

Global health and non-ideal justice

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Most readers are familiar with the dismal statistics on the severity and extent of global poverty and inequality. The number of human beings whose daily existence must be sustained on a miserable pittance (as officially defined, the equivalent of \$1 or \$2 per day) is truly staggering. Equally familiar is a philosophical appeal to these statistics designed to establish that we, rich inhabitants of the globe, have weighty obligations to improve the well-being of the global poor—weightier obligations than we typically admit, let alone act upon. Arguments of this sort can be found, for example, in Unger (1996) and Pogge (2002). A similar argument appeared in the very first volume of this journal (Singer, 1972).

Often, this appeal highlights not simply the very low incomes of the global poor, but also their appalling health. In Malawi, for example, life expectancy at birth is a mere 41 years for men and 42 years for women.¹ 27 countries, all but one in sub-Saharan Africa, have both male and female life expectancies at birth (at or) below 50 years. By contrast, global life expectancy at birth, combining male and female rates, is 66.75 years. In the United States, life expectancy at birth is considerably higher still, nearly double that in Malawi, at 75 years for men and 80 years for women. Highest of all is Japan, where life expectancy at birth is 78 years for men and 85 years for women.

On the surface, at least, these two ways of framing the appeal to our moral sensibility represent but different means of capturing the same underlying fact. The underlying fact is that the well-being of vast numbers of people falls starkly short of levels achieved by others—on a society-

¹ Unless otherwise noted, life expectancy figures cited are for 2003 (WHO, 2005, Annex Table 1).

wide scale, no less—and hence, short of levels that are evidently attainable, biologically and socially. At a minimum, this profound inequality underlines the prospect that the shortfall in well-being suffered by the globally worst-off may be (in good measure) avoidable.

No doubt the plight of the global poor strikes us both more vividly and as more urgent when it is framed in terms of their reduced health. While this observation likely informs the rhetorical strategy of the familiar appeal, it does not fundamentally alter the role the surface picture assigns to income and health. However, the relationship between income and health is actually considerably more complicated than this. Within a given society, an individual's health is highly positively correlated with her income; and, in comparisons between developed societies and developing ones, there is also a strong correlation between average national income and national life expectancy. Of course, it is a separate question whether these correlations are causal. But insofar as they are causal, income should be regarded as a determinant of health.

Suppose there is causation. With income as a significant determinant of health, the very low incomes and the very low life expectancy of hundreds of millions of people in sub-Saharan Africa would not simply be alternative indicators of their very low well-being. There would, furthermore, be an important sense in which their life expectancy is very low because their incomes are very low. Hundreds of millions of people would be unhealthy because they were poor. What difference, if any, should this make to our assessment of their situation? Of our obligations in the matter? Of the injustice of our world? These are questions I hope to pursue in the course of this review.

states, life expectancy is 15 years or more below the global average (Sen, 1999, pp. 99-103)—as low, that is, as the countries in sub-Saharan Africa with which we opened. Despite what national averages suggest, then, injustice in the distribution of life expectancy plagues India at least as much as it does sub-Saharan Africa.

III

§1. Let us now consider more directly how the connections between health and its social determinants bear on questions of justice. One immediate point, of course, is that even when our concern is restricted to health, the requirements of justice extend beyond the provision of health care (or, more generally, beyond the organisation of the traditional health sector). Since income, education, and the organisation of work (e.g.) are all socially controllable and may be significant partial causes of health, they fall within the ambit of justice as it applies to health. More or less all of the books under review make this point (cf. Marchand *et al.*, 1998).

But how, more specifically, does appreciation of the social determinants of health affect our judgements about the requirements of justice?¹⁹ I want to examine this question in relation to international distributive justice in particular: If there are such requirements, they are the most relevant to assessing the huge international inequalities in life expectancy with which we began. For the longest time, philosophical discussions of justice basically ignored this topic—a side-effect of their adopting a pair of fundamental simplifying assumptions, restricting attention first to the domestic case and second to ideal circumstances. In this, as in so much else, they followed Rawls

¹⁹ In the existing literature, Daniels, Kennedy, and Kawachi (2000) go the furthest in pursuing this question. Their approach is based on Rawls (1971). But I shall not discuss it here, since it inherits the original Rawlsian restriction to domestic justice.

(1971).²⁰ Had someone been able to read *PIH* or *CIH* in those days, and wanted to pursue the questions of international justice they naturally prompt, he or she would have come away from the philosophical literature rather disappointed.

More recently, there has been a surge of philosophical interest in the subject of international justice, including international distributive justice specifically (Pogge, 1989, 2002; Beitz, 1979/99). Not least among either the contributions to this development or the reasons for it is Rawls' own later extension of his theory to the international case in The Law of Peoples (1999).²¹ So a lively debate about international distributive justice is now underway.²² However, while some progress has thus been made in relaxing the first simplification, the second remains firmly in place. Discussions of (international) justice still proceed, that is, in the context of ideal theory.²³

I wish to discuss international distributive justice in non-ideal theory. In other words, to relax both of the traditional simplifications at once. I begin with a brief analysis of the category of 'non-ideal theory,' which I propose to understand more expansively than is customary. Then I explain what light the social determinants of health shed, within a framework of non-ideal theory, on international distributive justice.

²⁰ Rawls' (1971) two principles of justice apply only to the basic structure of a society that is both 'a closed system isolated from other societies' and also 'well-ordered' (TJ, pp. 7-8). I abbreviate references to Rawls (1971) as TJ, but give the pagination from the revised edition (1999).

²¹ Henceforth, LP. Notoriously, Rawls' own account of international justice lacks a principle of distributive justice.

²² For an overview, which I shall not attempt, see Caney (2001; 2005, ch. 4). New contributions continue apace (e.g., Singer, 2002; Chatterjee, 2004; Nagel, 2005).

²³ Murphy (2000) is a significant exception, but he does not address the international case.

On Rawls' conception, ideal theory describes a well-ordered institutional arrangement: Institutions are well-ordered when they are both just and known to be just; and when individuals both accept and comply fully with the requirements these institutions impose on them (TJ, §§2, 39, 69). This suggests two rather different ways in which circumstances may fail to be ideal. On the one hand, background institutions may not be just; and, on the other hand, individuals may not fully comply with the standing requirements on them. (Since these are independent possibilities, there is also the 'special' case when both obtain). For each kind of defective case, there is a corresponding branch of non-ideal theory.

To prescribe for the case where individuals do not fully comply with the requirements of justice, there is non-ideal theory as partial compliance theory. Partial compliance theory specifies, inter alia, what happens to an individual's obligations when others fail to do their fair share within some distributive scheme. This is what Liam Murphy (2000) takes up.²⁴ To prescribe for the case where background institutions are not just, there is non-ideal theory as transitional theory. Transitional theory specifies the obligations that individuals have to bring just institutions into existence. There are also two ways in which background institutions may fail to be just—they may be unjust or they may not exist at all. An individual may therefore be obligated to do her part either to reform existing institutions or to introduce just ones from scratch (TJ, pp. 99, 293-94).²⁵

²⁴ Murphy appears to identify non-ideal theory wholly with partial compliance theory (2000, pp. 5 and 135). One might think that this narrow view of non-ideal theory flows from his scepticism (1998) about institutions as the primary subject of justice. However, that would be a mistake. For some discussion, see my (forthcoming).

²⁵ In fact, the only example of an obligation to transfer resources that Rawls accepts in the international case belongs to this branch of non-ideal theory. His 'duty to assist burdened societies' is explicitly an obligation of transitional justice, since its aim is to assist 'burdened societies' to become 'well-ordered' (LP, pp. 106, 114-16). Moreover, from Rawls' point of view, this has a

I propose to understand ‘non-ideal theory’ more expansively than either Murphy or Rawls. To see what I mean, we should notice an assumption they both share, namely, that ideal theory is prior to non-ideal theory. On their conceptions, non-ideal theory proceeds by reference to the content of an ideal theory of justice, and thereby presupposes it. Rawls is explicit on this point:

Non-ideal theory asks how this long-term goal might be achieved, or worked toward, usually in gradual steps. It looks for policies and courses of action that are morally permissible and politically possible as well as likely to be effective. So conceived, non-ideal theory presupposes that ideal theory is already on hand. For until the ideal is identified, at least in outline—and that is all we should expect—non-ideal theory lacks an objective, an aim, by reference to which its queries can be answered (LP, pp. 89-90; cf. TJ, pp. 8 and 216; Beitz, 1999, pp. 170-71).

The rough idea is that before we can take any steps forward, we need to know where we are supposed to end up. Otherwise, we cannot know whether any given step is a step in the right direction.

This priority assumption operates in both partial compliance and transitional theory. Under partial compliance, we need to know what the ideal principle of justice is—in Murphy’s case, the principle of beneficence—and what fair shares it assigns, in order to know how the ‘compliance condition’ operates. Otherwise, we will be unable to specify the limits it sets on individual sacrifice. Similarly, in transitional theory, we need to know what the ideal institutions are—in LP, some description of a ‘well-ordered society’—in order to know what agents are obligated to introduce. Otherwise, we will be unable to specify (e.g.) the ‘cut-off’ point on the duty of assistance.

Of course, I do not deny that non-ideal theory can work like this. But I want to suggest that it need not. More strongly, there exists a kind of non-ideal theory for which the priority assumption

crucial consequence, namely, that the duty toward a given society expires once that society has become well-ordered. One of his main objections to principles of global distributive justice is that they lack a ‘target and a cut-off point’ (LP, pp. 115-19). In other words, the objectionable principles are proposed in ideal theory, and so entail permanent obligations.

fails. On this conception, non-ideal theory functions as an anticipation of ideal theory. Its prescriptions anticipate the ideal requirements of justice rather than presupposing them. To do so, non-ideal theory has to make assumptions about the minimum requirements that any plausible and complete ideal theory of justice will include. In this vein, it can define targets for practical action before a complete ideal has been worked out, even in outline. Furthermore, if our assumptions about the minimum demands of justice are defensible, we can be confident that steps toward these targets are steps in the right direction.

Let us call this non-ideal theory as anticipatory theory. A comparison with supervenience about vague predicates may be instructive (Fine, 1975). What the two theories have in common is that, in each case, the subset of what all the disagreeing contenders agree upon is counted as correct. With supervenience, the contenders are precisifications of some vague predicate. With an anticipatory theory of justice, the contenders are plausible and complete specifications of the requirements of ideal justice. Both approaches reach a core of agreement by circumventing existing disagreements instead of resolving them.²⁶

I take it that non-ideal theory so conceived is coherent and distinctive. What remains to be seen is whether it has any significant instantiations. Let me therefore propose an anticipatory theory of international distributive justice: any plausible and complete ideal theory of international distributive justice will minimally include an obligation on the richest nations to transfer one percent of their GDP to the poorest nations.²⁷

²⁶ Alternative comparisons might be Sunstein (1995) or Rawls (1993, lecture IV). But since their subjects are closer to home, those comparisons may also distract and mislead.

²⁷ I have elaborated on this proposal in my (2002). Parts of the present discussion extend that one and others abbreviate it. The formulation in the text presupposes a certain degree of

For concreteness, imagine this as an obligation incumbent on the ‘major seven’ countries of the Organisation for Economic Co-operation and Development (OECD). In that case, for 2004, we are considering an obligation to transfer some \$241.5 billion (OECD, 2005, p. 13). By contrast, in 2004, official development assistance from the major seven was 0.22 percent of GDP or \$56.686 billion (*id.*, p. 65). (In the United States, it was 0.16 percent, lowest of all). So even a one percent transfer would clearly be a step of some kind. But would it be a step in the right direction?

In my view, the answer is obviously yes. However, this can be disputed, as the nascent debates about international distributive justice already make clear. To establish the one percent proposal as an instance of anticipatory theory, then, we would have to show that it can be secured without having to resolve various debates in ideal theory. The aim would be to demonstrate that such a transfer is philosophically, and not simply intuitively, secure as a step towards justice between nations; and to do so before an ideal theory is settled or in hand.

§2. I shall not attempt to discharge that burden comprehensively here. In particular, I shall not attempt to refute those who deny that there is any obligation of any kind on rich nations to transfer resources to poor nations.²⁸ The most plausible ground on which to object to such an obligation

inequality between nations. I omit to specify the degree because, on any plausible specification, current international inequalities clearly satisfy it and because we should anyhow begin by regarding the one percent obligation as temporary (see following note).

²⁸ Nor shall I enter into the disagreement between Rawls and others about whether obligations to transfer resources between nations are permanent obligations of ideal theory or temporary obligations of transitional, non-ideal theory (see note 25). I myself think the one percent obligation is plausibly regarded as a part of ideal theory, and so as a permanent obligation. But for the purposes of anticipatory, non-ideal theory, it makes no sense to insist on this. Hence, we may begin by regarding it as a transitional obligation. To this end, I specify suitable targets and cut-off points in my (2002, p. 90).

would be that it is too demanding. Yet, in the present case, this objection is pre-empted, I believe, by the extreme modesty of the proposal. That is to say, theories of international justice that license this objection against a one percent obligation are thereby disqualified as plausible contenders. However, I shall not undertake to argue for this here.

Instead, I shall try to exhibit the appeal of the one percent proposal among the more limited, but still significant coalition of those who accept some obligation to transfer resources internationally. Arguably, this includes global egalitarians and prioritarrians of various kinds; international Rawlsians (note 28); utilitarians; decent humanitarians; as well as many decent, ordinary people.²⁹ More specifically, I shall indicate how an appreciation of the social determinants of health contributes to vindicating the one percent obligation as an anticipatory requirement, by pre-empting certain other objections to it.

Two main objections can be accommodated in this way. First, it may be objected that one percent of GDP is too small a transfer to qualify as a minimum obligation. To describe an obligation as the ‘minimum’ implies that the moral performance of those who discharge it is, in some sense, ‘satisfactory.’ It draws a significant distinction between them and those who do less. No rich nation that only transfers one percent, it may be felt, should be shielded from full moral censure in this way. Second, whatever its magnitude, there are naturally different ways to allocate a given resource transfer. Even from the standpoint of concern for the well-being of the worst-off, various alternative expenditures can plausibly claim top priority. An obligation to spend the one percent specifically on improving the health of the globally worst-off, which is what I have in mind, may therefore be found

²⁹ For example, potential members of the coalition include Pogge (2002, ch. 8) and Singer (2002, pp. 192-95), who explicitly endorse a one percent minimum. Outside of philosophy, they include Sachs (2005, ch. 15) and Bono, who endorse the U.N.’s Pearson target of 0.7 percent.

objectionable independently of its magnitude.

The social determinants of health allow us to accommodate both objections. To see how, let us briefly review the fundamental determinants of health specifically in developing countries, two of which are social determinants.

1. Basic health care. Following the material under review, I have not focused at all on medical care as a determinant of health. But, of course, that is not to deny that it is one. In particular, public health and primary health care systems are important determinants of health, especially in developing countries. For example, the significant role of immunisation, vector control, clean water, and sanitation in reducing mortality has been well documented there (Caldwell, 1986). Preston's main point in his original article (1975) was that only part of a nation's reduction in mortality could be attributed to economic development, i.e. to its movement along the Preston curve. The substantial remainder was due to upward shifts in the curve itself over time, i.e. to changes in the underlying relationship between mortality and economic development. In his later article, Preston (1980) estimated that at least 50 percent of the mortality gains by developing nations between 1940 and 1970 were due to factors other than income, literacy, and nutrition. While this remainder includes unknown factors, he attributed a significant part of it to public health measures.

2. Absolute individual income. Recall that, below the bend in the Preston curve, the relative and absolute income hypotheses actually agree that non-comparative income makes a significant contribution to individual life expectancy; they also agree that its marginal contribution is maximised when directed to the bottom of the domestic income distribution. A welcome side-effect of our focus on developing countries, therefore, is that the heat goes out of the income debate (this one, anyhow). In addition, the two hypotheses importantly agree on the causal pathways through which non-

comparative income contributes to life expectancy, namely, via the material risk factors of inadequate nutrition, lack of clean water and sanitation, and poor housing, inter alia. Indeed, the causal significance of these factors (especially, nutrition) and their sensitivity to individual (or household) income is quite widely agreed (Caldwell, 1986; Preston, 1980).³⁰ Lastly, notice that an extremely steep slope at the beginning of the individual income–life expectancy curve (e.g., the left-hand edge of Figure 5) implies that, at the very lowest levels, gains in non-comparative income produce disproportionately large gains in life expectancy.

Anand and Ravallion (1993) argue that the entire relationship between per capita GDP and life expectancy (i.e., the Preston curve) can be explained in terms of two factors: to wit, per capita public spending on health and the proportion of the population in extreme poverty.³¹ On their analysis, in other words, the relevance of national income to life expectancy is entirely mediated by the extent to which it funds public spending on our first determinant;³² and by the extent to which it (and so, our second determinant) is distributed to the poorest inhabitants. Anand and Ravallion calculate that roughly two-thirds of their explanation is due to the first factor and one-third to the second.

3. *Education.* A final fundamental determinant of health is education. In developing countries, female education in particular correlates very highly with infant and child (under 5) life expectancy, even after controlling for income and other factors (Subbarao and Raney, 1995; Hobcraft,

³⁰ For evidence supporting the operation of these pathways in South Africa, see Case (2002).

³¹ But they caution that their results are based solely on their sample of 22 countries.

³² Note that this is a narrower interpretation of ‘health care’ than we specified, since it excludes private spending on health care. Like that on clean water and sanitation, private spending on health care doubles as a material pathway through which our second determinant (individual income) contributes to health.

1993). Thus, mothers with primary schooling have child mortality rates 26 percent lower than mothers with no schooling, while mothers with secondary schooling have rates 36 percent lower again than mothers with only primary schooling (Filmer and Pritchett, 1999). Subbarao and Raney (1995) estimate that doubling female secondary school enrolments in 1975 (to 38 percent, from the actual 19) would have lowered annual infant deaths in 1985 by 64 percent.

Caldwell (1986) describes several pathways through which greater female education contributes to improved health, both a woman's own and that of her children. These include not only improvements in (health and general) knowledge, but also the empowerment of women. Indeed, Caldwell emphasises the important role of female autonomy in the most impressive cases of health gains by developing countries (on which, more below). A further pathway, which combines the previous ones, works through an increased demand for health services. In addition to better access to care, increased demand contributes to improvements in the efficiency of local health services. Caldwell thereby suggests several possible interactions between education and health services as determinants of health.

Filmer and Pritchett (1999) dispute the claim that public spending on health contributes significantly to life expectancy. They find that 95 percent of the cross-national variation in child mortality can be explained in terms of the level and distribution of income, the extent of female education, and two other social factors,³³ while adding public spending on health to their equation improves the explanation only trivially. By their estimate, each additional year of female schooling yields roughly a 10 percent decrease in child mortality.

³³ The additional factors are the extent of ethno-linguistic fragmentation and whether a country is predominantly Muslim.

§3. Against this background, we can return to the one percent obligation. To display a link between health and international justice, let us understand the proposal as requiring the resources to be spent on improving the health of the globally worst-off. What this means, however, is that they should be spent on improving the determinants of health in developing countries. As we can now appreciate, it therefore means that the transfers should be targeted at (i) primary health care and public health; (ii) basic nutrition and income support; and (iii) education (especially for girls and women). If we allocate a quarter percent to each of these fundamental determinants, that leaves a quarter percent to cover existing development commitments. 0.75 percent of GDP from the OECD major seven will fund a per capita package of \$144 for 1.26 billion people, which covers the world's bottom quintile.

This refined proposal is immune to the objection from alternative priorities. From the standpoint of individual well-being, nutrition, shelter, basic income, and education are reasonably conceived as instrumental priorities on a par with health care. For on any plausible theory of well-being, knowledge and autonomy, to which education is instrumental, will count as basic intrinsic components. In this respect, they are comparable to health. Income is not itself an intrinsic component. But it is the primary all purpose means to well-being, while nutrition is simply an indispensable means.³⁴ Still, important as they are, these priorities cannot possibly compete with the social determinants of health because they are identical to them. Moreover, nothing else plausibly has a similar priority for individual well-being.

In this light, we can see both that and how health functions as a notably effective summary measure of well-being. Not only is health itself a basic intrinsic component, but its social determinants comprehend all of the plausible instrumental competitors to health care for priority in

³⁴ I am taking shelter to be covered in the proposal under 'income.'

improving well-being. I observed at the very outset that the miserable health of the global poor strikes an especially salient chord. On one level, this represents an emotional response open to rhetorical exploitation. Yet, on another level, the particular salience of health actually turns out to have a secure rational basis.

The refined proposal's 'combination approach' to the fundamental determinants of health also has various practical advantages. To begin with, the relative strength of their respective causal contributions remains disputed, as we have seen. Not only is this true as between the traditional determinants (i) and the social ones, but also within the social determinants, i.e. between (ii) and (iii). However, by spreading the \$144 per capita over all three, the proposal maintains a bet, as it were, on all the principal horses in the race. It thereby mitigates the uncertainty concerning the precise causal strengths at work.³⁵

Furthermore, this approach draws important support from the historical experience of those developing countries that have achieved exceptional life expectancy despite a very low GDP: diagrammatically, these 'high achievers' occupy the top left corner of the bend in the Preston curve.³⁶ Among 'open societies,' they include Sri Lanka (71 years), Kerala,³⁷ and Costa Rica (77); and among 'closed' societies, China (71), Cuba (77), and Vietnam (71). Their life expectancies are all notably

³⁵ The sub-allocations can obviously be adjusted, once the relative contributions of the three determinants become more reliably known.

³⁶ Alternatively, they have achieved high life expectancy with very low per capita health expenditure. Compare our Figure 2 with the figure in Leon *et al.* (2001, p. 592). Except for Costa Rica (\$498), all the countries that follow in the text spent markedly less than \$500 per capita (in purchasing power parities) on the health sector in 1997.

³⁷ Kerala is an Indian state, but its population is 30 million. In 1994, life expectancy for women was 73 years, the same as Sri Lanka (Sen, 1999, p. 47). In 1982, combined life expectancy was 66 years (Caldwell, 1986, p. 174), almost the 2003 global average.

higher than the global average (66.75).³⁸ For our purposes, the main lesson lies in the path the high achievers followed, which was precisely the combination approach of concerted investment in (i) primary health care and public health; (iii) basic education, including for girls (and thus, a high degree of literacy among women); and (ii) the provision of a nutritional floor (Caldwell, 1986; Mehrotra and Jolly, 1998).³⁹

Finally, 0.75 percent of GDP is enough to fund this combination package for the world's bottom quintile at levels comparable to those employed by the high achievers. That is because \$144 per capita is a real dollar figure, whereas cross-national comparisons should be made in purchasing power parity (PPP) equivalents. Since the relevant PPP multiplier can be conservatively set at 3,⁴⁰ \$144 (PPP) can be spent per capita on each of the three fundamental determinants. In Sri Lanka (e.g.), for comparison, total health expenditures in 1998 were \$95 (PPP) per capita and public educational expenditures in 1995-97 were \$100 (PPP) per capita (UNDP, 2001). Hence, there is no need to forgo the advantages of the combination approach.

To fix ideas, then, suppose that spending \$432 (PPP) annually per capita on the combination package in many countries of sub-Saharan Africa or the worst off Indian states or Chinese

³⁸ Indeed, Costa Rica and Cuba have the same life expectancy as the United States.

³⁹ Amartya Sen invokes the same high achievers in the context of distinguishing two paths of development, 'support led' versus 'growth mediated' (*PIH*, ch. 17; 1999, ch. 2). His purpose is both to question the traditional definition of 'development' and to emphasise that the achievement of (e.g.) high life expectancy does not depend on economic growth. The latter point bears, incidentally, on criticisms of international aid that focus specifically on its contribution to growth (e.g., Birdsall *et al.*, 2005). However, like other pressing issues of implementation, this requires separate treatment elsewhere.

⁴⁰ In 1999, the World Bank's multiplier ranged from an average of 4.49 for low-income countries to 2.58 for middle-income countries (UNDP, 2001, p. 181). For Sri Lanka, it was 3.89.

provinces—jurisdictions where life expectancy is 15 years or more below the global average—would raise life expectancy there by 10 years. While by no means guaranteed, the evidence we have reviewed makes this entirely plausible.⁴¹ In that case, the objection that one percent of GDP is too small to qualify as a minimum obligation simply cannot be sustained. Far from being a pittance, a 10 year improvement in life expectancy represents a huge gain in well-being for the world’s worst off inhabitants.

A one percent obligation is light enough in its burden on the major seven, so I have assumed, to pre-empt the objection that it is too demanding. Yet its effects on the well-being of the globally worst-off, it now turns out, are nevertheless bountiful enough to make one percent also worthy of the status of ‘minimum obligation.’ What reconciles these claims is the fact that targeting the one percent at the fundamental determinants of health in developing countries produces a disproportionate ‘bang for the buck’ in terms of individual well-being.

An important part of this tremendous leverage is explained by the social determinants of health. In over-simple terms, as previously noted, the explanation appeals to the steep initial slope of the individual income–life expectancy curve. More sophisticated explanations share the credit for this leverage between income and other determinants of health, but without affecting the basic point. Of course, the leverage one percent can exert is also partly explained by the severity of international economic inequalities. These severe inequalities explain how such a small relative contribution from the major seven becomes such a large relative sum when transferred to developing countries; they also underwrite the PPP multiplier, which further magnifies that difference.

⁴¹ Compare Caldwell: ‘These findings...show that low mortality is indeed within the reach of all countries’ (1986, p. 209).

To factor these respective explanations, notice that \$432 (PPP) roughly doubles the income of someone living on \$1 (PPP) per day. Thus, 0.75 percent from the major seven roughly doubles the income of the world's poorest quintile. However, while this observation already does something to allay the pittance objection, that objection is much more powerfully dispelled by the addition of 10 years to these people's lives. It is the social determinants of health that warrant both the ground and the greater power of the latter reply.

I have not attempted a full defence of the one percent obligation as an anticipatory requirement of international distributive justice. Instead, I have concentrated on exhibiting the particular light shed on that subject by the material under review. By pre-empting the pittance objection, as well as the objection from alternative priorities, the social determinants of health help us to recognise the one percent obligation as a vital step towards justice in our non-ideal world.

References

- Adler, N. and K. Newman (2002) "Socioeconomic Disparities in Health: Pathways and Policies," Health Affairs 21: 60-76.
- Adler, N. and J.M. Ostrove (1999) "Socioeconomic Status and Health: What We Know and What We Don't" in N. Adler et al., eds. Socioeconomic Status and Health in Industrial Nations: Social, Psychological, and Biological Pathways. New York: New York Academy of Sciences: 3-15.
- Anand, S. and M. Ravallion (1993) "Human Development in Poor Countries: On the Role of Private Incomes and Public Services," Journal of Economic Perspectives 7: 133-50.
- Backlund, E. and P.D. Sorlie and N.J. Johnson (1999) "A comparison of the relationships of education and income with mortality: the national longitudinal mortality study," Social Science and Medicine 49: 1373-84.
- Beitz, C. (1979) Political Theory and International Relations. Revised edition, 1999. Princeton: Princeton University Press.
- Birdsall, N. and D. Rodrik and A. Subramanian (2005) "How to Help Poor Countries," Foreign Affairs 84: 136-52.
- Caney, S. (2001) "International Distributive Justice," Political Studies 49: 974-97.
- . (2005) Justice Beyond Borders. Oxford: Oxford University Press.
- Case, A. (2002) "Health, Income, and Economic Development," Proceedings of the World Bank Conference on Economic Development, 2001-2002. World Bank: 221-41.
- Chatterjee, D., ed. (2004) The Ethics of Assistance: Morality and the Distant Needy. New York: Cambridge University Press.
- Cohen, S. and S. Line, S. Manuck, B. Rabin, E. Heise, and J. Kaplan (1997) "Chronic Social Stress, Social Status, and Susceptibility to Upper Respiratory Infections in Nonhuman Primates," Psychosomatic Medicine 59: 213-221.
- Crimmins, E. and Y. Saito (2001) "Trends in healthy life expectancy in the United States, 1970-1990: gender, racial, and educational differences," Social Science and Medicine 52: 1629-41.
- Daniels, N. and B. Kennedy and I. Kawachi (2000) Is Inequality Bad for Our Health?. Boston: Beacon Press.

- Deaton, A. (2002) "Policy Implications of the Health and Wealth Gradient," Health Affairs 21: 13-30.
- (2003) "Health, Inequality, and Economic Development," Journal of Economic Literature 41: 113-58.
- Elo, I. and S. Preston (1996) "Educational differences in mortality: United States, 1975-1989," Social Science and Medicine 42: 47-57.
- Evans, R. and M. Hodge and I.B. Pless (1994) "If Not Genetics, Then What? Biological Pathways and Population Health" in R. Evans and M. Barer and T. Marmor, eds. Why Are Some People Healthy and Others Not?. New York: de Gruyter.
- Evans, T. and M. Whitehead, F. Diderichsen, A. Bhuiya, and M. Wirth, eds. (2001) Challenging Inequities in Health: From Ethics to Action. New York: Oxford University Press.
- Filmer, D. and L. Pritchett (1999) "The impact of public spending on health: does money matter?," Social Science and Medicine 49: 1309-23.
- Fine, K. (1975) "Vagueness, truth and logic," Synthese 54: 235-59.
- Gravelle, H. (1998) "How much of the relation between population mortality and unequal distribution of income is a statistical artefact?," British Medical Journal 316: 382-85.
- Gwatkin, D. and M. Guillot and P. Heuveline (1999) "The Burden of Disease among the Global Poor," Lancet 354: 586-9.
- Hobcraft, J. (1993) "Women's education, child welfare, and child survival: a review of the evidence," Health Transition Review 3: 159-75.
- Huisman, M. et al. (2005) "Educational inequalities in cause-specific mortality in middle-aged and older men and women in eight western European populations," Lancet 365: 493-500.
- Kawachi, I. and B. Kennedy and R. Wilkinson, eds. (1999) The Society and Population Health Reader: Income Inequality and Health. New York: New Press.
- Kunst, A. and J. Mackenbach (1994) "The Size of Mortality Differences Associated with Educational Level in Nine Industrialized Countries," American Journal of Public Health 84: 932-37.
- Leon, D.A. and G. Walt, eds. (2001) Poverty, Inequality, and Health: An International Perspective. Oxford: Oxford University Press.
- Leon, D.A. and G. Walt and L. Gilson (2001) "International perspectives on health inequalities and policy," British Medical Journal 322: 591-4.

- Lynch, J. and G.D. Smith, S. Harper, M. Hillemeier, N. Ross, G. Kaplan and M. Wolfson (2004) "Is Income Inequality a Determinant of Population Health? Part 1. A Systematic Review," The Milbank Quarterly 82: 5-99.
- Mackenbach, J.P. (2002) "Income inequality and population health," British Medical Journal 324: 1-2.
- Marchand, S. and D. Wikler and B. Landesman (1998) "Class, Health, and Justice," The Milbank Quarterly 76: 449-67.
- Marmot, M. (2004) The status syndrome. New York: Henry Holt.
- Marmot, M.G. and H. Bosma, H. Hemingway, E. Brunner, and S. Stansfeld (1997) "Contribution of job control and other risk factors to social variations in coronary heart disease incidence," Lancet 350: 235-39.
- Marmot, M.G. and G. Rose, M.J. Shipley, and P.J.S. Hamilton (1978) "Employment grade and coronary heart disease in British civil servants," Journal of Epidemiology and Community Health 32: 244-49.
- Marmot, M. and R. Wilkinson, eds. (1999) Social Determinants of Health. Oxford: Oxford University Press.
- Marmot, M. and R. Wilkinson (2001) "Psychosocial and material pathways in the relation between income and health," British Medical Journal 322: 1233-36.
- McDonough, P. and G. Duncan, D. Williams, and J. House (1997) "Income Dynamics and Adult Mortality in the United States, 1972 through 1989," American Journal of Public Health 87: 1476-83.
- McEwen, B. (1998) "Protective and damaging effects of stress mediators," New England Journal of Medicine 338: 171-79.
- Mehrotra, S. and R. Jolly, eds. (1998) Development with a human face. Oxford: Clarendon Press.
- Murphy, L. (1998) "Institutions and the Demands of Justice," Philosophy and Public Affairs 27: 251-91.
- (2000) Moral Demands in Nonideal Theory. New York: Oxford University Press.
- Nagel, T. (2005) "The Problem of Global Justice," Philosophy and Public Affairs 33: 113-47.
- Organisation for Economic Co-operation and Development (2005) OECD in Figures. Paris: OECD.

- Parfit, D. (1991) Equality or Priority?. Lindley Lecture, University of Kansas.
- Pogge, T. (1989) Realizing Rawls. Ithaca: Cornell University Press.
- (2002) World Poverty and Human Rights. Oxford: Blackwell.
- Preston, S.H. (1975) "The changing relation between mortality and level of economic development," Population studies 29: 231-48.
- (1980) "Causes and Consequences of Mortality Declines in Less Developed Countries during the Twentieth Century" in R. Easterlin, ed. Population and Economic Change in Developing Countries. Chicago: University of Chicago Press.
- Rawls, J. (1971) A Theory of Justice. Revised edition, 1999. Cambridge, Mass.: Harvard University Press.
- (1993) Political Liberalism. New York: Columbia University Press.
- (1999) The Law of Peoples. Cambridge, Mass.: Harvard University Press.
- Rodgers, G.B. (1979) "Income and inequality as determinants of mortality: an international cross-sectional analysis," Population studies 33: 343-51.
- van Rossum, C. and M. Shipley, H. van de Mheen, D. Grobbee, and M. Marmot (2000) "Employment grade differences in cause specific mortality," Journal of Epidemiology and Community Health 54: 178-84.
- Sachs, J. (2005) The End of Poverty. New York: Penguin Press.
- Sapolsky, R.M. (1993) "Endocrinology Alfresco: Psychoendocrine Studies of Wild Baboons," Recent Progress in Hormone Research 48: 437-68.
- Sapolsky, R.M. and G. E. Mott (1987) "Social subordination in wild baboons is associated with suppressed high density lipoprotein-cholesterol concentrations: the possible role of chronic stress," Endocrinology 121: 1605-10.
- Sen, A. (1999) Development as Freedom. New York: Knopf.
- Shively, C.A. and T.B. Clarkson (1994) "Social status and coronary artery atherosclerosis in female monkeys," Arteriosclerosis Thrombosis and Vascular Biology 14: 721-26.
- Singer, P. (1972) "Famine, Affluence, and Morality," Philosophy and Public Affairs 1: 229-43.
- (2002) One World. New Haven: Yale University Press.

- Sreenivasan, G. (2002) "International justice and health: a proposal," Ethics and International Affairs 16: 81-90.
- (forthcoming) "What is non-ideal theory?" In M. Williams and J. Elster, eds. Transitional Justice NOMOS L. New York: New York University Press.
- Subbarao, K. and L. Raney (1995) "Social Gains from Female Education: A Cross-National Study," Economic Development and Cultural Change 44: 105-28.
- Sunstein, C. (1995) "Incompletely Theorized Agreements," Harvard Law Review 108: 1733-72.
- UNDP (2001) Human Development Report 2001. New York: Oxford University Press.
- Unger, P. (1996) Living High and Letting Die. New York: Oxford University Press.
- Victora, C. and A. Wagstaff, J. Schellenberg, D. Gwatkin, M. Claeson, and J.-P. Habicht (2003) "Applying an equity lens to child health and mortality: more of the same is not enough," Lancet 362: 233-41.
- Wagstaff, A. and E. van Doorslaer (2000) "Income Inequality and Health: What Does the Literature Tell Us?," Annual Review of Public Health 21: 543-67.
- Wilkinson, R.G. (1992) "Income distribution and life expectancy," British Medical Journal 304: 165-68.
- (1994) "The Epidemiological Transition: From Material Scarcity to Social Disadvantage?," Daedalus 123: 61-77.
- (1996) Unhealthy Societies: The Afflictions of Inequality. London: Routledge and Kegan Paul.
- (1999) "Two pathways, but how much do they diverge?," British Medical Journal 319: 956-7.
- Wilkinson, R. and M. Marmot, eds. (2003) Social determinants of health: The solid facts. Second edition. Copenhagen: World Health Organisation.
- Wolfson, M. and G. Kaplan, J. Lynch, N. Ross, and E. Backlund (1999) "Relationship between income inequality and mortality: empirical demonstration," British Medical Journal 319: 953-55.
- World Health Organisation (2005) World Health Report 2005. Geneva: WHO.