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## **Revising Global Theories of Justice to Include Public Goods**

## Heather Widdows and Peter G. N. West-Oram

## **Abstract:**

Our aim in this paper is to suggest that most current theories of global justice fail to adequately recognise the importance of global public goods. Broadly speaking, this failing can be attributed at least in part to the complexity of the global context, the individualistic focus of most theories of justice, and the localised nature of the theoretical foundations of most theories of global justice. We argue – using examples (particularly that of protecting antibiotic efficacy) – that any truly effective theory of global justice must recognise the importance of global public goods. Global public goods confer significant benefits to individuals yet can only be effectively promoted and preserved through collective action and the restriction of individual choice; something which most theories of justice are structurally unequipped to sufficiently promote.



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## **Revising Global Theories of Justice to Include Public Goods**

# Heather Widdows and Peter G. N. West-Oram<sup>1</sup>

## Introduction

Theories of justice are, or should be, concerned with delivering justice – with sharing goods fairly and making lives better. There are differences with regard to how this is done, and in the focus of particular theories, for instance, a focus on the just distribution of resources (Pogge 2001; Brock 2009), on appropriate freedom and respect (Rawls 1999a), or on the provision of guarantees to certain essential goods (Shue 1980). But essentially all are concerned with how to deliver goods (of some sort or another) in fair ways; global theorists are of course concerned with how this can be done globally. One way of judging how well this is done is to consider the extent to which any particular theory of justice recognises and prioritises the protection and distribution of the most important goods.

This paper is about one type of primary good – global public goods (primary goods being goods which are essential to flourishing). We argue, somewhat tentatively, that current justice theorising often neglects global public goods. Our aim is to give an account of why this might be and why global public goods need to be recognised as goods qua goods.<sup>3</sup> To make this case we first argue that there are methodological and practical reasons for why current global justice theorising neglects public goods. Taken together, these methodological and practical reasons have led to theories of global justice being structurally individualistic; built around individual needs or rights or focused on delivering goods to individuals. We argue it is this structural constraint which makes it hard for current theories of justice to recognise. respect, protect and importantly prioritise global public goods. Having detailed this gap in theories of justice and offered some explanation we move to consider global public goods: what they are and why they matter. To illustrate our claim we will introduce a number of examples, most prominently that of global public health goods. We argue that global public goods are primary goods and as such should be recognised as goods to be protected in themselves (regardless of whether individuals recognise and choose these goods or not). We argue that if global public goods are not protected sufficiently then current and future individuals will be seriously harmed. Accordingly, if we are to deliver justice to individuals we must protect those global public goods which are required by all for flourishing and without which all will suffer.

Finally, and crucially, in making these arguments we are not in any way dismissing current global justice theories or the impressive work done to date by global justice theorists. On the

<sup>&</sup>lt;sup>1</sup> We would like to thank Monique Deveaux and Kathryn Walker for their repeated comments on this paper. It may not be a good paper but it is a vastly improved paper. It also gave us the opportunity to wrestle with some of the key issues we had been working on with regard to global public goods – this was hard and our views are by no means resolved but we hope that nonetheless this is a useful contribution to the debate.

<sup>&</sup>lt;sup>2</sup> As will later be explored many theorists of justice are not global theorists, for instance, David Millar and Thomas Nagel, and most importantly for this paper John Rawls, who is not a global justice theorist, but nonetheless the inspiration for many global theorists.

<sup>&</sup>lt;sup>3</sup> The claim is not that individuals and their goods are unimportant but rather that if we are to deliver global justice and actually make the lives of individuals better and maximise what they can 'actually be and do' (Sen 1999, 66), we must that recognising and respecting public goods is essential.

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contrary we view global justice theorists, such as Gillian Brock, Simon Caney, Darrel Moellendorf, Martha Nussbaum, Thomas Pogge, Henry Shue and Peter Singer, as doing the most significant and important work in contemporary moral and political philosophy. Our paper should not be read as dismissive of these theories in any sense, but as making two suggestions; first that primary global public goods are respected as goods *qua* goods; second that such goods are incorporated into current theories and not theorised separately. In this way the goods of individuals, groups, publics and global public goods can be considered together and prioritised appropriately. <sup>5</sup>

## **Structure of Global Justice Theorising**

In the first half of the paper we consider the structure and development of global justice theorising and suggest that the way global justice theories have developed has led, unintentionally, to the neglect of global public goods. We suggest that there are two reasons which can be identified for this – practical and methodological – we consider these in turn.

#### **Practical Concerns**

First, we suggest that there is a significant practical problem associated with theorising about global justice. Quite simply the vast gulf in inequality and the range of situations, and importantly, types of goods, which a global theory seeks to cover make expanding to a global theory of justice more difficult than is often recognised. That there is great global disparity in wealth globally is obvious – and the starting point of many theories – but we wonder if the challenges this poses for theorising have been recognised sufficiently. We suggest that the implications for the methodology of justice theorising have not been taken sufficiently into account, and that instead domestic or bounded theorising and global theorising have been treated as substantially the same.

Our claim is that global differences require substantive differences in approach. For instance, in domestic or regional contexts, often the focus of bounded theories of justice, those who fall within the relevant boundaries are likely to be vastly more similar than those in the global context. To illustrate we can consider an obvious measure of disparity between agents, financial wealth. Wealth inequality is a constant in all nations to some degree or other. For example, in the United States of America, since the 1920s the wealthiest 1% of people has owned on average around 30% of the nation's wealth (Keister and Moller 2000, 63). However, while there is significant disparity and inequality within wealthy nations, the disparity between citizens of rich and poor nations (when the totality of global disparity is taken into account) is even greater. For example, a recent report by the United Nations has noted that the wealthiest twenty percent of the global population enjoys over 70% of global total income, while the poorest twenty percent 'enjoy' only 2% of the total using purchasing-power-parity (PPP) exchange rates (Ortiz and Cummins 2011, vii). These disparities exist in other important areas as well. For example, citizens of wealthy nations enjoy both greater life expectancy (Farmer 1999, 11), and better access to essential medicines than their counterparts

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<sup>&</sup>lt;sup>4</sup> As well as being personal mentors, fellow-travelers, idols and friends. This should be read as a reflection and a suggestion of ways to expand and develop and as homage rather than critique.

<sup>&</sup>lt;sup>5</sup>This is an argument which Widdows has developed elsewhere particularly with regard to health goods (Widdows 2013).

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in poorer nations (Viravaidya, Obremsky, and Myers 1996, 11). Similarly, educational opportunities are fewer in poorer countries (Lewin 2009, 151), as are economic opportunities, largely due to the protectionist policies of western nations (Pogge 2008, 233,263). Therefore, while it is the case that in some bounded contexts – for instance, in some nations – the disparity between any two individuals may be vast, in the global context the totality of the disparity and what is required to move towards equality is far greater. This is even more the case when inequalities in opportunities and infrastructure are taken into account.

It might be objected that such inequality, whilst severe, is not problematic for theories of global justice, since while the level of inequality represents a great hurdle to overcome, the fundamental principles of justice can still be said to apply. Indeed, given that the aim of all theories of justice is the fairer distribution of goods of some sort, managing such inequality might be regarded as their raison d'être. In one sense this is true, since a commitment to equality, or to aiding the needy, represents the same theoretical commitment, irrespective of the practical problems of delivery or the scope of the theory. However, at the global level differences in scale create practical implications for the likely effectiveness of delivering justice. For instance, just global distribution of resources is likely to be highly costly for those who number amongst the world's wealthier citizens, which is likely to be a disincentive for many and make the challenge seem overwhelming. Other challenges arise simply from the sheer number of people who currently are in need of assistance. Moreover, it is notoriously difficult to evaluate how to best go about distributing appropriate goods and there is a significant, and so far inconclusive, literature attempting to establish the correct methods for deciding how to assign priorities in cases of resource distribution.

The difference between the domestic and the global is also one of perception and imagination: for instance justice between relative equals in close proximity to one another, appears relatively simple in comparison to global just distribution. And often, those required to contribute (the tax base) are required to give less than they would to meet global needs, and there are significant self interested reasons for giving to those one interacts with frequently. While such ties are increasingly global as the world economy becomes

<sup>&</sup>lt;sup>6</sup>The similarity between regions and the ease of delivering justice in bounds is recognised in some debates. For instance, John Harris and Charles Erin argue for a centralised European purchaser of body parts (Erin and Harris 2003). They suggest this is limited to the EU precisely because they recognise that global disparities in wealth are such that globally there is no price which would not be exploitative. While we are critical (for many reasons of this proposal) it does demonstrate that it is far harder to move to the global sphere than is often recognised.

<sup>7</sup> This seems to be still the case, even though in fact it may not be exceptionally demanding. For instance, as Pogge argues the cost of making up the difference between \$1 per day to \$2 per day for the approximately 950 million people currently living at or below the lower, 'extreme poverty', threshold would cost only \$38 billion annually (2008, 105). Such an expenditure would only reduce the share of global GDP enjoyed by wealthy

countries from 78.98% to 78.90% (2008, 105).

8 See for example (Nagel 1991), (Parfit 1997), and (Temkin 2003).

<sup>&</sup>lt;sup>9</sup> One example which could be given of such self interested reasons comes from public health. For example, in 1992 the public costs of treatment services in California for approximately 150,000 drug and alcohol addicts cost roughly \$200 million, but resulted in savings of between \$1,000 million and \$1,500 million during treatment and in the year following treatment, largely as a result in reductions in crime (Inter-University Consortium for Political and Social Research 2004, x). This represents an economic benefit, in the form of lower public costs of prevention, prosecution and incarceration, as well as a 'safety' benefit caused by the reduction of crime. The self interested reasons for contributions to the cost of public goods in bounded communities are more obvious than they are in the global context, although there are some instances, such as pandemics where arguments could be made for them.

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increasingly interconnected, these are not yet established in law and policy and arguably not in terms of identity and imagination in the ways they are in bounded communities (whether regions, nations or communities). For example, while citizens often recognise that it is in their interests to pay taxes to support the building of schools and to maintain transport networks within the domestic sphere, as it has benefits to them, this is less likely to be recognised globally (McKercher et al. 2010). Indeed some argue that for these reasons the more local such initiatives are the more likely there are to be successful. <sup>10</sup>

These practical difficulties are challenging and we suggest that these differences between domestic and global theories need to receive greater recognition and be considered in more detail. Currently, practical realities – with emphasis on perception and imagination as well as the extent of the inequality – are too often neglected. We have introduced this practical concern, obvious as it is, simply because we suspect this may contribute to and exacerbate the methodological problem to which we turn next. But, while these practical problems and the challenges they pose are obvious, it may be that the challenges to theorising they present have become obscured in current theoretical practice.

## **Methodological Concerns**

Having outlined the practical challenge of global justice theorising we move to methodological concerns. We suggest that the practical difficultly is compounded by a methodological trend to begin with a 'bounded' theory of justice (relational, domestic, regional or national) and then to seek to expand it into a global theory. We contend that this is problematic because this method fails to recognise what we have termed the practical difficulty (which is one of perception and imagination as much as inequality) and the incorporation of assumptions directly from earlier theories which are problematic for global theory. As a result global justice theories neglect key goods, such as global public goods, which are more important to protect in global theories than in domestic ones.

Before outlining this methodology it is important to understand that at least at the level of theory, consideration of global public goods is less crucial in domestic justice theorising than it is global theorising. This is for the obvious reason that most global public goods – such as the environment, and we will argue some health goods, can only be protected globally. Because such goods cannot be protected at local levels they are less relevant to domestic theories, as even though they contribute to individual wellbeing they cannot be protected individually or locally. Moreover, bounded theories are often focused slightly differently – for instance on local process and institutions and detailed mechanisms for delivering justice only to members of a specific group of people (whether the focus is on goods, rights or entitlements) or on the duties of individuals to each other. While global theories are concerned with such issues, the importance of protecting some global goods *irrespective* of which mechanisms and institutions of distribution are used is far more important. Before

<sup>&</sup>lt;sup>10</sup> While it should be the case that a self-interested argument could apply to the global health goods, as yet, this has not affected behaviour. But the truism that "infectious disease...knows no borders" is particularly apt here (Battin et al. 2009, 34) when we consider pandemics, infectious disease and the problems of antibiotic resistance (Kunin 1993). It can also be argued that the provision of effective health care services to poor people is in the interests of the wealthy since doing so reduces the likelihood of the spread of pandemic disease, and impedes the development of drug resistance (Ormerod 2005; Faustini, Hall, and Perucci 2006). However, these arguments are tangential to our main focus.

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considering these global public goods we will briefly elaborate on the idea of a 'methodology of expansion' using three general *types* of theory as illustrations; namely, contract theories, ethical theories and rights theories.

# **Expansion to the Global: Contract Theories**

The first type of theory that we examine are contract theories, such theories treat individual agents as parties to a mutually agreed, and agreeable, contract, usually, though not always, hypothetical. In contemporary debate, and particularly in the global justice debate, the most prominent name associated with such theories is that of John Rawls (Rawls 1999a; Rawls 1999b). While Rawls is absolutely not a global theorist – believing there are different rules for the domestic realm and the international realm – his work on justice has been transformative of contemporary global justice theorising and many global theorists have used his work as a basis for global theories of justice. <sup>11</sup> For instance, Darrel Moellendorf and Thomas Pogge can be described as being loosely Rawlsian in their approach to global justice (Moellendorf 2002; Pogge 2008); although these categories are somewhat artificial. When globalising Rawlsian theory, Rawls' claim that personal features of individuals such as race, gender, or status are morally arbitrary is extended by these Rawlsian theorists of global justice to nationality. As a result it is argued that nationality should be hidden behind the veil of ignorance in a like manner to other arbitrary features. The intention is to transform Rawls' theory of domestic justice into a global one by recognising that nationality (or place of origin) is simply another feature which may be used to unjustly discriminate against contracting parties. From this starting point, the distinctly Rawlsian claim is made that rational, selfinterested contractors deliberating in the original position will choose principles which are fair and that in this original position arbitrary partiality will be excluded (Rawls 1999a, 16). Methodologically speaking, this approach begins with an established bounded theory – a Rawlsian one – and then argues that imposing bounded limits is unjustified according to the theory, so creating a theory which applies globally.

In this process an expanding methodology is evident; first, a bounded theory (in this case contract theory within a state) is the starting point; second, the justifications for the limits and bounds of the theory are shown to be unjustified using the claims of the theory (in this case that nationality is morally arbitrary); as a result of the first and the second premises a global theory of justice is deemed to result. However, because the focus is not on content – on considering what features are necessary in a global theory of justice – the content and assumptions of the original model are carried over into the global theory. The assumption (and consequent omission) which we are concerned with in this paper is the individual focus of contract theories and the subsequent neglect of global public goods: it is individuals who are behind the veil in the domestic hypothetical contract, and who continue to be when the theory becomes global. We suggest that this emphasis on individuals and their hypothetical choices which is carried over from the domestic theory, is problematic for global theories as

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<sup>&</sup>lt;sup>11</sup> Rawls is explicitly not a global justice theorist. Rawls considers that his principles of justice apply only in the domestic realm and within borders. For Rawls, international justice, which he addresses in *The Law of Peoples* (Rawls 1999b) does not consist of the application of his principles of justice directly to individuals and the basic structures of societies in the global realm. Rather it is about respect for a minimal set of human rights applied within the 'society of peoples'.

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it fails to account for goods which might not be chosen, but which have significant value for individuals, such as global public goods; an argument to which we will return.

## **Expansion to the Global: Ethical Theories**

The second approach to theorising about global justice which we will consider might loosely be termed the 'ethical approach'. This is not to suggest that other methods of theorising are not ethical, but simply to delineate those theories which take a locally accepted or somehow bounded ethical principle, duty or theory and then make an argument to show why the principle, duty or theory applies globally. Perhaps the most famous example of this is Peter Singer's argument for a global duty to rescue. In a now famous paper, 'Famine, Affluence, and Morality' (1972), Singer argues that distance does not provide a sufficient cause for rendering a duty to rescue inapplicable. Thus, this ethical theory takes duties between individuals – what could be called a 'two-person justice situation' – and expands these to global duties. Singer uses the following example to make his argument:

"If I am walking past a shallow pond and see a child drowning in it, I ought to wade in and pull the child out. This will mean getting my clothes muddy, but this is insignificant, while the death of the child would presumably be a very bad thing." (Singer 1972, 231)

Singer's claim is obviously that it would be clearly wrong to ignore the needs of the child, even at some minor cost to ourselves. Having established that in this two person scenario there is a duty to act to save the child Singer then argues that geographical distance is not ethically significant and therefore that duties of this kind apply globally. On this approach to global justice, if it is accepted that providing assistance to those in dire need is required (something which we acknowledge may not be universally accepted)<sup>12</sup> then there is no reason to limit this on the grounds of distance. Accordingly there is just as much of a duty to save the dying child in a far off place as to save the drowning child in the pond, which leads to Singer's assertion of the individual's duty to aid the starving person (Singer 1972, 229).

Methodologically, these 'ethical' approaches start with an established principle or duty which is recognised to be demanding on individuals and expand to reach a global theory. Like contract based approaches to global justice, the focus here is not on the content of the theory or requirements of justice but on whom the duty is said to apply, methodologically the expansion structure is the same. The first premise is an established principle or duty between individuals; the second is the claim that there are no moral limits to whom these principles can apply within the logic of the theory (in this instance that limiting the duty because of distance is morally unjustified); again taken together these claims result in a global theory of justice. Like contract theories the assumptions are carried forward and in this instance the focus on individuals is clear and built into the structure of the argument: duties are between one individual and another, making it unsurprising that respect for global public goods are not well embedded in such theories.

<sup>&</sup>lt;sup>12</sup> For an example of the controversial nature of a duty to provide health care for all even within a domestic context we can consider the extremely contentious debate during the recent Presidential elections in the USA over the Patient Protection and Affordable Care Act (PPACA) (Rick Santorum for President 2011; Ron Paul Presidential Campaign Committee 2011; Ronney For President, Inc. 2012).

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## **Expansion to the Global: Rights Theories**

The third *type* of theory we will consider are human rights theories since rights theorists are key global justice theorists; for example, theorists such as Simon Caney (2005; 2008; 2010) and Henry Shue (1980) have each made major, and impactful, contributions to the field. At first glance, the human rights approach might not obviously be vulnerable to the expansionist claim as, by nature and definition, human rights are conceived of as global (UN General Assembly 1948). However, while it is true that in rhetoric human rights are global there are two key ways in which they could be said either to be regional (Western) or domestic, and in crucially they are individual, again leading to an under-recognition of global public goods.

First, some consider human rights not as global, but as embodying a set of specific liberal and individualistic values which are essentially 'western'. This is not a position we wish to endorse and the details of this are discussed elsewhere. However, it is undoubtedly the case that rights do attach to individuals. So, even if the western claim is rejected, rights are primarily located in individuals rendering the individual the unit of primary concern in rights theory. Second, in practice rights are not delivered globally but by states, and rights primarily involve duties owed by states to their citizens. In nearly all human rights practice, and a significant amount of theory, human rights remain the responsibility of states, and citizens have different rights to non-citizens. The lack of citizen status of refugees, illegal immigrants and the internally displaced profoundly affects the enjoyment human rights; a problem which has motivated an extensive literature on the subject. 15

The result then is that human rights theories are structurally and unavoidably focused on the individual. Here it is perhaps the case that the expansion claims are less justified. But it can certainly be argued that rights theory is an expansion of previous more bounded theories. <sup>16</sup> However, even if this is rejected, crucially for the claims of this paper, rights theories undoubtedly focus on the individual and on individual entitlements. As we shall see, recognising global public goods through individual entitlement is problematic and unlikely to protect primary global public goods sufficiently. Thus rights theory, like the others, is structurally built around the individual.

# Individuals, Individual Choice, and the Neglect of Public Goods

In mapping, in very general terms, the way that these *types* global theories of justice are produced we can make a number of claims. First, these theories were originally intended for bounded communities (including, perhaps, Human Rights with its heritage in earlier rights

<sup>14</sup> It should however be noted that increasingly, human rights discourse is recognising the status of group rights which assert value in virtue of the 'status of the group *qua* group' (Widdows 2013, 157). See for example, Peter Jones' discussion of state rights to self determination, or rights to the preservation of heritage and culture (1999, 85–87). Importantly, these rights, while essential for individuals, are not merely the result of the collection of many individual rights, they are rights held by the community itself.

<sup>&</sup>lt;sup>13</sup> For a discussion of this see (Widdows 2007).

<sup>&</sup>lt;sup>15</sup> See for example, (Oloka-Onyango 1995; Liao 1996; Verdirame 1999; Guthrie and Quinlan 2005; Hathaway 2005).

<sup>&</sup>lt;sup>16</sup> Earlier rights documents which are argued as pertinent here are the founding document of the French Republic, the Declaration of the Rights of Man and the Citizen (1793) (F. M. Anderson 1967, 160–170), and the American Declaration of Independence (Continental Congress of the United States of America 1776).

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documents) or are about duties between individuals. Second, global theories carry assumptions about what matters from these earlier theories into global theories; most importantly for this paper the structural focus on the individual. This is important as which goods are recognised and which injustices will become visible is dictated by what theories can recognise and this is structurally determined *prior* to application.<sup>17</sup>

The expansion mechanism – as we have identified it – means that we have ended up with theories of global justice which are neglectful of global public goods and are focused on the individual. There are good reasons why bounded theories – whether domestic or concerned with duties between individuals – are not as concerned with global public goods as global theories need to be. Most obviously – as we will come to see clearly using the example of protecting antibiotic efficacy – global public goods can only be protected globally, so it makes less sense for such goods to be primary on non-global models. To prioritise them nationally or regionally would be ineffective. Problematically however, the expansion methodology means when we do develop global theory global public goods are not embedded or prioritised enough. In a sense, what we currently have are not truly global theories – or at least they are different from how global theories would have been had they been developed as global theories rather than expanded from prior theories. In particular a global theory developed from scratch would be likely to prioritise primary global public goods directly and be able to balance them with individual goods. Structurally, global theories have the same content as they did when they were more limited: they simply apply the same demands to more individuals. As a result of this expansion most global theories have not questioned sufficiently the *type* of goods required globally to actually improve lives and deliver justice, but rather focused on whether bounds can be removed and previous theories expanded to global theories. In theoretical terms therefore, the only change is in the number of individuals which are considered worthy of moral concern.

The emphasis on individuals sets the limits of enquiry for these theories by specifying a limited set of features which will be taken to be of moral concern. That is, by focusing primarily on individual agents, these theories inevitably treat those goods which cannot be enjoyed exclusively or privately as being of secondary concern, or seen only with regard to how they impact on the individual. As we will discuss later, using examples of global public health goods this can be problematic as it can overemphasise certain harms to individuals and underemphasise shared and communal harms, harms which may be the most important for individual flourishing and wellbeing. In making this claim, we are not suggesting that there is currently no attempt to account for global public goods – much environmental ethics focuses primarily on these goods (although too often this is done separately from other theories of justice)<sup>18</sup> – we are only aiming to show that the form and development of such theories has lead to an overemphasis on some goods and harms and an under emphasis on others. Moreover, we claim that this ordering of goods and harms does not accord with which goods matter most for individual wellbeing. We suggest that this focus is broadly true of current theorising, although there are theories which are clearly trying to address this. However for the purposes of highlighting this gap in current theorising we suggest that, in general, even

<sup>&</sup>lt;sup>17</sup> This claim is also implied by Sen in *The Idea of Justice* when he discusses the difficulty of applying 'perfect' theory to real world practice (Sen 2010, 15–18).

<sup>&</sup>lt;sup>18</sup> Arguably Caney's work in environmental ethics brings global public goods and individual wellbeing together in claims about access to a sustainable environment being a human right.

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theories which do attempt to recognise group and public goods can still be said to give a little too much emphasis to individual choice.

Before moving on we will give one example of how even theories which attempt to recognise shared goods are limited by the individual focus. By way of example, the capability approach attempts to recognise a number of public goods (including health goods) when discussing the importance of 'freedom froms'. For example, Sen argues that "'freedom from hunger' or 'being free from malaria' need not be taken to be just rhetoric...there is a very real sense in which the freedom to live the way one would like is enhanced by public policy that transforms epidemiological and social environments" (Sen 1993, 44). Thus, freedom in the capability approach is taken to include more than the mere absence of constraint on the choices and behaviours of individuals, but recognises the need for social goods. Alkire elaborates Sen's position: "if, given the choice, we would choose to live in a malaria-free environment, then ... a public programme to drain malaria ponds does indeed enhance our freedom, even if we were not in fact asked, because in the absence of this public programme we would not have the effective freedom to live in a malaria-free environment" (Alkire 2005, 7). 19 But, as is made clear by the quote from Alkire, while the capability approach recognises public goods – and public goods of the type we are interested in for this paper – the reasons for this is that these goods would have been chosen by individuals. If there are other goods that individuals do or could prefer or choose over and above these then presumably they will be deemed less valuable. Accordingly, the model remains individualist, focusing on choices, and hypothetical choices, as such, public goods are seen through the prism of the individual.

Thus shared goods (of all types) will only be valued to the extent to which they feature on the list of goods likely to be chosen by individuals, something especially problematic when it is recognised that this tends to mean what individuals considered separately would choose rather than what they would choose collectively. We contend that this focus is not minor, but crucial, as even though theories can respect public goods in this way, because theories dictate *prior* to their use which injustices they will make visible and which they will ignore, global public goods are less likely to be respected in the robust way that is needed if individuals are to be protected. It is for this reason that we suggest that public goods need to be protected as such. Public goods should be included in theories of justice not *just* as goods which individuals *might* reasonably choose, but as primary goods. Spelling out this claim about why public goods matter and why it is likely to be more effective to respect them as goods in their own right will be our focus for the rest of the paper.

#### What are Public Goods?

Public goods are essentially a form of group good. Public goods or group goods are available to be used by all members of a given group, such that if ownership of them is possible at all (this is contested as ownership implies a right to exclude) it is a collective ownership, shared by members of the group. Public goods are simply goods belonging publicly to a given group. Public goods, and most group or common goods (to those within the group), are

<sup>&</sup>lt;sup>19</sup> We might also note that this emphasis on choice could be said to apply to the 'ethics-type' of theory, since the goods which we might uncontroversially want, enjoy this status because they are wanted or chosen by individuals.

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enjoyed collectively and as such are non-rivalrous (Kaul, Grunberg, and Stern 1999a, 2), lack excludability (they are inclusive and available to all), and require collective management and maintenance. Examples of such goods at the local level include traffic lights (Kaul, Grunberg, and Stern 1999a, 2), laws (Widdows and Cordell 2011, 14–15) and education (Kaul, Grunberg, and Stern 1999b, 456; Sen 1999, 127–129). Domestic public goods are enjoyed collectively within a geographical location or as part of a community (for instance, a nation or a tribe) and are characterised by being beneficial to those who have access to them. Further, violations of them, such as failure to observe traffic laws, may harm others within the state, but the harm caused by failure to adhere, protect or observe such goods does not extend past national boundaries (except perhaps in a very indirect sense). Accordingly, different nations may have different rules governing these goods, and public goods are not the same in all places. In contrast, global public goods can *only* be adequately protected by global collective action. Where failure to observe local traffic laws has little impact on citizens of distant countries, failing to respect global public goods drastically damages these goods and harms others.

## **Global Public Goods**

Our focus today is only on global public goods – not on other public goods or group goods, in addition our focus is also only on what we have called *primary* global public goods. By primary we mean goods which are essential for individual wellbeing in the sense that if these goods are not protected then *all* individuals (current and future) will be exposed to harms, and often will *actually* suffer harm which would not have occurred had the global public good been adequately protected. Moreover, these are goods which cannot be protected unless all collectively act to protect them, and consequently individuals cannot be allowed to choose to neglect them. We will now consider two global public goods, briefly the environment and then, in more detail, antibiotic efficacy to illustrate the nature of a primary global public good.

The environment is perhaps the most common example of a global public good, it is a good which is collectively enjoyed by all persons and it cannot be said to be owned by any one person or group of persons. It therefore, has the features of non-rivalrousness and non-excludability (if it is maintained and protected). It is also a good which requires collective maintenance and which generates obligations of duty which apply to all persons. For example, maintenance of this important public good entails the placement of restrictions on individual and state liberties to consume natural resources and emit pollutants. Importantly, failing to preserve the environment effectively is likely to create significant widespread harms and as such is potentially disastrous for all individuals. The consequences of failing to protect the environment are well documented and include: harms due to increases in sea level (Barnett and Adger 2003, 322–323)); harms of suitable habitat erosion and harms caused by increasing the risk of dangerous extreme weather events (McMichael et al. 1996, 6); in addition, health risks can be exacerbated, as increases in temperature by small margins are likely to increase the available habitat for disease carrying vector organisms such as mosquitoes, potentially leading to an increase in the number of people at risk globally of

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<sup>&</sup>lt;sup>20</sup> Please note that not all access to healthcare or treatment is considered to be a global public good.

<sup>&</sup>lt;sup>21</sup> Clearly there are reasons why it is easier to enforce public goods in the domestic arena as compliance, at least to some of these is required by law.

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diseases such as malaria or dengue fever (Haines et al. 2006, 2101).<sup>22</sup> Protecting the environment also reduces conflict risks and protects scarce resources (McMichael et al. 1996, 142–143). Enjoying a clean, habitable environment is obviously of great value to individuals, regardless of whether they choose to prioritise (assign value to) it or not.

According to our definition the environment is clearly a primary global public good: first, if the environment is not protected then *all* individuals (current and future) will be exposed to harms, and often will actually suffer harms; second, the environment cannot be protected without collective action; and third, individuals and/or states cannot be allowed to neglect or ignore the need to protect this good if it is to be successfully protected.

Other primary global public goods are health goods. Clearly health goods come in different types, from access to treatment and health care, to public health measures such as vaccinations, infrastructure, such as sanitation and hospitals, and lifestyle. We are not arguing that all health goods fall into the category of primary global public health goods, but only that some do.<sup>23</sup> To illustrate this we first introduce the example of antibiotic resistance and the need to protect antibiotic efficacy and show that it clearly fits the criteria of a primary global public health good. Later we introduce a second example, that of vaccination, to strengthen the claim that these goods cannot be preserved if individuals are allowed to choose to neglect them and to return us to the debate regarding global justice theorising.

Our first example of a global public health good is antibiotic efficacy, a good which like the environment is currently being eroded. The modern antibiotic era can reasonably be described as having started in the 1930s and '40s, when the use of antimicrobial medicines started to become widespread (Cohen 1992, 1050; Van Epps 2006). Since then, the existence of effective antibiotics has dramatically curtailed the threat posed by numerous potentially lethal, and formerly untreatable, diseases such as tuberculosis (Iseman 1993; Reichman 1997), and turned these pathogenic killers into manageable, treatable threats. The introduction and use of antibiotic medicines can therefore be seen to have provided enormous benefit to all persons. Antibiotics have increased life expectancy, reduced the risk associated with many existing threats to health, and have transformed our health expectations. As such, the existence of antibiotic medicines should be recognised as a global public health good, and one which has generated significant benefits for all people (Wilson 2012).

In light of this description antibiotic efficacy fits the definition of a primary global public good: first, if antibiotic efficacy is not protected then all individuals (current and future) will be exposed to harms, and often will actually suffer harms, disease being no respecter of borders; second, antibiotic efficacy cannot be protected without collective action; third, if individuals and/or states neglect or ignore the need to protect this good it will be eroded.

<sup>22</sup> Further, even if we ignore the possibility for increased habitat ranges of vector organisms, increased temperatures also tend to increased transmission rates within areas where mosquitoes are already present (Koopman et al. 1991, 1168). That is, where diseases like dengue fever and malaria already exist, they are likely

to affect more people if temperatures increase slightly.

<sup>&</sup>lt;sup>23</sup> Indeed elsewhere Peter West-Oram makes an argument for healthcare, rather than health, as a basic right and effectively a public good (West-Oram forthcoming). His claim is that if we wish to analyse any human right to health(care) it could be argued that what we are entitled to is care for our health and not health itself, since such a guarantee is impossible. However, the focus on this paper is on primary goods of this type, hence the focus on global public health goods.

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Despite the importance of antibiotic efficacy for the basic wellbeing of current and future individuals this global public good is being eroded as antibiotic resistance increases to the point where we are in danger of returning to a pre-antibiotic era where common infectious diseases again become lethal. Antibiotic resistance is an increasing phenomenon and the spread of pathogens which are resistant to existing antibiotics is a clear global health threat. Moreover, pathogens which are resistant to antibiotics, such as multi- or extremely-drug (MDR or XDR respectively) resistant tuberculosis (Ormerod 2005), methicillin-resistant staphylococcus aureas (MRSA) (Cosgrove 2006, s83), or MDR yersinia pestis (MDR plague) (Welch et al. 2007, e309), are more difficult to treat than non-drug resistant strains of disease due to their drug resistance (Battin et al. 2009, 230). As a result, these diseases pose a greater risk to patients (Cosgrove and Carmeli 2003, 1433–1434), and are more expensive to treat (Cosgrove 2006, s82). Further, alternative drugs which have been developed in response to the evolution of drug resistance tend to have far more severe side effects than older medicines (Cosgrove and Carmeli 2003, 1434). In addition, the evolution of drug resistance has imposed societal economic costs estimated in the billions of dollars per year (McGowan Jr. 2001, 286; Levy and Marshall 2004, s123).

In the face of such threats to the primary global public good of protecting antibiotic efficacy one might imagine that there are currently significant collective actions to address the erosion of this crucial good. But while, the issue of drug resistance has generated global public debate and generated many prominent calls for action there is little action being taken. For example, on World Health Day 2011 the World Health Organization released a set of policy proposals to address antibiotic resistance (World Health Organization 2012) and stated that "[t]he world is on the brink of losing these miracle cures" (Chan 2011). More recently, the government of the United Kingdom hosted an international event to discuss the problem of drug resistance (UK Department of Health 2013). Moreover, and the problem of drug resistance has a long history in academic literature (Cohen 1992; Huovinen and Cars 1998; Coast, Smith, and Millar 1998; Bronzwaer et al. 2002; Byarugaba 2004). However, despite these recent calls for something to be done there is little evidence of collective action. Indeed the quite the opposite. It is to this lack of respect for antibiotic efficacy as a global public good worthy of respect and protection which we will now turn.

Historically the question of whether to use antibiotics to treat individual patients has been seen as an essentially a private issue, with the result that the wider consequences of inappropriate, inefficient, and over- or underuse have been largely ignored. Under the currently dominant paradigm of antibiotics as private goods, individual patients are not recognised as being members of a wider group, meaning that the implications of a specific treatment regimen are considered only in light of that patient's interest and not in terms of long term, or societal, impact (Cosgrove and Carmeli 2003, 1433). Moreover, antibiotic medicines are often seen as causally isolated products which affect only their purchaser. This perspective can be seen to be driven by a range of factors, including patient preference for 'brand name' medicines (Byarugaba 2004, 107) as well as financial incentives offered to health care providers to prescribe antibiotics which are enjoyed even when clinical need for a specific drug is not indicated (Indalo 1997; Byarugaba et al. 2001). The current erosion of antibiotic resistance is not only driven by treating antibiotics as commodities which are

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purchased by the rich and used as they will, but also as a result of poverty which reduces access and leads to misuse.<sup>24</sup>

The poor, typically in developing countries, are often unable to afford full courses of treatment, and often only have restricted access to inappropriate drugs and limited health care facilities (Byarugaba 2004, 107). In addition, lack of regulation in developing countries can lead to misuse, or overuse of antibiotic medicines (Hart and Kariuki 1998, 647). In such cases, lack of access to effective treatment can encourage patients to share medicines, or to stockpile 'excess doses' once symptoms desist, meaning that infections are not fully resolved when treatment ceases (Byarugaba 2004, 107). This exposes potentially treatable pathogens to medicines which would have been effective if properly used, yet when underused have limited efficacy. This places selective pressures on previously susceptible pathogens to develop resistance to a specific medicine: in effect, by failing to ensure that treatment is effective we are actively selecting for more dangerous diseases (Farmer 1999, 30–31). Thus, under the current paradigm, antibiotic medicines are seen as causally isolated, patient specific products, with no impact on existing communities or future generations. As a result of this perspective, the effective treatment range of many existing antimicrobial medicines is being reduced at an accelerated pace, creating significant risk for all persons (Wilson 2012). While antibiotic resistance is an inevitable consequence of the use of antibiotics, the rise of antibiotic resistance might have significantly slowed if antibiotic efficacy had been recognised as a global public good. In the absence of collaborative management and cooperative participation in the maintenance of antibiotic efficacy, we will be left without a response to the many threats to individual wellbeing which are currently held at bay only by ad hoc, inefficient use of our existing resources. Understood like this, antibiotic resistance then is clearly a primary global public good profoundly contributing to the wellbeing of current and future individuals and only able to be protected by collective action and curtailing individual choice.

# Protecting Global Public Goods and Curtailing Individual Choice

The examples of the environment and the more detailed example of antibiotic efficacy and the problem of drug resistance should show why primary global public goods should be protected as public goods, and not as goods which individuals choose. The example of antibiotic resistance shows that unless antibiotic efficacy is seen as a matter of collective responsibility, these goods will certainly not be protected – and indeed in some cases, such as the use of drugs in poor countries this is for very understandable reasons. In the context of antibiotic efficacy, only collective action is ever going to be effective, relying on individuals, particularly individuals with restricted access to medicines or subject to the pressures of advertising, is not. For individuals to prioritise the preservation of antibiotic efficacy, other needs would have to be met first and, and importantly, there would need to be a reasonable expectation that other people would contribute in similar ways, something which the evidence shows is not the case. <sup>25</sup> Hence coordinated action is needed. In this final section of

<sup>&</sup>lt;sup>24</sup> Additional reasons include the widespread use of antibiotics in agriculture, which has also accelerated the evolution of drug resistance (Khachatourians 1998).

<sup>&</sup>lt;sup>25</sup> Similar arguments apply to the environment, it is not yet a good which individuals choose to prioritise. In a review of tourist attitudes towards air travel and climate change McKercher et al. note that despite increased fuel prices, and increasing concern about the environment, global tourism is predicted to grow between 4% and 7% annually 'for the foreseeable future' (2010, 297–298). Therefore, while individual agents may be aware that the

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this paper we will further explore the tension between protecting primary global public goods and the continued 'trumping' of individual choice. To do this we will introduce the example of vaccinations and protecting herd immunity – arguably another global public good (although perhaps not as primary, as the consequences for future generations and others are arguably less severe and the erosion of the good need not be permanent).<sup>26</sup>

Herd immunity is the emergent property of vaccination by which all members of a given community are protected from a specific vaccine preventable disease by majority participation in vaccination programmes for that disease (R. M. Anderson and May 1985). Herd immunity requires that a threshold number of persons in a given community be vaccinated against a specific pathogen, which reduces the number of possible 'human vectors' for the disease to a level where transmission is no longer sustainable causing it to go into abeyance. As long as sufficient numbers of people are vaccinated all members of a given group are protected against the disease, not just those who have been vaccinated. When the number of vaccinated persons falls below the herd immunity threshold, resurgence of the disease becomes likely. Herd immunity is interesting as a global public good because it relies on collective action of most, recognising that some people – the immunocompromised, the very young and very old – are unable to participate in vaccination programmes for safety reasons. Nonetheless, all are protected by collective action.<sup>27</sup>

In this example, even though collective action is required if the good is to be protected participation in vaccination programmes tend to be regarded as matters of personal choice. In the United States for example, 48 of the 50 States allow exemptions to vaccinations otherwise mandatory for school attendance on religious grounds (Salmon et al. 2005, 778). Religious freedom is generally cited as justification for allowing exemptions, though many States in the USA also allow exemptions for other philosophical reasons (Salmon et al. 2005, 778). The reasoning being that the infringement on religious freedom of the individual constitutes a major harm to that person's liberty. While the importance of vaccination may be recognized in public health terms, the herd immunity which it generates is not seen as a public good, but something which individuals may legitimately refuse. According to models which endorse individual choice, the harm done by forcing compliance outweighs the significant harm of failing to maintain herd immunity.

This discussion returns us to the earlier debate and the claim that theories of justice determine at the outset the goods which they will recognize and protect and the injustices they will prevent. If individuals and their goods are primary – as we have suggested they are in current models of justice theorizing – then it is the case that harms to individuals will always be

preservation of the environment is important this does not significantly change their choices. Indeed, McKercher et al. note that amongst those who were more informed about the issue of climate change, there was a diminished sense of responsibility for actually doing something about it (2010, 300).

<sup>&</sup>lt;sup>26</sup> Vaccination is in many ways a global public good – although it doesn't require the action of all, but rather the vast majority and clearly if all those who could were vaccinated this would be the best way of protecting this key good.

<sup>&</sup>lt;sup>27</sup> For the majority, vaccination is safe, cost effective, and effective (Expanded Programme on Immunization of the Department of Immunization, Vaccines and Biologicals 2006, 3).

<sup>&</sup>lt;sup>28</sup> See for example the rhetoric displayed on personal liberty and the Patient Protection and the Affordable Care Act in the US during the recent Republican Presidential Primary Elections (Rick Santorum for President 2011; Ron Paul Presidential Campaign Committee 2011; Romney For President, Inc. 2012).

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regarded as primary. In this instance, the harm of requiring vaccination is deemed greater than the harm to the global public good of maintaining herd immunity. Clearly the good for individuals which comes from herd immunity – or from our earlier examples of protecting the environment or antibiotic effectiveness – are substantial and primary. However, this is hard to recognise on current models of justice theorizing, for all the reasons we have outlined. Hence we make two suggestions; first that primary global public goods are recognized as such and not through the prism of the individual; and second, that they are included in theories of justice alongside individual goods (and not in separate theories) so that these goods can be considered together and their merits weighed. If this is done it is more likely that global theories of justice will deliver as they will be able to recognise, prioritize and protect all goods according to the extent to which they impact on the actual wellbeing of individuals.

#### Conclusion

In this paper we have reflected on global justice theorizing and argued that current theories do not adequately recognise primary global public goods. We have suggested that this is a significant failure as it significantly harms current and future individuals. We have suggested that this current neglect is in part because of the methods by which current theories of justice were developed and the assumptions which were imported from previous domestic theories. Our suggestion is that we, as global justice theorists, need to devise theories which recognise primary global public goods, such as the health goods we have focused upon. Our aim is not to fail to respect the individual, but rather to treat individuals more justly, by recognizing that some global public goods are too important for individual wellbeing to be left for individuals to choose or not.

## **Bibliography**

- Alkire, S. 2005. *Valuing Freedoms: Sen's Capability Approach and Poverty Reduction*. Oxford University Press, USA.
- Anderson, F.M. 1967. The Constitutions and Other Select Documents Illustrative of the History of France, 1789-1907. Russell & Russell. http://books.google.co.uk/books?id=xPUNAQAAMAAJ.
- Anderson, Roy M., and Robert M. May. 1985. 'Vaccination and Herd Immunity to Infectious Diseases'. *Nature* 318 (6044) (November 28): 323–329. doi:10.1038/318323a0.
- Barnett, Jon, and W. Neil Adger. 2003. 'Climate Dangers and Atoll Countries'. *Climatic Change* 61 (3): 321–337. doi:10.1023/B:CLIM.0000004559.08755.88.
- Battin, Margaret P., Leslie P. Francise, Jay A. Jacobson, and Charles B. Smith. 2009. *The Patient as Victim and Vector: Ethics and Infectious Disease*. New York, USA: Oxford University Press.
- Brock, Gillian. 2009. *Global Justice: A Cosmopolitan Account*. Oxford, UK: Oxford University Press.

For the final published version, see Widdows H. and West-Oram PGN. "Revising Global Theories of Justice to Include Public Goods", *Journal of Global Ethics*, 2013, 9:2, 227-243. URL = <a href="http://dx.doi.org/10.1080/17449626.2013.838457">http://dx.doi.org/10.1080/17449626.2013.838457</a>

- Bronzwaer, Stef Lam, Otto Cars, Udo Buchholz, Sigvard Mölstad, Wim Goettsch, Irene K Veldhuijzen, Jacob L Kool, Marc JW Sprenger, John E Degener, and SL Bronzwaer. 2002. 'The Relationship Between Antimicrobial Use and Antimicrobial Resistance in Europe'. *Emerging Infectious Diseases* 8 (3): 278.
- Byarugaba, DK. 2004. 'A View on Antimicrobial Resistance in Developing Countries and Responsible Risk Factors.' *International Journal of Antimicrobial Agents* 24 (2): 105.
- Byarugaba, DK, D Olilia, RM Azuba, DH Kaddu-Mulindwa, W Tumwikirize, and E Ezati. 2001. 'Development of Sustainable Strategies for the Management of Antimicrobial Resistance in Man and Animals at District and National Level in Uganda'. *Feasibility Report, May*.
- Caney, Simon. 2005. *Justice Beyond Borders, A Global Political Theory*. Oxford, UK: Oxford University Press.
- ———. 2008. 'Human Rights, Climate Change, and Discounting'. *Environmental Politics* 17 (4): 536–555.
- ———. 2010. 'Climate Change, Human Rights, and Moral Thresholds'. In *Global Ethics: Essential Readings*, edited by Stephen M. Gardiner, Simon Caney, and Dale Jamieson, 163–177. Oxford, UK: Oxford University Press.
- Chan, Margaret. 2011. 'WHO | World Health Day 2011'. Global Health. *World Health Organisation*. April 6. http://www.who.int/mediacentre/news/statements/2011/whd\_20110407/en/index.html .
- Coast, Joanna, RD Smith, and MR Millar. 1998. 'An Economic Perspective on Policy to Reduce Antimicrobial Resistance'. *Social Science & Medicine* 46 (1): 29–38.
- Cohen, Mitchell L. 1992. 'Epidemiology of Drug Resistance: Implications for a Post—Antimicrobial Era'. *Science* 257 (5073): 1050–1055.
- Continental Congress of the United States of America. 1776. 'In Congress, July 4, 1776. The Unanimous Declaration of the Thirteen United States of America'. Baltimore, MD: Continental Congress of the United States of America. http://memory.loc.gov/cgi-bin/query/r?ammem/bdsdcc:@field%28DOCID+@lit%28bdsdcc02101%29%29.
- Cosgrove, Sara E. 2006. 'The Relationship Between Antimicrobial Resistance and Patient Outcomes: Mortality, Length of Hospital Stay, and Health Care Costs'. *Clinical Infectious Diseases* 42 (Supplement 2): S82–S89.
- Cosgrove, Sara E, and Yehuda Carmeli. 2003. 'The Impact of Antimicrobial Resistance on Health and Economic Outcomes'. *Clinical Infectious Diseases* 36 (11): 1433–1437.

- For the final published version, see Widdows H. and West-Oram PGN. "Revising Global Theories of Justice to Include Public Goods", *Journal of Global Ethics*, 2013, 9:2, 227-243. URL = <a href="http://dx.doi.org/10.1080/17449626.2013.838457">http://dx.doi.org/10.1080/17449626.2013.838457</a>
- Van Epps, Heather L. 2006. 'René Dubos: Unearthing Antibiotics'. *The Journal of Experimental Medicine* 203 (2): 259.
- Erin, Charles A, and John Harris. 2003. 'An Ethical Market in Human Organs'. *Journal of Medical Ethics* 29 (3): 137–138.
- Expanded Programme on Immunization of the Department of Immunization, Vaccines and Biologicals. 2006. 'WHO-UNICEF Guidelines for Developing a Comprehensive Multi-Year Plan (cMYP): Immunization, Vaccines and Biologicals'. WHO/IVB/05.20. Geneva, Switzerland: WHO-UNICEF. http://www.who.int/vaccines-documents/DocsPDF06/832.pdf.
- Farmer, Paul. 1999. *Infections and Inequalities: The Modern Plagues*. Berkeley, Calif.: University of California Press.
- Faustini, A, A J Hall, and C A Perucci. 2006. 'Risk Factors for Multidrug Resistant Tuberculosis in Europe: a Systematic Review'. *Thorax* 61 (2) (February 1): 158 –163. doi:10.1136/thx.2005.045963.
- Guthrie, R., and M. Quinlan. 2005. 'The Occupational Safety and Health Rights and Workers' Compensation Entitlements of Illegal Immigrants: An Emerging Challenge'. *Policy and Practice in Health and Safety* 3 (2): 41–62.
- Haines, A., R.S. Kovats, D. Campbell-Lendrum, and C. Corvalan. 2006. 'Climate Change and Human Health: Impacts, Vulnerability and Public Health'. *Public Health* 120 (7) (July): 585–596. doi:10.1016/j.puhe.2006.01.002.
- Hart, CA, and S Kariuki. 1998. 'Antimicrobial Resistance in Developing Countries'. *BMJ: British Medical Journal* 317 (7159): 647.
- Hathaway, J.C. 2005. *The Rights of Refugees Under International Law*. Cambridge University Press.
- Huovinen, Pentti, and Otto Cars. 1998. 'Control of Antimicrobial Resistance: Time for Action: The Essentials of Control Are Already Well Known'. *BMJ: British Medical Journal* 317 (7159): 613.
- Indalo, AA. 1997. 'Antibiotic Sale Behaviour in Nairobi: a Contributing Factor to Antimicrobial Drug Resistance.' *East African Medical Journal* 74 (3): 171.
- Inter-University Consortium for Political and Social Research. 2004. 'California Drug and Alcohol Treatment Assessment (CALDATA), 1991-1993'. ICPSR 2295. Ann Arbor, Michigan: Inter-University Consortium for Political and Social Research. http://sociology-data.sju.edu/2295/2295mr.pdf.
- Iseman, Michael D. 1993. 'Treatment of Multidrug-Resistant Tuberculosis'. *N Engl J Med* 329 (11): 784–791. doi:10.1056/NEJM199309093291108.

For the final published version, see Widdows H. and West-Oram PGN. "Revising Global Theories of Justice to Include Public Goods", *Journal of Global Ethics*, 2013, 9:2, 227-243. URL = <a href="http://dx.doi.org/10.1080/17449626.2013.838457">http://dx.doi.org/10.1080/17449626.2013.838457</a>

- Jones, Peter. 1999. 'Human Rights, Group Rights, and Peoples' Rights'. *Human Rights Quarterly* 21 (1): 80–107.
- Kaul, I., I. Grunberg, and M.A. Stern. 1999a. 'Defining Global Public Goods'. In *Global Public Goods: International Cooperation in the 21st Century*, 2–19. Oxford and New York: Oxford University Press.

  http://disciplinas.stoa.usp.br/pluginfile.php/15077/mod\_resource/content/1/Kaul,%20 Grunberg,%20Stern%20%28eds%29%20-%20Global%20Public%20Goods%20-%20International%20Cooperation%20in%20the%2021st%20Century.pdf#page=488.
- ——. 1999b. 'Global Public Goods: Concepts, Policies and Strategies'. In *Global Public Goods: International Cooperation in the 21st Century*, 450–516. Oxford and New York: Oxford University Press. http://disciplinas.stoa.usp.br/pluginfile.php/15077/mod\_resource/content/1/Kaul,%20 Grunberg,%20Stern%20%28eds%29%20-%20Global%20Public%20Goods%20-%20International%20Cooperation%20in%20the%2021st%20Century.pdf#page=488.
- Keister, Lisa A., and Stephanie Moller. 2000. 'Wealth Inequality in the United States'. *Annual Review of Sociology* 26 (January 1): 63–81.
- Khachatourians, George G. 1998. 'Agricultural Use of Antibiotics and the Evolution and Transfer of Antibiotic-resistant Bacteria'. *Canadian Medical Association Journal* 159 (9): 1129–1136.
- Koopman, James S., D. Rebecca Prevots, Miguel Angel Vaca Mann, Hector Gomez Dantes,
  Maria Luisa Zarate Aquino, Ira M. Longini, and Jaime Sepulveda Amor. 1991.
  'Determinants and Predictors of Dengue Infection in Mexico'. *American Journal of Epidemiology* 133 (11) (June 1): 1168 –1178.
- Kunin, Calvin M. 1993. 'Resistance to Antimicrobial Drugs—a Worldwide Calamity'. *Annals of Internal Medicine* 118 (7): 557–561.
- Levy, Stuart B, and Bonnie Marshall. 2004. 'Antibacterial Resistance Worldwide: Causes, Challenges and Responses'. *Nature Medicine* 10: S122–S129.
- Lewin, Keith M. 2009. 'Access to Education in sub-Saharan Africa: Patterns, Problems and Possibilities'. *Comparative Education* 45 (2): 151–174.
- Liao, F.L. 1996. 'Illegal Immigrants in Garment Sweatshops: The Universal Declaration of Human Rights and the International Covenant on Civil and Political Rights'. *Sw. JL & Trade Am.* 3: 487.
- McGowan Jr., J.E. 2001. 'Economic Impact of Antimicrobial Resistance'. *Emerging Infectious Diseases* 7 (2): 286–292.

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- McKercher, Bob, Bruce Prideaux, Catherine Cheung, and Rob Law. 2010. 'Achieving Voluntary Reductions in the Carbon Footprint of Tourism and Climate Change.' *Journal of Sustainable Tourism* 18 (3) (April): 297–317. doi:Article.
- McMichael, A.J., A. Haines, R. Slooff, and S. Kovats, ed. 1996. Climate Change and Human Health: An Assessment Prepared by a Task Group on Behalf of the World Health Organization, the World Meteorological Organization and the United Nations Environment Programme. Geneva, Switzerland: World Health Organization.
- Moellendorf, Darrel. 2002. Cosmopolitan Justice. Boulder, CO: Westview Press.
- Nagel, T. 1991. Equality and Partiality. Oxford University Press, USA.
- Oloka-Onyango, J. 1995. 'Plight of the Larger Half: Human Rights, Gender Violence and the Legal Status of Refugee and Internally Displaced Women in Africa, The'. *Denv. J. Int'l L. & Pol'y* 24: 349.
- Ormerod, L. P. 2005. 'Multidrug-resistant Tuberculosis (MDR-TB): Epidemiology, Prevention and Treatment'. *British Medical Bulletin* 73-74 (1) (January 1): 17 –24. doi:10.1093/bmb/ldh047.
- Ortiz, I., and M. Cummins. 2011. 'Global Inequality: Beyond the Bottom billion—A Rapid Review of Income Distribution in 141 Countries'. *Available at SSRN 1805046*.
- Parfit, D. 1997. 'Equality and Priority'. Ratio 10 (3): 202-221.
- Pogge, Thomas. 2001. 'Priorities of Global Justice'. Metaphilosophy 32 (1/2): 6–23.
- ——. 2008. *World Poverty and Human Rights*. Second Edition. Cambridge, UK: Polity Press.
- Rawls, John. 1999a. *A Theory Of Justice: Revised Edition*. Revised Edition. Cambridge, MASS: Harvard University Press.
- ——. 1999b. *The Law of Peoples; with, The Idea of Public Reason Revisited*. Cambridge, MASS: Harvard University Press.
- Reichman, LB. 1997. 'Tuberculosis Elimination--what's to Stop Us?' *Int J Tuberc Lung Dis* 1 (1) (February): 3–11.
- Rick Santorum for President. 2011. 'Repeal and Replace ObamaCare with Patient-Centered Healthcare'. Political Campaign. *RickSantorum.com*. http://www.ricksantorum.com/repeal-and-replace-obamacare-patient-centered-healthcare.

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- Romney For President, Inc. 2012. 'Health Care: Repeal and Replace Obamacare'. Political Advocacy. *Mitt Romney for President*. http://www.mittromney.com/issues/health-care.
- Ron Paul Presidential Campaign Committee. 2011. 'Health Care | Ron Paul 2012 Presidential Campaign Committee'. Political Campaign. *Ronpaul2012.com*. http://www.ronpaul2012.com/the-issues/health-care/.
- Salmon, Daniel A., Jason W. Sapsin, Stephen Teret, Richard F. Jacobs, Joseph W. Thompson, Kevin Ryan, and Neal A. Halsey. 2005. 'Public Health and the Politics of School Immunization Requirements'. *Am J Public Health* 95 (5): 778–783. doi:10.2105/AJPH.2004.046193.
- Sen, Amartya. 1993. 'Capability and Wellbeing'. In *The Quality of Life*, edited by Martha Nussbaum and Amartya Sen, 30–54. WIDER Studies in Development Economics. Oxford, UK: Clarendon Press.
- . 1999. Development As Freedom. New York, USA: Knopf.
- ——. 2010. The Idea Of Justice. London, UK: Penguin Books.
- Shue, Henry. 1980. *Basic Rights: Subsistence, Affluence and U.S. Foreign Policy*. Princeton, N.J.: Princeton University Press.
- Singer, Peter. 1972. 'Famine, Affluence, and Morality'. *Philosophy and Public Affairs* 1 (3): 229–243.
- Temkin, L.S. 2003. 'Egalitarianism Defended\*'. Ethics 113 (4): 764-782.
- UK Department of Health. 2013. 'Antibotic Resistance a Threat to Global Health Security and the Case for Action'. Geneva, Switzerland: World Health Organization. https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/200505/WHA Written Contributions Report.pdf.
- UN General Assembly. 1948. 'The Universal Declaration Of Human Rights'. 217 A(III). Paris, France: The United Nations. http://www.un.org/en/documents/udhr/index.shtml.
- Verdirame, G. 1999. 'Human Rights and Refugees: The Case of Kenya1'. *Journal of Refugee Studies* 12 (1): 54–77.
- Viravaidya, Mechai, Stasia A. Obremsky, and Charles A. Myers. 1996. 'The Economic Impact of AIDS on Thailand'. *The Journal of Development Administration* 36 (3): 1–26.
- Welch, Timothy J., W. Florian Fricke, Patrick F. McDermott, David G. White, Marie-Laure Rosso, David A. Rasko, Mark K. Mammel, et al. 2007. 'Multiple Antimicrobial

For the final published version, see Widdows H. and West-Oram PGN. "Revising Global Theories of Justice to Include Public Goods", *Journal of Global Ethics*, 2013, 9:2, 227-243. URL = <a href="http://dx.doi.org/10.1080/17449626.2013.838457">http://dx.doi.org/10.1080/17449626.2013.838457</a>

- Resistance in Plague: An Emerging Public Health Risk'. *Public Library of Science: One* 2 (3) (March 21): e309. doi:10.1371/journal.pone.0000309.
- West-Oram, Peter G. N. forthcoming. 'Global Health Care Justice: Establishing the Demands of the Basic Right to Health Care'. PhD, Birmingham UK: The University of Birmingham.
- Widdows, Heather. 2007. 'Is Global Ethics Moral Neo-Colonialism? An Investigation of the Issue in the Context of Bioethics'. *Bioethics* 21 (6): 305–315. doi:10.1111/j.1467-8519.2007.00558.x.
- ——. 2013. *The Connected Self: The Ethics and Governance of the Genetic Individual*. Cambridge Bioethics and Law. Cambridge University Press.
- Widdows, Heather, and Sean Cordell. 2011. 'Why Communities and Their Goods Matter: Illustrated with the Example of Biobanks'. *Public Health Ethics* 4 (1) (April 1): 14 25. doi:10.1093/phe/phr009.
- Wilson, J.G.S. 2012. 'Drug Resistance, Patents and Justice: Who Owns the Effectiveness of Antibiotics?' In *Global Health, Global Goods, and International Community*, In Press. Bloomsbury Academic.
- World Health Organization. 2012. 'The Evolving Threat of Antimicrobial Resistance: Options for Action'. QV 250. Geneva, Switzerland: World Health Organization. http://whqlibdoc.who.int/publications/2012/9789241503181\_eng.pdf.