimately drove up the prices of patent-protected pharmaceuticals and biotechnologies, even in their generically produced forms, making it difficult for out-of-pocket users and governments to afford such treatments (Ecks 2008: 7, 24; Kapczynski et al. 2005: 1033).

Although some public funding supported biotechnological and pharmaceutical development, there was growing private investment in this field from hedge funds and venture capital (Rabinow 1996: 25-32). This investment, in combination with patent protection and technical capability, led to the commercialisation and industrialisation of the biological and biotechnical sciences (Kenney 1986: 27). In fact, 'the cumulative equity investment in all types of biotechnology companies rose from fifty million [dollars] to over eight hundred million between 1978 and 1981' (Wright 1986a: 347). This intertwining of privatised neoliberal economics with life sciences diminished the relevance and capability of nation-state governments in this domain and gave impetus to scientists to develop new biotechnical 'magic bullets,' such as vaccines or anti-retrovirals (Kremer 2002: 68; Rabinow 1996: 46). These developments allowed the problems of human health to be reconceptualised in the new terms of molecular biology and privatised life sciences.

In the face of the economic crises of WHO and the world's nations, WB easily transitioned into the field of health, armed with new biotechnology and financial capability. WB's neoliberal ideology appealed to the public and to other nations in the new political and economic milieu of the 1980s, particularly as it helped indebted countries to recover, and it made its first loans and programs in the field of health. This improved public image helped

WB fill the void left by financial constraints and disillusionment with WHO and the international health framework. WB quickly became widely recognised as the world-leading authority in global health aid and development, and it brought with it a new set of techniques, values, and beliefs. The following section will address this new approach as representative of the concept of global health, examining its implications for the re-thinking of the human.

3. WB, global health, and the ‘economic-biological human’

As a branch of the UN, WB consists of member nations, which are differentially involved in its decision-making processes.⁷ However, unlike other UN agencies, WB’s funding is not limited to the capital contributions provided by the regular dues of member countries. WB may independently generate funding by investing in financial markets and using the resultant capital to provide interest-bearing (and interest-free) loans, credits, grants, and technical assistance to developing countries, which could not otherwise afford to borrow money in international markets (Ruger 2005: 60). However, the loans would only be granted to a borrowing nation based on the ‘conditionality’ that they would agree to implement specific objectives or policy reforms designed by WB. These stipulated reforms derived from WB’s neoliberal commitment to decentralised, privatised, and liberal market values, rather than those of universal social welfare (Collier 2000: 9).

During the 1980s, WB confidently moved into the vacuum created by an increasingly ineffective and ill-funded WHO by making significant direct stand-alone loans for health.⁸ This strategy can be traced to WB’s 1980 World Development Report, which emphasised that investing in health, including nutrition, is essential for poverty alleviation and economic growth (World Bank 1980: iii; Sridhar 2007: 504). With financial capability and growing prestige, WB was able to loan money to countries, which would in turn, be required to implement policy reforms and projects that were consistent with WB’s neoliberal ideology of global health.

3.1 WB policy reforms and the privatisation of health

The policy reforms that WB required for its loans were outlined in the 1987 Policy Study, ‘Financing Health Services in Developing Countries’ (World Bank 1987). These stipulations were: 1) charging user fees at government health facilities; 2) promoting private health insurance; 3) decentralising government health services; and 4) encouraging nongovernmental health provision (1987: 3-6). Charging user fees meant instituting a

⁷ WB was established in 1944 by forty-five countries at the Bretton Woods Conference in New Hampshire, where the Articles of Agreement were drafted for the creation of WB and IMF (Staples 2006: 8).

⁸ In the aftermath of the Great Depression and World War II, WB was charged with reconstructing post-war Europe and ensuring global economic stability (Sridhar 2008: 37). However, under the leadership of WB President Robert McNamara, it was transformed into a health and development agency (Ruger 2005: 63-65). Thus, in 1979, WB created a Health, Nutrition, and Population (HNP) sector, a testament to its growing commitment to this global domain (ibid. 2005: 61, 65).

‘modest’ charge⁹ for drugs and other curative services at government health facilities, which accounted for 75-80% of all health expenditures in developing countries in 1987 (ibid.: 3-4). WB predicted that these user fees and the three other policy reforms that it recommended would generate revenue and would enhance the individual’s sense of responsibility for health (Ruger 2005: 68).¹⁰

The 1987 WB policy recommendations were proposed in reaction to earlier international health recommendations that health care in developing countries should be treated as a ‘right of the citizenry,’ which should be provided free to everyone (World Bank 1987: 3). WB argued that ‘[t]his approach does not usually work,’ and it proposed user fees and other policies as a radical alternative to the preceding international health framework (ibid.: 3). To reduce governmental responsibility and spending for health, WB proposed guidelines to determine who should finance health goods and services and who should receive their benefits. With regard to user fees, a distinction was made between ‘private’ health goods and services, which benefit only the specific individual who receives treatment, and ‘public’ ones, which benefit society as a whole. WB recommended that the former be privately funded and that only the latter receive funding from public sources. This categorisation of private and public health services roughly corresponds to the categories of curative and preventive treatment. According to the Bank’s policy study,

An aspirin taken for a headache is a good example of a purely private health good. Spraying to protect all residents from a vector-borne disease closely approximates a purely public health good. Many actual services are of a mixed type.... The person who is vaccinated receives a private benefit of protection, but others benefit as well because they are less likely to be exposed to illness. Consumers are almost always willing to pay directly for health services with largely private benefits. But they are generally reluctant to pay directly for programs and services which benefit society... as a whole. (ibid.: 2)

This discourse referring to the recipients of health services as ‘consumers,’ which was unique at that time, highlights the extent to which consumer-market economics

⁹ A ‘modest’ charge was defined as constituting, even for poor households, ‘1 percent or less of annual income, assuming two visits per person a year to a government health post for curative care’ (World Bank 1987: 4).

¹⁰ There has been much criticism of user fees and evidence that they reduce demand for necessary care and have a disproportionately adverse effect on poor and sick people (Ruger 2005: 68; Rao 1999). While WB currently admits to flaws in user fees, it has not totally rejected this thinking, claiming that such fees are still very useful for mobilizing revenue and enhancing efficiency.

had permeated WB's position on health. In addition, the examples given by WB of treatments that counted as private or public goods reflect its tendency to consider health care in terms of biological technologies, such as pills or vaccines, (ibid.: 2-7). Furthermore, the recommendation that individuals, rather than governments, be responsible for curative and other private services, except in cases of extreme poverty, marks a change in the logic of approaches to health. WB's new approach promoted individual responsibility through user fees by rolling back the responsibility of governments for the health of their citizens.

WB's reforms promoting private insurance and non-profit/nongovernmental charity work moved health from being a universal social service provided by the government to a personal responsibility or, when it cannot be afforded, to a stateless philanthropic service. This process of privatisation and decentralisation of health care was facilitated in the 1980s by the rise of the biotechnology industry and the privatisation of its research. Further, WB's emphasis on decentralisation and neoliberal economics transformed the domain of health into a privatised marketplace. The state was then viewed as merely an overseer or manager of a health system in which there are a multitude of health providers. This role of governments includes setting standards and regulations for countries and professions that were not yet well-established and developing the legal framework for this new health marketplace (ibid.: 5).

3.2 Biology, quantification, and WB's lending for nutrition

In addition to its more general policy reforms, WB extended project loans to countries in exchange for their adoption of specific health objectives or interventions. The first major lending projects of this kind, in the late 1970s and early 1980s, were for nutrition-related initiatives to address childhood and maternal malnutrition. Although the WB Executive Directors were initially reluctant to fund nutrition programs because of their complexity and multifaceted nature, WB President Robert McNamara and Alan Berg (future WB Senior Nutrition Advisor) convinced them that these nutrition investments were justified based on their returns in terms of future productivity (Sridhar 2007: 501).

Approval by WB managers of funding for nutrition projects required that a specific 'problem,' or 'disease,' be identified, for which a particular intervention, or

‘cure,’ could be applied. Using recent advances in molecular bioscience, malnutrition was transformed from being a vague, multisectoral issue that originated somewhere within the social domain to become a tangible pathological state located specifically within the body. Thus, the WB’s first nutrition team defined under-nutrition as ‘the pathological condition brought about by the inadequacy of one or more of the essential nutrients that the body cannot make but that are necessary for survival, for growth and reproduction, and for the capacity to work, learn, and function’ (Berg 1987: 4). This definition not only made malnutrition more comprehensible to WB economists, it also helped WB to support targeted biological treatments, or behavioural modifications, by which individuals could ‘cure’ themselves of this problem. The ‘cure’ advocated by WB for the ‘disease’ of malnutrition – a disease located within the body with an organic basis in physiology and biochemistry – was educating women, providing short-term supplementary feeding, and monitoring the growth of children (Sridhar 2008: 196-197).¹¹ In this way, human disease and well-being were conceived in purely biological and economic terms as opposed to social ones and regarded as a personal responsibility. This biological view of humanity makes the latter an inclusive category because it is independent of citizenship status or taxes paid.

Once malnutrition was packaged as a curable problem, WB could apply its ‘economic gaze’ to assess and measure nutrition – a vital element of human existence. The first step, transforming the vague notion of ‘nutrition’ into the quantifiable category of ‘food,’ helped to make nutrition loans palatable for the WB economists, who favoured metrics and quantification (Sridhar 2007: 502). This led WB nutrition staff to create productivity equations, which draw a direct mathematical link between an increase in food consumption and an increase in output per person, or productivity (see Appendix G below). They used ‘food consumption’ as a proxy for ‘nutrition’ because ‘[f]ood has obvious tangibility features that nutrition lacks. Food costs and supplies can be measured, subjected to economic analysis, and entered into... accounts’ (Berg 1973: 30). In this way, WB developed a working definition of nutritional well-being, based on food

¹¹ WB defines supplementary feeding as ‘the distribution of food to supplement energy and other nutrients missing from the diet’ (Gillespie 1999: 1). To treat malnutrition, WB recommends providing such food supplements and nutritional education for women. For children, the efficacy of these strategies is assessed using the tool of growth-monitoring and -promotion, which involve regular weighing and height graphic in the early years of life (Griffiths et al. 1996: 5).

consumption and economic productivity, rather than upon such features as access to personal food preferences, feelings of food security, and barriers to food access, which are common in many other definitions (FAO 2010: 8).

The global health perspective taken by WB regards malnutrition as a case of lost productivity due to biological debility, rather than as one of fundamental human rights or social welfare. This is evident in WB's view that nutrition '[is] not just a medical or a social welfare issue,' as it is in international health, but a 'development concern that [has] an impact on productivity' (Sridhar 2007: 501). In this way, the vital domain of human health became increasingly separated from the 'social' and attached instead to the more quantifiable domains of biology and economic productivity. While WB staff recognised the social benefits of investing in nutrition, their primary concern was whether the project outcomes are measurable, treatable and economically beneficial. As one WB staff member noted, '[senior economists] wanted numbers so we played that game' (quote from Sridhar 2007: 502). This 'game' resembles a Foucauldian 'game of truth' in the way it demonstrates how different understandings of nutrition and health are negotiated by various actors to construct an emergent world view – in this case, one that is grounded in molecular biology and privatised neoliberal economics. This worldview extends beyond nutrition to the conceptualisation of human life itself, and to the existential problems of disease and death, thereby viewing the human as what I have called an 'economic-biological human.'

3.3 Health econometrics and targeting healthcare beneficiaries

The biological foundations of WB's global health conception of humanity imply that access to health services is not restricted by an individual's nationality and therefore should enable all human beings to be eligible for aid. At the same time, WB's economic ideology leads it to identify specific 'target groups,' to which they direct health efforts. Membership in these groups, typically defined by an 'at risk' characteristic, such as age or pregnancy status, that would most impact future economic growth, determines an individuals' access to biological treatments (Sridhar 2007: 506). With regard to malnutrition, WB identified preschool children and pregnant and lactating mothers as target groups for receiving nutritional treatment. According to a 2005 WB document,

[u]ndernutrition's most damaging impact occurs during pregnancy and in the first two years of life, and the effects of this early damage on

health, brain development, intelligence, educability, and productivity are largely irreversible. Actions targeted at older ages have little, if any impact. (World Bank 2005a: 9)

This economic-biological perspective employs an instrumental, rather than intrinsic, approach to the lives and well-being of project beneficiaries, according to their future productivity. As an example, providing vitamin supplementation for micronutrient-deficiency diseases, which cause growth stunting among children, is justified on the grounds that ‘children with retarded growth become stunted adults who are less productive’ (World Bank 2005b: 2). Pregnant and lactating mothers are targeted for health interventions because of the prenatal and antenatal biological effects on their children and because of their roles as educators and behavioural models in the home (Griffiths et al. 1996: 22). WB’s creation of target groups as beneficiaries of health aid clearly demonstrates the ways in which the conception of the economic-biological human has a practical and material impact on the determination of how and for whom health care is provided.

The concept of the economic-biological human was further promoted by WB’s continued development of new metrics of human existence. Such ‘econometrics of suffering’ use theoretical models to create numerical relationships between biological well-being, capital, labour, and productivity (Sridhar 2007: 502). This way of understanding the human is first evident in the 1980 World Development Report and in nutrition projects in which WB developed an economic theory of the individual, commonly referred to as ‘human capital theory,’ that extends ‘the concept of capital... to human beings’ (Berg 1981: 17). This human capital framework persists as a fundamental compass within WB and is evident in the refining and development of new health econometrics, the most prominent of which is the disability-adjusted life year (DALY).

The DALY was introduced in WB’s 1993 World Development Report – the first one to be devoted entirely to health – as a measure of the global burden of disease and as a tool to assess resource allocation (Gold et al. 2002: 117). Since that time, it has become ubiquitous as a measurement within the field of health and policy (Anand and Hanson 1997: 686). WB developed the DALY in order to determine the efficacy and success of investments in private health care projects, based on the ‘number of life years saved’ or ‘cost of deaths averted’ – a discourse

that is mirrored in nutritional economic indicators.¹² The DALY combines ‘time lived with a disability’ and ‘time lost due to morbidity or premature mortality,’ representing a value of ‘life years lost’ (Murray 1994: 441). This is a purely economic and biological indicator of health and the burden of disease, based on human function and productivity in terms of an individual’s ability to participate in the workforce, marketplace, and larger global economy (see Appendix H below). WB’s ability to identify the ‘number of lives,’ or ‘DALYs,’ saved offers a comprehensible measure of success that appeals to donors and makes easier the acquisition of financial support (World Bank 1993: 28). However, although the information that the DALY provides is useful for WB and private investors, it does not necessarily have relevance for nation states.

WB’s approach differs from the rights-based approach of international health used by the WHO. The latter sought to identify the social indicators and causes of disease, which then could be used by governments to provide better health and welfare to their citizens. By contrast, the global health perspective, represented in the DALY, does not incorporate social determinants of health. This is evident in the DALY’s principle of treating all health outcomes equally, independent of social circumstance. To illustrate this principle, Murray (1994: 431) at WB suggests that the illness of a forty-year-old woman should contribute equally to the global burden of disease, irrespective of whether she lives in the slums of Bogota or in a wealthy suburb of Boston. Murray claims that health status is an individual, rather than a social, phenomenon, stating that ‘[t]he value of a person’s health status is his or her own and does not depend on his or her neighbour’s health status’ (ibid.: 431). This separation between a biological state and social conditions of living considers all individuals to be equal, based on a notion of universal human biology and to be independent of their society, or ‘neighbours.’

In the 1980s and 1990s, WHO was faced with an existential crisis as to whether it should continue to promote its national society-building projects, emphasising social justice and welfare, or concede to WB’s new program of a global humanity in a privatised health market place (Brown et al. 2006: 68-69). When Gro Brundtland was elected WHO Director-General in 1998, she was immediately

¹² For nutrition, other indicators include ‘cost per case of child stunted averted,’ ‘cost per 0.1 kg increase in birth weight,’ and ‘cost per child removed from third degree malnutrition.’ For more examples, see Levinson et al. 1999: 121.

confronted with potential isolation by the now dominant WB. She decided to support the recommendations of WB, which was now independently well-funded and publicly supported. In 2000, Brundtland established the Commission on Macroeconomics and Health (CMH), chaired by economist Jeffrey Sachs. A 2001 CMH Report clearly marked WHO's new alignment with WB, designating individuals as consumers and providers of health, emphasising the role of non-state actors in the health market place, and advocating a vertical approach that provides biological treatments, rather than social remedies. The subscription of WHO to WB ideology and to the DALY as a health metric is evident in Brundtland's Executive Summary of the Report:

We estimate that...330 million DALYs would be saved for each 8 million deaths prevented. Assuming, conservatively, that each DALY saved gives an economic benefit of 1 years' per capita income..., the direct economic benefit of saving 330 million DALYs would be \$186 billion per year.... (CMH 2001: 12)

Brundtland's alignment of WHO with WB ideology, metrics, and discourse allowed WHO to 'move beyond ministries of health' and join other actors on the global health scene (Brown et al. 2006: 70). In this way, WHO can be seen to have taken part in the development of this new epistemic framework of global health, which has a unique body of knowledge, discourse, and power relations. Subscription to this framework and to its implicit conception of the human has an enormous impact on the design of health interventions and the determination of those receiving access to care.¹³

Conclusion

The recent dominance of the WB's global health framework highlights a historical, ideological, and political shift in the balance of power and knowledge in world

¹³ The current WHO largely relies on 'public-private partnerships,' with the Bill & Melinda Gates Foundation emerging as a predominant philanthropic donor (Brown et al. 2006: 70). WHO projects, such as the Global Alliance for Vaccines and Immunizations in 1998 and Stop TB in 2001, are now often disease-specific, offering biotechnical interventions mainly through vaccine and immunization programs (Reid and Pearse 2003: 9-10).

health aid. I have attempted to show that WB's approach to health in biological and economic terms has theoretical consequences in terms of its conceptualisation of the human, and tangible consequences in terms of the allocation of health care resources. Indeed, the variable way in which the human is conceived is materialised by health providers and health beneficiaries in the practical determination of who is given treatment and how this treatment is provided. When these policies emanate from bodies such as WB and WHO, with their immense resources, leverage, and global reach, the implications for the welfare of humans can be enormous.

Throughout this article, I have referred to WB and WHO as if they each represent a single perspective. However, each of these organisations is composed of thousands of individuals with a wide range of views, which may conflict with one another or be critical of the organisations they serve. Mary Douglas (1986) and Devi Sridhar (2008) have raised the question of whether it is possible to aggregate beliefs at the institutional level. Douglas argues that while institutions do not 'have minds of their own,' the individuals working in these institutions may nevertheless share a 'symbolic universe,' which contributes to solidarity of the group (1986: 9-13). Sridhar applies these ideas to WB, which promotes a coherent and uniform worldview, even though inner-workings are comprised of a hegemonic group of individuals (2008: 11).

In the case of WB, the solidarity of group thinking is strengthened by the commonality in language and way of thinking of so many of its policy staff. Unlike other UN agencies, WB's working language is English, thereby favouring graduates from English-speaking institutions (Woods 2000: 823-4). Furthermore, a 1991 study of high-level WB staff working in policy, research, and external affairs departments indicate that approximately 80% had trained in economics and finance at institutions in the United States and United Kingdom (Woods 2000: 834). Therefore, it has been suggested that WB staff tend to behave in similar ways, using economic and biological approaches to identify problems and propose their solutions, although there may be diversity and dissent within these organisations (Sridhar 2007: 512).

A similar caveat can be made regarding the distinction between the concepts of the social citizen of nation-states and the global 'economic-biological human.' I have argued that WB's promotion of global health has aided the separation of the biological from the social and from nation-state domains. However, this does not mean that social approaches or government involvement are entirely absent from the field of health. On the contrary, social approaches to health and disease and rights-based arguments for public and/or private provision of universal

health care continue to be voiced within WB and in the public domain. However, while these views may be voiced, they are not necessarily funded, promoted, or put into action by those with the financial and symbolic authority to do so. I have tried to illuminate in this article the process by which health programs are designed and given legitimacy – that is, made ‘true’ – as preferred courses of action. This makes evident the way in which health agencies and organisations develop a particular version of reality, in which certain tools, projects, and ways of thinking are made ‘valid’ by virtue of their alignment with the prevailing ideology and structure of these organisations.

My primary goal in this article has not been to critique existing health policies or to identify inadequacies in this or that intervention, nor has it been to be prescriptive, arguing for the relative superiority or inferiority of international health programs compared to those of global health. Without evaluating the criticisms or benefits of neoliberal or social welfare policies, I have intended to challenge some of the widely held presuppositions about them. The latter include the notion that the WB’s introduction of neoliberalism and market economics into health represents a ‘profit-driven,’ ‘corporate evil.’ However, the global health phenomenon is complex and regards health as existing within a corporate world, though working for global human benefit, rather than for corporate or personal profit.

It has been suggested by some that universal social welfare policies are intrinsically better than neoliberal ones because of the former’s presumed intention to provide health care to all people. This position may be tenable, but its foundations may also be questioned by comparing the different conceptions of humanity implicit in each of these approaches. The presumed greater inclusiveness of the social welfare programs of WHO is challenged by the observation that WB is able to provide care to a larger number of individuals with the greatest need. Based on DALY assessments of global burden of disease, WB has targeted most of its health efforts to individuals residing in sub-Saharan Africa – a region with the greatest global disease burden. Sub-Saharan Africa was noticeably absent from the MEP and PHC programs of WHO in its promotion of universal health for all. This exclusion stemmed from the adherence of WHO to a nation-state framework, conceiving health beneficiaries along state lines and as dependent upon governments to provide them with health. The biologically based conception of humanity in global health may, in some cases, allow greater inclusiveness in its

determinations of who will receive health care because such decisions are not limited by the political and financial capacity of governments. These insights can inform future policy design and the often polarised debates that tend to glorify or demonise social welfare or neoliberalism.

Anthropologists and policy-makers have noted that there is often a discrepancy between the way health beneficiaries are defined, measured and evaluated by such health agencies as WB and WHO, and how these are lived and experienced in affected communities (Sridhar 2008: 194; Redfield 2013: 10-14). The concept of the human may be very different both in the way policies are carried out 'on the ground' and in the subjective experience of 'being human.' My analysis in this paper has not been extended to the way in which care is delivered by health providers or received by beneficiaries. I have also not tried to suggest that the conception of health and humanity developed by WB and WHO 'maps on to' the lived experience of the people they aim to treat. In that regard, a limitation of Foucault's notion of governmentality and subjectivation may be that the view of the human 'subject,' or 'governed' individual, taken by health aid organisations is not internalised by the subjects themselves, nor is it necessarily relevant for governing nation states.

Finally, I wish to clarify my focus on the human. This article has not been intended as an attempt to provide an answer to the question of 'what it means to be human,' nor even 'what kind of humans we are in the process of becoming.' Rather, I have tried to demonstrate the way in which health organisations and policy-makers think and re-think the human and its vital elements of existence. These considerations demonstrate that the concept of global health represents a radical departure from that of international health, such that the knowledge, discourse, and tools of the latter cannot be used to describe adequately the current global health framework. These insights may also help to justify the value of anthropological research in the area of global health, demonstrating its potential to illuminate the conceptual and practical implications of this new domain.

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Appendix A

At its first meeting on April 7, 1948, the World Health Assembly (WHA) formally established the WHO as a permanent institution of the UN for international health (WHO 2007: 4; Brown et al. 2006: 64). The first Director-General was Brock Chisholm, a Canadian psychiatrist trained in the British tradition of social medicine, who helped to consolidate ideals of social welfare and universal healthcare in the WHO (Brown et al. 2006: 64; Staples 2006: 145). These ideals shaped future WHO initiatives, rhetoric, and ideology and the

construction of the identity of WHO as a 'body of scientifically based medical professionals housed in a universal...institution' (ibid.: 161).

Appendix B

The discovery and mass-commercial production of dichloro-diphenyl-trichloroethane (DDT), a long-lasting and highly effective insecticide, provided a unique opportunity for the potential eradication of malaria (Staples 2006: 162). Candau emphasised the importance of this goal, highlighting that malaria killed more people each year than any other disease and that its eradication would reduce national spending on malaria-related costs (ibid.: 165; Packard 2007: 151). Additionally, members, such as the United States and its allies, believed that providing foreign aid for MEP would promote economic growth, creating overseas markets for American goods. They also believed it would help to build support among local governments, thereby winning their 'hearts and minds' in the international battle against communism (Brown et al. 2006: 65).

Appendix C

MEP consisted of preparatory, attack, consolidation, and maintenance phases. The preparatory stage involved identifying local epidemiological characteristics of the disease. This was followed by an attack phase, in which DDT would be sprayed twice yearly on the walls inside all dwellings. Upon the near elimination of all infected human carriers of malaria, the consolidation and maintenance phases would begin in order to treat any remaining cases and prevent the reintroduction of the disease from neighbouring countries. WHO supplied technical advisors and UNICEF provided most of the necessary supplies, with local costs provided by the host countries and/or donor nations (Staples 2006: 164-7).

Appendix D

Operational difficulties that arose in MEP's implementation included the failure to acknowledge local social and cultural factors. Some Indians reacted negatively to the caste of those spraying their homes, while others disliked the smell of DDT and re-plastered their walls after they had been sprayed. Further complications arose with nomadic populations, migratory workers, and dwellings that lacked any surface suitable for spraying. Double resistance to pesticides and anti-malarial drugs posed major problems for treatment efficacy, and many poor countries were unable to maintain the MEP following the exit of the highly trained international staff. More importantly, growing evidence in the 1960s indicated that DDT caused disastrous environmental damage to avian and aquatic ecosystems. Ultimately, the MEP failed due to a collapse of funding and support for the use of DDT, which resulted in a lack of necessary equipment, means of transport, pesticide supplies, personnel, and other essential resources (Wernsdorfer 1994: 144; Carson 1962). Ironically, some of the early successes of the MEP led many governments to reduce or cease funding for malaria eradication programs because they were perceived as less necessary to control malaria or as supporting unwanted population growth (Packard 2007: 154-8). Unfortunately, even the initial successes of MEP were quickly reversed once most programs were abandoned.

Appendix E

The supporters of SPHC, including UNICEF and WB, argued that WHO lacked clear goals and that the goal of 'Health for All by 2000' was an unrealistic utopian ideal. On the other hand, WHO and its PHC supporters

criticised the SPHC movement for its narrow technocentric approach and for being the exact ‘anti-thesis’ of the goals and values of PHC and Alma-Ata (Newell 1988: 906). Furthermore, PHC supporters argued that SPHC diverted attention away from socioeconomic development, did not address the social causes of disease, and resembled the vertical, disease-specific programs of the malaria eradication disaster (ibid.: 904; Cueto 2004: 1869). For more on this debate, see Gish (1982).

Appendix F

In 1971, for example, the regular budget accounted for 75% of the total WHO budget, the remainder being supplemented by extra-budgetary funds. However, by the 1986-1987 fiscal year, extra-budgetary funds exceeded core funding by \$21 million (WHO 1971, 1980, 1991). These donations by organizations or governments tended to target particular health programs, such as the Malaria Eradication Special Fund and the global programme on AIDS, which were largely independent of WHO and which often were not concordant with programs promoted by the majority of WHO member states (Walt 1993: 129).

Appendix G

The emphasis on productivity and quantification is evident in a comment made by one nutrition staff member at WB that senior economists ‘wanted a return. So the nutritionists turned their arguments against them and created productivity numbers’ (quote from Sridhar 2007: 502). This led WB staff to create equations, such as the following: (1) $Q = A \times L^l \times K^k$ and (2) $N(df) = N(dy) \times (dc/dy) \times (dq/dc)$. In equation 1, Q = output, A = conversion coefficient, L = labour, K = capital, l = percent increase in output per one percent increase in capital, and k = percent increase in output per one percent increase in capital. In equation 2, N(df) = expected number of low-income individuals who move from ‘poor’ to ‘fair’ diet, N(dy) = number of low-income individuals at risk multiplied by the change in real income of each participant, dc = change in participant food consumption associated with a change in real income, dy = family income, dq = estimated proportion of households with ‘poor diets,’ and dc = current level of food consumption. See Wilson (1973).

Appendix H

The DALY uses unequal age weighting for a year of time lived with a disability because of individuals’ differential value at various ages. These values are estimated according to the human capital framework, which ‘views individuals as a type of machine with costs of maintenance and expected output. The value of time at each age for this human production machine should be proportionate to productivity’ (Murray 1994: 435). By contrast, the quality-adjusted life years (QALYs), developed by economists in the late 1960s, includes in its assessment of disease burden both the quality and quantity of life lived and measures of self-perceived health (see, for example, Stiefel et al. 2010). While the QALY is still used in some places, only the DALY was promoted by WB as the best measure of disease burden, and only those indicators that were consistent with this approach were used by WB.