The Human Right to Water and Common Ownership of the Earth

Faculty Research Working Paper Series

Mathias Risse

Harvard Kennedy School

February 2013
RWP13-003

The Human Right to Water and Common Ownership of the Earth

Mathias Risse, Harvard University

January 29, 2013

1. "Thousands have lived without love, not one without water," so W. H. Auden finished his poem "First Things First."[1] Only oxygen is needed more urgently than water at most times. But a key difference that makes water a more immediate subject for theorists of justice is that, for now, oxygen is normally amply available where humans live. Historically, the same was true of water since humans would not settle in places without clean water. Nowadays, however, water treatment plants and delivery infrastructure have vastly extended the regions where humans can live permanently. Population increases have prompted people to settle in locations where access to clean water is precarious.

While we need other nutrients as well we can survive without any one of them for quite some time. Without water we die within days. Water is life-giving and non-substitutable. A second crucial point about water is that it is part of nature. Its existence is not owed to human accomplishments. My goal here is to argue in support of a human right to water and a global water compact to regulate its distribution. I do so in a way that develops the aforementioned two points about water within a theory of global justice I recently presented (Risse (2012a)), which is especially suitable to capture the significance of water for human life and to show that there is a genuinely *global* responsibility for the distribution of water. A human right to water is discussed

[1] Many thanks to Sharmila Murthy for very helpful comments, as well as to the participants of a Radcliffe Exploratory Seminar on the Human Rights to Water and Sanitation at Harvard University and a colloquium at the University of Graz for their insights. I am also grateful to Charles Beitz for helpful conversations.

in two forms, a right to safe drinking water and a right to sanitation. I support both. I talk of a "human right to water" to refer to both rights, and distinguish between them where appropriate.

According to the WHO, each human being requires at least 20 liters of clean water for daily consumption and basic hygiene.[2] However, many countries in Latin America, Africa, Asia and the Middle East lack sufficient water resources or have so far failed to develop these resources or the necessary infrastructure. According to a 2006 UN Development Programme report, "one part of the world sustains a designer bottled water market that generates no tangible health benefits, another part suffers acute public health risks because people have to drink water from drains or from lakes and rivers."[3] The world has met the Millennium Development Goal of halving the proportion of people without sustainable access to safe drinking water, well in advance of the 2015 deadline. Nonetheless, insufficient access to clean water remains a ubiquitous problem, posing an impediment to development and may even be a security risk.[4]

The human rights framework is the leading proposal for a globally acceptable normative approach to regulating human affairs (Risse (2012b), chapter 1). It matters therefore greatly

[2] http://hdr.undp.org/external/hdr2006/water/10.htm. The 2006 Human Development Report provides much information on the global water crisis. See also the biennial report *The World's Water* by the Pacific Institute (edited by Peter Gleick, e.g., Gleick (2011)). On the overall water situation, see World Water Assessment Programme (2003) and (2009). For the range of conceptual (legal) and practical issues connected to a human right to water, see Dubreuil (2006). Water is vital as a solvent and an essential part of a multitude of metabolic processes within the body. As the Quran states, "by means of water, we give life to everything" (21:30), first of all, we may add, to our own bodies. For historical approaches to water regulation across cultures, see Salzman (2006). For historical and contemporary water conflicts, see also Shiva (2002).

[3] http://hdr.undp.org/en/media/HDR06-complete.pdf, p 35.

[4] Most water is used for agriculture (upwards of 70%) followed by industry (15-20%) and personal consumption (10-15%), of which drinking water is a fraction. Arguably, for now, the biggest security threat is when agricultural water is tapped. About a decade ago, there was much concern about "water wars." The more recent thinking seems to be that countries find ways to cooperate over water but that water could exacerbate conflicts. See the 2012 Global Water Security report produced by US intelligence agencies (http://www.dni.gov/index.php/newsroom/press-releases/96-press-releases-2012/529-odni-releases-global-water-security-ica, last accessed January 9, 2013).

whether there is a human right to water. There has been an intense debate about this topic in recent years. Lawyers and social scientists have discussed whether international law generates such a right, what precisely it would mean, and what difference it could make (perhaps for the better, by promoting development or by preventing excessive privatization, or perhaps for the worse, by wrestling control over water from indigenous peoples or by preventing appropriate privatization). Philosophy comes late to this debate. But if we are to accept a human right to water, it must have solid normative foundations. Before turning to that subject, let me say a bit about the legal and political situation that provides the background to our inquiry.

Legally and politically a human right to water has become increasingly recognized, its inauspicious beginnings notwithstanding. The Universal Declaration of Human Rights (UDHR) does not mention water, nor does the International Covenant on Economic, Social and Cultural Rights (ICESC). Article 25 of the UDHR recognizes for each person a "right to a standard of living adequate for the health and well-being of himself and of his family," stating that such a right covers "food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control." Water is not mentioned. Article 11 of ICESC asks governments to "improve methods of production, conservation and distribution of food by making full use of technical and scientific knowledge," and Article 12 "recognize[s] the right of everyone to the enjoyment of the highest attainable standard of physical and mental health." Again water is omitted.

However, both the 1979 Convention on the Elimination of Discrimination against Women (CEDAW) and the 1989 Convention on the Rights of the Child (CRC) mention water, albeit only in contexts concerned with the eponymous women and children. CEDAW obligates

its signatories to make sure (rural) women enjoy "adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply, transport and communications" (Art. 14 (2)). CRC asks its state parties to "combat disease and malnutrition (…) through, inter alia (…) the provision of adequate nutritious foods and clean drinking water" (Art. 24 (1)). In 2002, then, the Committee on Social, Economic, and Cultural Rights, charged with assessing the implementation of ICESC, recognized a human right to water as being implied by the provisions of that Covenant. In its General Comment 15, the committee asserts:

> The human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses. An adequate amount of safe water is necessary to prevent death from dehydration, to reduce the risk of water-related disease and to provide for consumption, cooking, personal and domestic hygienic requirements.

General Comment 15 discusses extensively what a human right to water amounts to, and what its corresponding duties are. In July 2010, the UN General Assembly (resolution A/64/292) recognized rights to water and sanitation. In September 2010, the Human Rights Council adopted a resolution acknowledging that both rights are implied by the right to an adequate standard of living. The Council had earlier appointed an Independent Expert (later Special Rapporteur) on the Issue of Human Rights Obligations Related to Access to Safe Drinking Water and Sanitation. Both resolutions have advanced the political acceptance of these rights. Nonetheless, neither the Committee on Social, Economic, and Cultural Rights (a group of experts), nor the UN General Assembly or its Human Rights Council can readily create binding international law. Moreover, as one among a couple of dozen countries the United States has not ratified ICESC and so does not recognize a right to an adequate standard of living to begin with. Thus the legal and political

support for human rights to water and to sanitation is far from unambiguous.[5]

Sanitation might appear less worthy a subject for a human right than drinking water. However, water for drinking and water for sanitation come from the same water system around us. We are highly vulnerable to water: there are waterborne diseases humans catch from dirty water, water-scarce diseases stemming from insufficient access, water-based diseases originating from organisms that live in water, and water-related diseases spread by animals that live near water. Poor sanitation is causally related to all these hazards. Moreover, the drinking of water and the disposal of urine and feces belong to the same metabolic cycles for which water is so essential. Two thirds of our bodies consist of water, and a right to safe drinking water makes sure we receive enough safe water for resupply. A right to sanitation guarantees that conditions allow for the safe disposal of human waste, which to some extent just is contaminated water but also involves water as a medium.

2. Let us turn to the philosophical debate. This section offers an overview. Economic and social rights enable individuals to participate actively in community life and to be competitive in commercial life by providing them with some substantive (often material) prerequisites to those ends (education, food, housing, social security, private property, etc.). A human right to water

[5] For the legal discussion, see Dubreuil (2006), Staddon et al (2012), Winkler (2012), Riedel and Rothen (2006), Murthy (forthcoming) and Thielboerger (forthcoming). See also Gleick (1999) and Albuquerque (2012). On global waters politics and governance issues, see Dobner (2010). On General Comment 15, see Riedel (2006), Tully (2005) and Langford (2006). Perhaps we should take it at face value that major human rights treaties ignore water: water was not supposed to become part of the international responsibilities associated with human rights. This stance was taken, for instance, by the Canadian government (Craven (2006)). Another possibility is that the framers of those documents took the availability of water for granted. Water conflicts are more prevalent now than when those documents were crafted. According to a morsel of wisdom attributed to Benjamin Franklin, "only when the well is dry, we know the worth of water." On account of population increases and climate change, water conflicts have come to stay. Here we will not be further concerned with exploring why water appears so rarely in human rights documents and with other issues of legal interpretation that arise in this context.

would be among these rights. Two questions arise: whether there are such rights at all, and if so, whether a right to water is among them. There is hardly any philosophical discussion about a human right to water itself.[6] But there has been much discussion about whether economic and social rights count as human rights. Some philosophers insist it is in light of general features of rights that such (alleged) rights are of the wrong sort to be human rights. Despite the significance of water for life, there could then be no human right to water. Section 3 rebuts these reservations.[7]

To be sure, this rebuttal only shows that there *could* be such rights, not that there *are*. And if there are, one still needs to argue that a human right to water is among them. One may wonder, for instance, how such a right bears on practical choice, say, how it can be consistent with markets for water and sanitation. Or perhaps such a right would be unduly specific. Why proclaim it when we have a right to an adequate standard of living? Does this presuppose a judgment about priorities among the components of wellbeing that we may want to avoid? There is also an inflation worry: do we devalue the currency by declaring too many rights? Finally, one may think there is something about water that should detach it from the international responsibilities associated with human rights (especially on the account we will use in the present study). To argue that there are economic and social rights in general and a human right to

[6] Exceptions are Bleisch (2006) and Ladwig (2007). But see also Ingram et al. (2006) and Veiga da Cunha (2009). Sultana and Loftus (2012) also discuss philosophical issues.

[7] Most philosophers of human rights, like most practitioners, now accept that such rights are human rights although the precise list of such rights is debatable. To mention a few, Beitz (2009), Caney (2006), Cohen (2004), Griffin (2008), Miller (2007), Nickel (2007), Pogge (2002), Sen (2009, Talbott (2010), Waldron (1993), all do. Shue (1980) offers a classic argument to the effect that the enjoyment of any rights presupposes both basic civil and political rights (a basic right to physical security) and basic economic and social rights (to subsistence). Even Rawls (1999), who only accepts a fairly limited set of human rights, acknowledges at least a right to subsistence. Main voices of resistance have included Maurice Cranston (1973) and Carl Wellman (1995), (1999). See also Williams (2005) and O'Neill (2005). The most outspoken opponent among practitioners is Aryeh Neier ((2012), chapter 3).

water specifically we need an actual account of human rights that delivers such rights.

There are economic and social rights, *and* there are human rights to safe drinking water and to sanitation according to the conception of human rights as membership rights in the global order I have recently presented (Risse (2012a)). My conception integrates an idea that initially would seem to have little to do with human rights: that humanity collectively owns the earth, the resources and spaces that exist without human accomplishments. Since my approach integrates the two fundamental points about water recorded at the beginning (that it is indispensable to all life and that its existence is nobody's accomplishment) it provides especially secure foundations for a human right to water. My approach also makes clear why there is a genuinely global responsibility for water provision everywhere.

The idea that the earth is collectively owned by humanity was pivotal to the political philosophy of the 17th century. At that time European expansionism had come into its own. Questions about how to divide up the planet arose forcefully among the conquering nations. The Old Testament (where the divine gift of the Earth was recorded) was as secure a starting point for such debates as these religiously troubled times permitted. Philosophers such as Hugo Grotius, Thomas Hobbes, Samuel Pufendorf and John Locke disagreed about how to capture this ownership status and the conditions under which parts of the earth can be appropriated. Section 4 looks at Locke's take on collective ownership with a focus on what he says about water.[8]

Revitalizing the standpoint of collective ownership is sensible in light of the problems of global reach that now preoccupy us and that concern our use of the earth, such as questions about immigration and our responsibility for future generations. What is at stake is the sheer space in

[8] See Buckle (1991) and Tuck (1999) for these discussions.

which our existence takes place. There turns out to be a conceptual link between collective ownership and human rights. In virtue of the fact that humanity collectively owns the earth, persons possess a set of natural rights that capture their status as co-owners. The existence of states puts these rights in jeopardy. A set of associative rights must ensure that states preserve these natural rights. ("Associative" rights are rights individuals have in virtue of being subject to certain political or economic structures.) These associative rights are among the membership rights in the global order and as such are human rights. Within that conception the human right to water emerges vindicated. Sections 5-7 develop these matters.

As we see in section 8, my account of collective ownership also allows us to formulate ideas about the proportionate distribution of human beings across the earth. If countries fail to occupy resources and spaces in a proportionate manner, they can be expected to admit more people or to relinquish resources or spaces. What matters is the overall value of a region for human purposes. Water is increasingly important for determining a region's value. Water-rich countries have a duty to make good on that human right if other countries are unable to do so for their citizens. I conclude by arguing in support of a global compact on water, including a monitoring body that keeps track of global water distribution of water. As we notice in passing, Thales of Miletus and the Old Testament gave water pride of place. Contemporary theories of global justice should do the same.

3. In its 1993 Vienna Declaration and Program of Action the UN states that "all human rights are universal, indivisible and interdependent and interrelated. The international community must treat human rights globally in a fair and equal manner, on the same footing, and with the same

emphasis."[9] However, there have been philosophical doubts about economic and social rights as human rights. Prominent among them are arguments to the effect that it is because of certain features of rights that economic and social rights could not be human rights. I discuss the two most influential objections.[10]

The *Nature-of-Rights objection* insists that regardless of how we think of the moral urgency of the issues behind economic and social rights, we should not think of them in terms of *rights*. Talking about a (moral) right to something involves identifiable addressees with an ability to make good on the realization of the right and with relevant connections to the holder. But for economic and social human rights, this could not be done. Notice how Bernard Williams (2005) formulates a worry specifically for labor rights:

> The problem is: against whom is the right held? Who violates it if it is not observed? (…) [E]ven if governments accept some responsibility for levels of employment, it may not be possible for them to provide or generate work, and if they fail to do so, it is not clear that the best thing to say is that the rights of the unemployed have been violated. (…) Since in many cases governments cannot actually deliver what their peoples are said to have a right to, this encourages the idea that human rights represent merely aspirations, that they signal goods and opportunities which, as a matter of urgency, should be provided if it is possible. But that is not the shape of a right. If people have a right to something, then someone does wrong who denies it to them. (p 64)

If there is a right and it is not satisfied, Williams says, then someone has done wrong. If someone does wrong, then that agent has the power to make it the case that the right was satisfied. But no one has the power to make it the case that, in this example, everyone has the opportunity to

[9] http://www.unhchr.ch/huridocda/huridoca.nsf/(symbol)/a.conf.157.23.en

[10] For nuanced discussion of these matters, see also Beitz (2009), 161-174; see also Sen (2009), 379-385, and Pogge (2002), 67-69. See also Griffin (2000).

work. Therefore there is no identifiable duty-holder, which goes to illustrate that economic and social rights generally do not possess a vital feature of rights.[11]

The crucial response to the Nature-of-Rights objection is that human rights can sensibly be *aspirational*.[12] Aspirational rights are rights one can only progressively realize but that do not thereby forfeit their status as rights. A human right to X is a moral demand that X be realized if it is possible to do so, and that appropriate steps towards the creation of conditions be taken under which X can be realized if that is not possible right away. The obvious worry is that this response renders rights indistinguishable from mere goals (which may be desirable but do not impose duties on particular agents). But it does not. Even rights one cannot realize immediately have corresponding *duty*-bearers with the ability to *contribute* to the realization of the right and with relevant connections to the holder. The manner in which duty-holders should contribute is by way of helping to create circumstances under which the right can then later be realized. The UDHR itself is to some extent a teleological document, aimed at a progressive realization. As the Chilean delegate to the drafting committee, Santa Cruz, stated: "if the Declaration were to be adjusted only to existing conditions it would not achieve a very useful purpose" (Morsink (1999), p 162).

We can distinguish between strict human rights, whose more or less immediate realization can be expected, and aspirational ones ("manifesto rights," as Feinberg (1973) says),

[11] See also Cranston (1973), p 66.

[12] The words "aspirational" and "manifesto rights" are sometimes used in a sense that excludes any connection to normative force, a point sometimes stressed through the addition of the word "mere" ("merely aspirational rights"). I do not use these terms in this way. Aspirational or manifesto rights have all the normative force of rights, but are not always immediately realizable.

which can be realized only progressively (but also *must* be so realized). Contrary to Williams, it is possible for (aspirational) rights to be currently unsatisfied and yet for nobody to have done anything wrong. Which rights are strict and which aspirational varies by country, changes over time, and is contested. What bears on the distinction – and thus on what is "possible" to do -- is both resource limitations and political obstacles. There is much potential for political abuse of the space created by the idea of aspirational rights for disagreement about who needs to do how much towards the realization of certain rights. But this does not undermine the conceptual possibility of aspirational rights.

Strictly speaking (in my view of human rights, see below), the duty holder is always the global order as such. We must then determine which entities in the global order must do what towards the realization of the rights in question. A person's state must protect her rights, strict and aspirational ones, as appropriate. The international community has a duty to defend strict rights by intervening as appropriate if the government fails. The global order must aid governments that need assistance, intervening as appropriate if countries refuse to make efforts toward realizing aspirational rights. As René Cassin, a drafter of the UDHR, said about that document twenty years after its passing, "[n]ow that we possess an instrument capable of lifting or easing the burden of oppression and injustice in the world, we must learn to use it" ((1968), p 6). But there is progress: the sheer articulation of human rights standards is an expression of global concern. Human rights are a source of moral progress partly *because* discourse about them renders unavoidable the question of who needs to do what.[13]

[13] Griffin (2008), chapter 5, offers a good discussion of these matters. See also Risse (2012b), chapter 11.

One may worry that within states it would be unsatisfactory to claim that, say, some constitutional rights are for future realization, and if so, the same applies to human rights. But this objection assumes that the context in which a right to X is held does not matter for what is involved in there being such a right and in being a duty-holder. We are primarily used to (legal and moral) rights that hold within *states*. Those rights are plausibly linked to rather immediate realization. But it is not true that such rights are rights to begin with (among other reasons) because they are readily realizable. It is the other way round: they are readily realizable because state power has a certain nature, and so rights that hold within states can be conceptualized in this way. Human rights, in my view, hold within and against the global order. It is because of the differences between states and the global order that it might be problematic for rights guaranteed by constitutions to be aspirational, but not for human rights. There is always a link between rights and duties, but what precisely it is depends on the context in which the rights are held.[14]

A second objection to counting economic and social rights as human rights is the *Inferior-Urgency objection*. If X is a human right, then it is no less urgent than any other human right. Economic and social rights are less urgent than some other rights that everyone accepts are human rights. Therefore, economic and social rights are not human rights. Maurice Cranston (1973) argues that economic and social rights fail the test of "paramount importance" (p 67). It is "a paramount duty to relieve great distress, as it is not a paramount duty to give pleasure." It would be a "splendid thing" if, the content of economic and social rights were also realized. Yet it would be much more serious if civil and political rights were disregarded than if economic and social rights were.

[14] For Pogge (2002) and (2000) all human rights are strict because the lack of fulfillment of basic economic and social rights is a function of how the global order operates, a failing that *should* and *could* be remedied immediately.

One way of understanding what is at stake is that civil and political rights are said to be more essential to survival than economic and social rights. But that point is misguided. Civil and political rights provide security, while economic and social rights protect one's ability to make a living. That ability is as essential to survival as security. Therefore some economic and social rights must be of as paramount an importance as some civil and political rights. A second understanding of what is at stake is that there is greater urgency in the provision of civil and political rights than in the provision of social and political rights, in the sense that satisfying the former can be more readily *expected of duty-holders* than satisfying the latter. The rationale is that civil and political rights are negative rights: they merely require that duty-holders refrain from inflicting harm. Economic and social rights are positive: they require measures to supply rights-holders with something. Not harming is more significant than doing good.

But first of all, just about every right involves positive and negative elements. The right to a fair trial is a classic civil right. A negative component of this right is that the state does not abuse its power by way of prejudicing court proceedings. A positive component is that states must take measures to create a judicial infrastructure in which fair trials are normal. The point applies to civil and political rights generally. Abstaining from abuse is always one aspect of what it is for such a right to be realized. But in addition, the state must take measures to make sure officials are trained and supervised in such a way that they do not abuse their powers. Economic and social rights often require the provision of material benefits to people, or the creation of opportunities that allow them to secure these benefits. But there is also a requirement that others refrain from interfering with individuals as they go about doing so. The division of rights into negative and positive ones is misleading.

A second reply to the Inferior-Urgency objection is that even if there were a difference in urgency between civil and political rights on the one hand and economic and social rights on the other, this difference would not preclude any kind of right from being human rights. Any conception of human rights would have to explain why a certain list of rights is being proposed as a list of human rights. If all things considered a conception is plausible the present objection would have little bite.

4. So there is nothing about the nature of rights that excludes the possibility of economic and social rights, which would ipso facto exclude a right to water. But this does not show that such rights *are* human rights. To show they are we need a conception of human rights that delivers them. Below we discuss my proposed conception, and it is only once we have that conception that we can ask about a right to water. That conception integrates the idea of collective ownership of the earth. In preparation, let us look at one of the classic explorations of collective ownership in Locke's *Second Treatise of Government*. The discussion of property in his chapter V is stage-setting for philosophical reflection on the foundations of property. We are interested in what he says about water.[15]

To be sure, water is a venerable topic of philosophical and religious writing. In the Western canon water enters early. Thales of Miletus believed water was the origin of everything. The Presocratics started philosophy by seeing the world as orderly and comprehensible. The

[15] Except for the recent revival of left-libertarianism, inquiries about collective ownership have been almost invisible since the Rawlsian renaissance of political philosophy. But this approach is present in international law, where for forty years the term "common heritage of mankind" has been applied to the high seas, the ocean floor, Antarctica and outer space. For "common heritage of humankind," see Attfield (2003), 169–72, and Malanczuk (1997), 207–8; see also Buck (1998). For left-libertarianism, see Vallentyne and Steiner (2000a) and (2000b).

original version of that thought made water essential. In the biblical Book of Genesis we read that before giving shape to this creation, "the Spirit of God was hovering over the waters" (Genesis 1:2). Water became God's point of departure for further deeds. The Old Testament also mentions God as a giver of water. In Exodus 15, the Israelites are saved when God reveals a tree whose contact with available bitter water makes it sweet. However, when collective ownership of the earth was discussed in the 17th century, it was not this idea of God as a giver of water, and thus the significance of water for life, that set the tone. Instead, the idea that water was abundant and worthless became prevalent.

Water appears three times in chapter V of Locke's *Second Treatise*. He begins by stating that, by revelation and natural reason, the earth can be considered common property of all of humanity. The revelation is recorded in Genesis (1:26, and 9:2-3; see also Psalm 115:16). Locke explores how there can be private property of resources that were originally given to humanity in common. Each person owns her body, and thus her labor. When she "mixes" her labor with something that is commonly owned, this object is thereby appropriated. An apple becomes mine when I pick it. Everybody has a license to appropriate in this way, without anybody else's consent. One illustration for how things are removed from the common pool involves water:

> Though the water running in the fountain be every one's, yet who can doubt, but that in the pitcher is his only who drew it out? His labor hath taken it out of the hands of nature, where it was common, and belonged equally to all her children, and hath thereby appropriated it to himself. (Sec. 29)

Next Locke introduces constraints on acceptable property acquisition. Nobody is supposed to acquire more than she can enjoy: nothing must be spoiled or destroyed. When land appropriation occurs initially, such acquisition would leave "enough and as good" for others. Again he illustrates the matter in terms of water:

> No body could think himself injured by the drinking of another man, though he took a good draught, who had a whole river of the same water left him to quench his thirst: and the case of land and water, where there is enough of both, is perfectly the same. (Sec. 33)

The remainder of chapter V explores how the development of money affects what property holdings people may have. The final mention of water occurs when Locke explains the decisive contribution of labor to the value of things:

> Bread, wine and cloth, are things of daily use, and great plenty; yet notwithstanding, acorns, water and leaves, or skins, must be our bread, drink and cloathing, did not labour furnish us with these more useful commodities: for whatever bread is more worth than acorns, wine than water, and cloth or silk, than leaves, skins or moss, that is wholly owing to labour and industry; the one of these being the food and raiment which unassisted nature furnishes us with; the other, provisions which our industry and pains prepare for us, which how much they exceed the other in value, when any one hath computed, he will then see how much labour makes the far greatest part of the value of things we enjoy in this world (…). (Sec. 42)

It is indeed not the theme of the precious water from Exodus that animates Locke, but an idea we can trace to another revered source, Cicero's *On Duties*. In Book I, 52, Cicero lists fresh water alongside fire and council as something one should give freely because it is useful to the receiver and of no trouble to the giver. This classic passage makes water a subject for an account of *beneficence*, rather than *justice*.[16] For Locke, water exists in abundance and has little commercial value, not only at the early stages of acquisition but also in his time. Still, appropriation can occur although it adds no value to the water. But then appropriation must also be possible once

[16] This Cicero passage is quoted by Grotius in *On the Laws of War and Peace,* Book 2.2.11 and discussed more in 2.2.12. Like Locke, Grotius thought fresh water was abundant and should be left to everybody's use. Pufendorf, in his *Two Books on the Duty of Man and Citizen*, also lists water, fire and advice as things nobody should be refused (Book I.8.4). In the middle of the 18th century, Emer de Vattel would again list water as an example of something that is so abundant it should not be refused anyone, see *Law of Nations,* Chapter IX, sec. 126 (a section called "Things, the Use of which is Inexhaustible"). Seneca's *On Benefits*, another inspiration for the 17th century, also treats water as an example of something that is abundantly available (see 4.29). It is a long way from there to an attitude expressed by John F. Kennedy on several occasions, that "the first country that is able to [transform sea water into fresh water at a reasonable price] will earn far more prestige than we lost by being second in outer space" (e.g., http://www.presidency.ucsb.edu/ws/index.php?pid=60400&st=salt+water&st1=). Linton (2010) explores the many ways in which societies have integrated water into their practices, including its transformation into a resource.

there no longer is abundance. However, since the earth was given to humanity in common, "for the support and comfort of their being" (sec. 26), at that later stage everybody must still have access to enough water to survive. It requires detailed investigations of Locke to assess just what this may mean. But rather than pursuing this matter, let us see what we can make of ideas of collective ownership in the present, and explore how water fares on that approach.

5. While Locke took the biblical standpoint of the earth as a divine gift, he also thought this view should be acceptable even if humankind had never received that revelation. Indeed, that the earth originally belongs to humankind collectively remains plausible without religious input. But the approach must be developed with some care. Philosophically, much can be gained by developing, in secular ways, the idea that humanity collectively owns the earth, since this original ownership status has strong implications for what individuals and groups can do with portions of three-dimensional space. Once we develop this secular version we find an important connection to human rights. Sections 5 and 6 develop this approach. Sections 7 and 8 explain what this theory says about water.

Three points are straightforward enough: first, the resources and spaces of the earth are valuable and necessary for any human activities to unfold; second, those resources have come into existence without human interference; and third, the satisfaction of basic human needs matters morally. These points must be considered when individual accomplishments are used to justify property rights strong enough to determine use across generations.[17] *Egalitarian Ownership* is the view that the earth originally belongs to humankind collectively, in the sense

[17] There is an enormous literature on the foundations of property; see Becker (1977), Reeve (1986), or Ryan (1987) for overviews.

that all humans, no matter when and where they are born, must have *some* sort of symmetrical claim to it. ("Original" ownership now does not connote with time but is a moral status, one that pertains to the "original" resources and spaces, the resources and spaces of the earth as they exist without human interference.) This is the most plausible view of the ownership of natural resources in light of the three points just mentioned. Egalitarian Ownership is detached from the complex set of rights and duties the civil law delineates under the heading of property law (Honore (1961)). At this level of abstraction from conventions and codes that themselves have to be assessed in relation to views on original ownership, all Egalitarian Ownership states is that all humans have a symmetrical claim to original resources. The considerations motivating Egalitarian Ownership speak to raw materials only, not to what human beings have *made* of them. The distinction between what "is just there" and what humans have shaped is blurred. But by and large, we understand well enough the idea of what exists without human interference.[18]

One may object that the idea of humanity's collectively *owning* the earth is misguided in light of the environmental problems that now are (or should be) so high on our agenda. But Egalitarian Ownership does not presuppose the arrogance associated with an interpretation of the biblical account that subjects the rest of creation to the human will, an attitude that shows, say, in Calvin's view that God took six days to create the world to demonstrate to human beings that everything had been prepared for them. In that way my approach differs from its 17th century

[18] A more difficult question is under what conditions man-made products, including improvements of original resources, should no longer be accompanied by special entitlements of those who made them or their offspring. See Risse (2012a), chapter 8, for discussion. Egalitarian Ownership formulates a standing demand on all groups that occupy parts of the earth to inhabit the earth in a manner that respects this symmetrical status of individuals with regard to resources. That Egalitarian Ownership operates in this way should be intelligible and acceptable even within cultures where individuals are not seen as property owners. Nothing about Egalitarian Ownership precludes such cultures from being acceptable to their members even if they do not treat individuals themselves as property holders. At the same time, even cultures that do not see individuals themselves as property holders must indeed be acceptable to those who live in them especially because all individuals have symmetrical claims to original resources, no matter how precisely we understand such acceptability.

predecessors many of whose defenders took no issue with this implication.[19] Egalitarian Ownership captures a relationship among human beings and can accommodate concerns, say, about the value of nature or the value of non-human animals: *to the extent* that nature is at our disposal, no human being has a privileged claim. Valuing nature intrinsically, as sublime or awesome, as providing a context where life obtains meaning to begin with, or even as in some sense sacred is consistent with my view.

Conceptions of Egalitarian Ownership differ in terms of how they understand the symmetry of claims to original resources. There are, roughly, four types of ownership-status entities may have: *no* ownership; *joint* ownership – ownership directed by collective preferences; *common* ownership – in which the entity belongs to several individuals, each equally entitled to using it within constraints; and *private* ownership. Common ownership is a right to use something that does not come with the right to exclude other co-owners from also using it. If the Boston Common were held as *common* ownership when it was used for cattle, a constraint on each person's use could be to bring no more than a certain number of cattle, a condition driven by respect for other co-owners and the concern to avoid the infamous Tragedy of the Commons. Yet if they held the Common in *joint* ownership, each use would be subject to a decision process to be concluded to the satisfaction of each co-owner. Joint ownership ascribes to each co-owner property rights as extensive as rights of private ownership, except that others hold the same rights: each co-owner must be satisfied on each form of use.

[19] The biblical story can be read in different ways, see White (1967) and Passmore (1974), chapters 1 and 2. Passmore (1974) contains a wealth of information about the diversity of attitudes towards nature that have been held across cultural traditions. For the reference to Calvin, see Passmore, p 13.

So there are various interpretations of Egalitarian Ownership: resources could be jointly owned, or commonly owned, or each person could have private ownership of an equal share of resources, or its value equivalent. These conceptions all carve out a pre-institutional space of natural rights that constrain property conventions which in turn regulate what these natural rights leave unregulated. I submit that Common Ownership is the most plausible conception.[20] While I cannot offer a complete argument for this proposal here, I can elaborate on what common ownership means, what it entails, and why it should be considered the preferred interpretation of Egalitarian Ownership.[21] The core idea of common ownership is that all co-owners ought to have an equal opportunity to satisfy basic needs to the extent that this turns on obtaining collectively owned resources. This formulation, first, emphasizes an equality of status; second, it points out that this equality of status concerns opportunities to satisfy needs (whereas there is no sense in which each co-owner would be entitled to an equal share of what is collectively owned, let alone to the support of others in getting such a share, any more than co-owners of the Boston Common had a claim to such a share or to the support of others to obtain it); and third, it does so insofar as these needs can be satisfied with resources that are collectively owned.

To put this in standard Hohfeldian rights terminology, common ownership rights must include liberty rights accompanied by what Hart (1982) calls a "protective perimeter" of claim rights (p 171).[22] To have a liberty right is to be free of any duty to the contrary, and obviously, common ownership rights must include at least rights of that sort; that is, co-owners are under no

[20] In capital letters, "Joint Ownership" and "Common Ownership" are names of interpretations of Egalitarian Ownership and hence views about ownership of the earth, whereas in small letters "joint ownership" and "common ownership" are general forms of ownership of anything.

[21] For detailed discussion, see Risse (2012a), chapter 6.

[22] For the Hohfeld terminology, see Edmundson (2004), chapter 5.

duty to refrain from using any of the resources of the earth. But the symmetry of claims postulated by Egalitarian Ownership demands more than liberty rights. In light of the intuitions supporting Egalitarian Ownership, to count as an interpretation of it, Common Ownership must guarantee some minimal access to resources, that is, impose duties to refrain from interference with certain forms of use of resources. So we must add that protective perimeter of claim rights to the liberty rights. We can obtain enough mileage from the original intuitions to require that common ownership rights (for Common Ownership to serve as an interpretation of Egalitarian Ownership) be conceived of in sufficientarian terms, in the sense that no co-owner should interfere with the actions of another to the extent that they serve to satisfy basic needs. I do not think these intuitions can be pressed beyond that. Equal Division and Joint Ownership press these intuitions too far. But we must add one more right to Common Ownership as we have understood it thus far. We must also make sure individuals can maintain their co-ownership status under more complex arrangements. A necessary condition for the acceptability of such arrangements is that the core purpose of the original rights can still be met. That core purpose is to make sure co-owners have the opportunity to meet their basic needs. In Hohfeldian terminology, co-owners have *immunity* from living under political and economic arrangements that interfere with their having such opportunities.

Let me address a typical *reductio* through which right-libertarians often ridicule collective ownership. Can somebody seriously claim, asks Murray Rothbard, that a newborn Pakistani baby has a claim to a plot in Iowa that Smith just transformed into a field?[23] As soon as one considers such implications of collective ownership, says he, one realizes its implausibility. Smith has claims on the strength of his plight, but the baby has none. Yet

[23] Rothbard (1996), p 35; Hospers (1971), p 65, makes a similar point.

collective ownership of the sort I defend (Common Ownership) does not grant each and every individual claims to each and every object. Not any nugget of gold found on the ocean floor has to be shared among all human beings. That our baby has claims to resources on a par with Smith's is consistent with him/her not having claims on Smith to vacate *that* land. Collective ownership is not so easily shown to be absurd. However, the discussion of this attempted *reductio* also serves to highlight that certain complaints one might have thought humanity's collective ownership helps us articulate cannot be made from this standpoint (assuming Common Ownership is the right conception of it). People in Slovenia or Chile do not have a claim specifically to the oil and gas riches of other countries merely because they do not find such resources where they live themselves.

6. I continue to say that humanity "collectively" owns the earth if the precise form of ownership does not matter. Otherwise I will talk about Common Ownership. In any event, one way of putting our result from section 5 is that these terms are interchangeable. The existence of a system of states dividing up the world's resources must be reconciled with Common Ownership. Each state, in virtue of its immediate access to individuals' body and assets, might deprive them of such opportunities, but so might other states by refusing them entry if they cannot satisfy basic needs. When individuals cannot satisfy basic needs where they live, other states that have this ability but refuse entry would not merely fail to aid them; they would deny them the opportunity to satisfy these needs. Under these conditions we must ask what to make of the immunity individuals have from living under political and economic arrangements that interfere with those subject to them having opportunities to satisfy their basic needs.

Common ownership rights are natural, pre-institutional rights. Once institutions are founded, guarantees must be given to co-owners that institutional power will not be used to violate their status. Since such a violation is threatened by the system of states per se, such guarantees take on the form of moral demands against that system of states. Responsibilities that arise in the manner I have sketched must be allocated at the level of the state system as such, as collective responsibilities, rather than resting exclusively with individual states and then only with regard to their members.

These considerations take us to a conception of *human rights*. Cohen (2006) sensibly proposes that human rights have three features: they are universal and owed by every political society to everybody; they are requirements of political morality whose force does not depend on their expression in enforceable law; and they are especially urgent requirements. Any more specific account of human rights, says Cohen, has to meet these constraints, as well as two methodological assumptions: fidelity to major human rights documents, so that a substantial range of these rights is accounted for; and open-endedness (we can argue in support of additional rights). Yet these criteria do not entail commitments with regard to a range of questions about such rights. It is the function of a *conception* of human rights to provide fuller answers to such questions. For instance, accepting these criteria does not imply human rights must be understood as protecting essential features of personhood, as for instance Griffin (2008) argues. A different way of adding detail to these criteria is to think of "human" rights as rights individuals hold qua members of the global and political order that ipso facto but contingently includes *everybody.*

What I have argued above is work towards such a conception. That is, humanity's collective ownership generates a set of rights, namely membership rights in the global order.[24]

In what sense are human rights held in virtue of membership in the global order? This order is the system of states that covers most of the land of the earth as well as the network of organizations that provides for "global governance." At the political level, the state system is governed by a set of rules, the most significant of which are codified by the UN Charter. At the economic level, the Bretton Woods institutions (IMF, World Bank, later the GATT/WTO) provide a cooperative network intended to prevent wars and foster worldwide economic improvement. These institutions, jointly with the more powerful states acting alone or in concert, shape the economic order. Importantly, for there to be enough structure to the global order to render that term ("global order") applicable, and an accompanying capacity for coordinated action, is a minimal condition for the existence of rights held within that order. And, indeed, there is enough structure of that sort. Being a member of that order merely means to live on the territory covered by it, which by now all human beings do, if for no other reason then because they all live on the territory of some state. So it makes sense to speak of rights that are held in virtue of membership in the global order.[25]

---

[24] A conception of human rights, fully developed, consists of four elements: First, a list of rights; second, an account of the basis on which individuals have them (of what features turn individuals into rights holders); third, an account of why that list has that particular composition, that is, a principle or process that generates that list; and fourth, an account of who has to do what to realize these rights.

[25] My view does not presuppose that individuals "participate" in the global order. Even secluded tribes possess human rights. They are co-owners of the earth and are constrained by the imposition of the state system even if they do not actually feel the constraints. Notice also that in my conception the duty-holder is always in the first instance the global order, and then we must assess what this involves for entities *within* the global order. Entities with obligation are not merely states but also other powerful organizations. See Risse (2012a), chapter 11, on this issue.

Once we see how collective ownership of the earth generates membership rights in the global order, it is natural to turn around the direction of inquiry and explore whether there are other bases on which such rights could be held. There are indeed, such as the idea of common humanity (which to most readers will be more naturally tied to human rights than collective ownership). I have explored this elsewhere (Risse (2012a), chapter 11). What matters now is this: using collective ownership for a derivation of membership rights generates two *fundamental guarantees* states and other powerful organizations must give, and whose realization is a global responsibility. First, they must make sure their power does not render individuals incapable of meeting basic needs; second, they must provide opportunities for individuals to lead a life at least at subsistence level. A good deal of work still needs to be done to get from these guarantees to a sizeable list of human rights. But if such guarantees exist, the dangers imposed on individuals through the existence of the global order are neutralized vis-à-vis the status of which individuals are ensured in virtue of their common ownership rights.

7. We can now harvest some important results about water. To begin with, my approach does deliver economic and social rights. In addition to ensuring that the power of states and other organizations is not used to render individuals incapable of meeting basic needs, such organizations must provide opportunities for individuals at least to meet basic needs. Everybody must have the opportunity to enjoy a minimally adequate standard of living, as far as food, clothing, and housing are concerned. But this reasoning merely delivers a small set of rights since we can derive only a requirement to protect everybody's ability to satisfy basic needs.

However, we can adopt a broader understanding of what rights are entailed by our starting points. According to that reading, rights provide more *robust* protection. We are

assessing what set of associative rights should protect a bundle of natural rights of vital importance, rights needed to ensure individuals can meet basic needs. But in the pre-institutional scenario where these rights hold, no agent is as powerful as the state. It is in light of the power of states and of the importance of the rights that are at stake that control mechanisms must be imposed especially on states to ensure the individuals' status as co-owners prevails. The permanence and reliability of that protection matter critically. So we should adopt the broader view of what rights are entailed by our starting points that generates more robust protection.

Recall the first fundamental guarantee, that states must make sure their power does not render individuals incapable of meeting their basic needs. On a narrow reading, this standpoint does not deliver much beyond basic rights to life and physical integrity. On the broader reading, co-ownership status is not preserved merely if it so happens that states do not render individuals incapable of meeting basic needs. States must be *bound* to refrain from doing so. Their power must be limited so that they cannot simply elect to become abusive. Adding ideas of robustness responds to the nature of the state as an entity that (generically, ignoring phenomena such as failed states) is overwhelmingly more powerful than individuals and organized in complex ways that permit abuse in many forms. Ensuring that individuals are robustly protected in light of the dangers posed by the state system requires such constraints although we cannot achieve perfect protection. To rights to life and bodily integrity we must add individual liberties (e.g., freedom from forced labor, of conscience, of expression and association, of movement, and freedom to emigrate), as well as political rights (e.g., to accountable representation), and due process rights (e.g., a fair trial).

The second fundamental guarantee is that states must provide opportunities for individuals to lead a life at least at subsistence level. On a narrow reading we merely obtain a set

of rights that protect people's ability to live at subsistence level, such as rights to food, clothing and housing. But here too a broader understanding is available that generates a more robust set of rights. At least in societies with sophisticated economies that make it difficult to satisfy needs without actively participating in society, an elementary right to education and a right to work understood as a right not to be excluded from labor markets can be supported within such societies. Such rights constitute robust protection of the rights to food, clothing and housing that the narrower understanding already delivered.

Without water humans cannot survive. Therefore this right "to food" must include a right to safe drinking water. According to the more robust understanding such a right includes a claim to enough safe drinking water to be an active member of society. Given the present understanding of human rights, it is then up to the global order to distribute the global water resources accordingly, and to assume a shared responsibility to develop local infrastructures to assist with accessing and distributing water. If people find themselves without water and their state cannot help, other agents in the global order must either make sure they have water or else allow them to move elsewhere. States can exclude people, and thus restrict their liberty right, only if they jointly give guarantees to people wherever they live. Since even minor deficiencies in our supply with safe water can seriously debilitate human beings, this guarantee must include safe drinking water.

Section 2 recorded some concerns about a right to water: that we would have to assess how such a right bears on practical choice, that is, how it may be compatible with markets for water; that it may be too specific and presuppose a problematic judgment about priorities among components of wellbeing; that we may devalue the currency by proclaiming too many rights; and that there may be good reasons not to tie water to international duties. As far as the first point is

concerned, a right to water has often been enlisted to resist privatization of water resources. For instance, in the late 1990, the Bolivian government sought to improve the provision of municipal services by, among other things, privatizing water services. To cover their investments the companies involved raised the price of water substantially. In the city of Cochabamba these measures encountered such heavy resistance that the government ultimately undid the changes. During these protests several grassroots organizations issued the Cochabamba Declaration according to which "water is a fundamental human right and a public trust to be guarded by all levels of government, therefore, it should not be commodified, privatized or traded for commercial purposes."[26]

But nothing in the account of human rights that we discussed licenses such a move. What the theory delivers is that a human right must constrain private markets to make sure everybody has access to enough safe water. This in turn implies that water has to be available at reasonable prices (prices that to do not interfere with other purchases required to maintain a decent life, and on which the original ownership status of the water exerts downward pressure). To be sure, the efficiency arguments that generally support markets also support them in the case of food and water. Markets facilitate the distribution of food and water and thereby help to make sure everybody has access to food and water at all. And although water occurs naturally, pipes do not. Charging for treatment and delivery is appropriate. Nonetheless, fees must be kept at rates that do not interfere with the requirement that everybody have access to water at reasonable prices.

[26] The Cochabamba Declaration contrasts with an international statement, the Dublin Statement, published in 1992. Issuing the first major recognition of water as a commodity, the governments represented at the 1992 International Conference on Water and the Environment declared that "water has an economic value in all its competing uses and should be recognized as an economic good." For both declarations, see Salzman (2006). See Bakker (2012) for the relationship between a human right to water and privatization. See also Murthy (forthcoming), Dobner (2010), chapter 3, Bakker (2010), Chapter 5, and Barlow and Clarke (2002). Related is also the issue of bottling water, private suppliers profiting from packaging natural resources, see Gleick (2010).

The concern about over-specificity is toothless on account of the special status water has among nutrients. We *must* prioritize access to water as a component of wellbeing. The worry about rights inflation fails for the same reason. Finally, that there is something about water that makes it unsuitable for international duties is false. Precisely the opposite is true, and making that clear is one of the distinctive implications of resorting to my account of human rights in this context: there is a genuinely global responsibility for making sure everybody can enjoy access to water to which co-owners of the earth are entitled. The state system is acceptable only if it meets that responsibility.

A human right to sanitation also emerges, in any event on the more robust understanding of human rights that I just introduced. The basic thought behind the derivation of rights from collective ownership is that co-ownership generates entitlements to access to natural resources that must be either preserved or adjusted appropriately when individuals live in states. A right to water is an example of a right that preserves access to something to which individuals qua co-owners must have access. A human right to basic education, for instance, adjusts for lack of access. Such a right applies at least in any slightly sophisticated society since the existence of states means that co-owners will often not have the possibility to make a living by accessing natural resources. As a substitute for this lack of access we need empowerment to participate in society. A right to sanitation involves both aspects (preservation of access to something to which co-owners must have access, and appropriate adjustment to life in states). It involves a guarantee to use the local water system, in this case for purposes of hygiene and thus for the maintenance of health. But such a right also captures an adjustment to life in societies where particular health hazards are generated or exacerbated through our organized ways of living together. Hygiene is an example of such a health concern. In a nutshell, there is human right to sanitation because co-

owners are allowed to help themselves to naturally existing water systems to protect themselves against health hazards that to a large extent arise because of human living arrangements.

To put this point in perspective, let me add that a general human right to basic health care cannot be derived from collective ownership. Such a right is not necessary to neutralize the state system's ability to interfere with co-ownership. After all, access to such care does not turn on access to original resources as much as, say, sanitation does, but instead turns on human services and ingenuity. The basic thought for the derivation of rights from collective ownership mentioned at the beginning of the previous paragraph therefore does not cover a general human right to basic health care beyond a right to sanitation. As opposed to the human services and ingenuity that are at stake in a right to basic health care, human rights to safe drinking water and sanitation capture different aspects of a general right to use the world's water systems for survival. One can argue for a right to basic health care as a right of citizens, or possibly even as a human right/membership right in the global order that emerges in some way other than through collective ownership. But that is not my topic here.

Let us review what my approach says about water. Collective ownership (especially Egalitarian Ownership) is plausible because the resources and spaces of the earth are nobody's accomplishment but are required for human needs to be satisfied. Common Ownership, the conception I find most plausible, implies that each individual must have the opportunity to satisfy basic needs to the extent that this turns on natural resources and spaces of the earth. In light of the significance of water for all forms of life, this includes a right to make use of the earth's water. This reasoning integrates the two crucial points about water with which we started: water is essential to all forms of life, and its existence is not owed to any human accomplishments. The state system interferes with the co-owners' ability to satisfy basic needs

by exericising their liberty right to water. Crucially, guaranteeing access to safe drinking water and basic sanitation becomes a *genuinely global responsibility*, a condition of the very acceptability of the state system, which on my account is characteristic of human rights. The particular theoretical set-up of this account is especially useful for showing that there is such a global responsibility.

8. There is more to say about water on my approach. For one thing, we can explore who has to make good on a human right to water. But we can also extend our horizion beyond the issues addressed by human rights. The vast majority of water is used for agriculture (upwards of 70%), followed by industry (say 15-20%) and then personal consumption (10-15%), of which drinking water is only a fraction. Many "water justice" issues involve disputes over water for agriculture that are not covered by the (legal or moral) definition of human rights to safe drinking water and sanitation. Often these are questions of transboundary water allocation on which human rights provide little guidance, but which collective ownership also illuminates.

I focus mostly on obligations pertaining to the actual provision of water, rather than support that may be necessary to create infrastructure. However, we should notice that often physical water shortage is not the issue when people lack water for drinking and sanitation. There is often enough water, but it is used for other purposes. Agriculture is frequently the only way for people (say, in rural Africa) to make a living, but water used for irrigation is unavailable for drinking needs. In such situations, a human right to water entails a duty to help with the provision of infrastructure to optimize use of water for agriculture or other essential purposes while also making sure there is enough water for drinking and sanitation.

To approach the topics I mentioned in the first paragraph of this section, let me develop the ownership standpoint a little further. Note first that Risse (2012a) also brings to bear collective ownership on *immigration.* We must ask under what conditions would-be immigrants can reasonably be expected to accept borders. Countries are justified in excluding others *only if* sufficiently many people populate their spaces. "Sufficiently many" means the number of these people is proportionate to the value for human purposes of the resources and spaces thereby removed from general use. We arrive at an idea of relative over- and under-use, and thus of *proportionate use*, of portions of the earth, an idea that is helpful for water distribution problems. A population under-uses its share of three-dimensional space if the per-capita value of what they occupy is higher than the world average across states. The average person in such a state can access more resources and spaces than people around the world can on a per-country average. They over-use if the per-capita value of what they occupy is lower than the world average among states. Under-users can be reasonably expected to permit immigration. Alternatively, they should relinquish some territory or resources. Over-users may decline further requests for immigration. They are doing enough in permitting a proportionate share of humanity to make a living.

Assessing how many people are proportionate to the value for human purposes of certain resources is not a matter of population density that proceeds in terms of sheer territorial extension. Territories of the same size might differ vastly in terms of soil quality, resource endowment, climatic conditions and other variables. A host of biophysical factors shape the value of a territory for human purposes, as do technological constraints. Much of the empirical work needed to make the relevant valuing operation precise is currently unavailable. Another complication is that one needs to wonder exactly what counts as "use" in the relevant sense (not

merely what is in circulation but also, say, what is accessible in the ground but not yet in circulation), a point that matters greatly for the case of water (see below).

It is in any event the *overall* value for human purposes of whole regions that determines whether a country proportionately uses a portion of the earth. If countries have large amounts of certain resources, people who live elsewhere do not therefore have a claim on a share of those particular resources. It is not the case that each country should have its share of oil, gas, copper or coal. But things are different *for water*. Water is special among the raw materials humans have integrated into their lives as resources. Unlike any other resource (except oxygen, which, however, is amply present where people normally live) water must either be made available to human beings everywhere, or alternatively, people who live in countries where there is not enough water to allow for the realization of the human right to water must be permitted to move to countries where water is available.

This situtation calls for a *global compact on water*, which must include a monitoring body.[27] This body would take inventories of global water resources and assess how they contribute to the overall value for human purposes of regions of the earth. It must identify which countries (a) under-use their regions and (b) are water-rich (on a per-capita basis). As far as the human right to water is concerned, it is in the first instance those countries satisfying conditions (a) and (b) that are responsible for making good on the global responsibility of ensuring all human beings can access water. They could do so either by plainly transferring water (and thus relinquishing full ownership over water on their territory) if other countries cannot realize the right to water for their citizens, or else by allowing for more immigration, primarily from

[27] Petrella (2001), for one, argues for such a compact. He considers water a common heritage.

countries that (a) over-use resources, and specifically (b) suffer from water shortages. Donor countries could thereby make a contribution to global distributive justice for which they would get credit when it comes to assessing what they must contribute overall.

But the global compact idea (and Common Ownership) has broader applications than what we can say about the *human right* to water. With populations growing, living standards rising in many places, and climate change disrupting patterns of water supply, availablity of clean water is increasingly important for the value for human purposes of three-dimensional spaces. Thereby water also becomes increasingly important for assessing whether countries over- or under-use their portion of the world. Recall also that many "water justice" issues involve disputes over transboundary water allocation for agriculture, or for industrial use, which are not generally addressed by human rights. Here too ideas of over- and under-use allow us to make progress.

For instance, suppose a river runs through several countries and affects people's lives in different ways (e.g., the Mekong). In some parts the river is used for fishing, but elsewhere mostly for transportation or generation of energy. Suppose country A wants to build a dam to generate hydroelectric power. The dam might affect the water flow and, let us suppose, would negatively affect fishing downstream. If "downstream" is still in A, my approach does not offer any advice since it is formulated at the level of countries. One could perhaps apply the same ideas to different regions of a country, but that is not what the theory is in the first instance designed to do. But if "downstream" is in country B, and B complains, the monitoring body should assess the impact of the construction on relative over- and under-use in A and B.

What should *not* matter for the resolution is how much water overall A or B possess, or their absolute wealth. What matters is how the overall value of resources and spaces is affected

for whose assessment availability of water is but one (albeit increasingly important) factor. That is, what matters is the per-capita value of what A and B occupy (before and after the construction), and the relative change in their situations. If A is an under-user both before and after but B's over-use is exacerbated, B has a rightful complaint. If A and B are over-users before and after but afterwards A's situation has been somewhat ameliorated at the expense of an exacerbation of B's over-use situation to about the same extent, B has a rightful complaint. I have picked easy cases, and others are more complex. For instance, what if both A and B are over-users before and after, but A's over-use improves by quite a margin at the cost of a minor exacerbation in B's situation? Or how should we think about a case where A is an under-user before but an over-user after the construction whereas B is an under-user before and an over-user afterwards? Difficult questions arise, but they are questions about fair division that are independent of water issues and that therefore I set aside. My point is only that this is the kind of use to which a global water compact and its monitoring body should put the idea of proportionate use of regions of the earth.[28]

Let me end by describing why such a monitoring body would indeed face a difficult task. It is vexing to determine which countries are "water-rich" in the sense that they – if they also

[28] It is worth noting here that in 1997, the United Nations adopted the Convention on the Law of Non-Navigational Uses of International Watercourses (or Watercourse Convention). This Convention pertains to the uses and conservation of all waters that cross international boundaries (both surface and ground water). The Convention has three primary principles. First, states should use an international watercourse in a way that is "equitable and reasonable" vis-à-vis other states sharing that watercourse. Second, states should take "all appropriate measures" to prevent "significant harm" to co-riparian states. Third, states should "consult" with co-riparian states and provide "timely notification" of any changes in use that could have significant, adverse effects on those co-riparian states. The Convention also outlines seven factors designed to ensure that an international watercourse is utilized in an "equitable and reasonable manner." Notably, in the absence of agreement or custom to the contrary, no use of an international watercourse enjoys priority over other uses, but disputes about use must be resolved with "special regard being given to the requirement of vital human needs." For this Convention, as well as for its legal context and possible implications for the case of Iraq, see Murthy (2010). As of 2012, the Convention has not yet been ratified by enough countries to enter into force.

generally under-use resources – can be expected to be the first to share water. More generally, it is vexing to determine how water contributes to the overall value of a region for human purposes. First of all, we must note the difference between water *volume* and yearly *renewable supply.* Countries might have a topography that creates lakes and a climate that prevents evaporation. For instance, Canada harbors 20% of the global water that is contained in lakes (Sprague (2010)). Based on that, one might wish to conclude that Canada should be among the first to be summoned when water is scarce elsewhere. Perhaps so, but one way of illustrating the intended impact of the remainder of this discussion is that it renders that kind of inference more problematic than it may seem. The renewable supply is the amount of fresh water that is fully replaced annually through precipitation. (Canada's share of world supply is 6.5%, to continue that example.) If the supply is gone, it will be replaced next year. If the volume is diminished, it may not be replenished. An assessment of the overall value for human purposes of regions of the earth must distinguish between these two manners of access to water.

A second complication is that humans are not the only water users. Collective ownership is a relationship among humans that is meant to capture that all of us have the same claim to resources and spaces. That relationship does not imply that other creatures should not also have an opportunity to consume resources, or that the preservation of ecosystems (of which hydrological systems are an essential component) does not by itself at least have aesthetic value that demands preservation. A third complication stems from the instrumental value of ecosystems. Wetlands and forests, for instance, play a critical role in purifying water. This kind of instrumental value of nature accrues mostly to the immediate environment. But ecosystems

might also contribute to the cycle of transforming CO_2 into oxygen, a contribution to life everywhere on earth and not just where that ecosystem happens to be located.[29]

More work is needed to develop these ideas of a global water compact and its guiding idea of proportionate use of resources and spaces of the earth. Much of it is work in disciplines other than philosophy. Nonetheless, despite these complications, a global water compact that includes a monitoring body is required to make sure human beings have the kind of access to which they are entitled as co-owners. This relatively concrete result also mirrors our more general finding. Unlike Cicero and, following his example, Locke and others, we can no longer think of fresh water as abundant and thus a suitable illustration of what *beneficence* requires. Water is an essential subject for a global theory of *justice*. Thales and the Old Testament rightly gave water pride of place. Contemporary theories of global justice should do the same.

Literature

Albuquerque, Catarina de. 2012. *On the Right Track: Good Practices in Realizing the Rights to Water and Sanitation.* Private Printing (2000 copies)

Attfield, Robin. 2003. *Environmental Ethics: An Overview for the Twenty-First Century*. Oxford: Polity Press

Bakker, Karen. 2012. "Commons vs. Commodities: Debating the Human Right to Water." In Sultana and Loftus (2012), 19-45

Bakker, Karen. 2010. *Privatizing Water. Governance Failure and the World's Urban*

[29] For discussion of these points, see also Bakker (2010), chapter 5. See Bakker (2007) for insightful assessments of Canada's water situation.

Water Crisis. Ithaca: Cornell University Press

Bakker, Karen (ed.). 2007. *Eau Canada: The Future of Canada's Water*. Vancouver: UBC Press

Barlow, Maude, and Tony Clarke. 2002. *Blue Gold: The Fight to Stop the Corporate Theft of the World's Water*. New York: The New Press

Becker, Lawrence. 1977. *Property Rights: Philosophical Foundations*. Boston: Routledge and Kegan Paul

Beitz, Charles. 2009. *The Idea of Human Rights*. Oxford: Oxford University Press

Bleisch, Barbara. 2006. "The Human Right to Water – Normative Foundations and Ethical Implications." *Ethics and Economics* 4 (2): 1-23

Buckle, Stephen. 1991. *Natural Law and the Theory of Property. Grotius to Hume*. Oxford: Clarendon

Caney, Simon. 2006. *Justice Beyond Borders: A Global Political Theory.* Oxford: Oxford University Press

Cassin, René. 1968. "How the Charter on Human Rights Was Born." UNESCO Courier 21 (January): 4–6

Cicero, Marcus Tullius. 1993. *On Duties*. Edited by E. M. Atkins. Cambridge: Cambridge University Press

Cohen, Joshua. 2006. "Is there a Human Right to Democracy?" In Christine Sypnowich (ed.), *The Egalitarian Conscience: Essays in Honor of G. A. Cohen.* Oxford: Oxford University Press, 226-249

Cohen, Joshua. 2004. "Minimalism about Human Rights: The Most We Can Hope for?"

Journal of Political Philosophy 12 (2): 190-213

Cranston, Maurice. 1973. *What Are Human Rights?* New York: Taplinger

Craven, Matthew. 2006. "Some Thoughts on the Emergent Right to Water." In Riedel and Rothen (2006), 37-47

Dobner, Petra. 2010. *Wasserpolitik. Zur politischen Theorie, Praxis und Kritik globaler Governance*. Frankfurt: Suhrkamp

Dubreuil, Celine. 2006. *The Right to Water. From Concept to Implementation*. World Water Council

Edmundson, William. 2004. *An Introduction to Rights*. Cambridge: Cambridge University Press

Feinberg, Joel. 1973. *Social Philosophy*. Englewood Cliffs, NJ: Prentice Hall

Gleick, Peter (ed.). 2011. *The World's Water: The Biennial Report on Freshwater Resources*. Washington DC: Pacific Institute

Gleick. Peter. 2010. *Bottled and Sold. The Story Behind Our Obsession with Bottled Water.* London: Island Press

Gleick, Peter. 1999. "The Human Right to Water." *Water Policy* 1 (5): 487-503

Griffin, James. 2008. *On Human Rights*. Oxford: Oxford University Press

Griffin, James. 2000. "Welfare Rights." *The Journal of Ethics* 4 (1-2): 27-43

Grotius, Hugo. 2005. *The Rights of War and Peace*. Edited and with an introduction by Richard Tuck. Indianapolis: Liberty Fund

Honore, A. M. 1961. "Ownership." In *Making Law Bind: Essays Legal and Philosophical.* Oxford: Clarendon

Hospers, John. 1971. *Libertarianism.* Nash Publishing: Los Angeles

Ingram, Helen, John Whitely and Richard Perry. 2006. "The Importance of Equity and the limits of Efficiency in Water Resources." Introduction to Ingram, Whitely and Perry, *Water, Place, and Equity.* Cambridge: MIT Press

Ladwig, Bernd. 2007. "Kann es ein Menschenrecht auf Wasser geben?" In Beate Rudolf (ed.), *Menschenrecht Wasser?*, 45-59. Frankfurt: Peter Lang

Langford, Malcolm. 2006. "Ambition that Overleaps Itself? A Response to Stephen Tully's Critique of the General Comment on The Right to Water." *Netherlands Quarterly of Human Rights* 24:3, 433-459

Linton, Jamie. 2010. *What is Water? The History of a Modern Abstraction*. Vancouver: UBC Press

Locke, John. 1960. *Two Treatises of Government*. Edited with an introduction by Peter Laslett. Cambridge: Cambridge University Press

Malanczuk, Peter. 1997. *Akehurst's Modern Introduction to International Law*.7th ed. London: Routledge

Miller, David. 2007. *National Responsibility and Global Justice*. Oxford: Oxford University Press

Morsink Johannes. 1999. *The Universal Declaration of Human Rights; Origin, Drafting,*

and Intent. Philadelphia: University of Pennsylvania Press

Murthy, Sharmila. Forthcoming. "The Human Right(s) to Water and Sanitation: History, Meaning and the Controversy over Privatization." To appear in *Berkeley Journal of International Law*

Murthy, Sharmila. 2010. "Iraq's Constitutional Mandate to Justly Distribute Water: The Implications of Federalism, Islam, International Law and Human Rights." *The George Washington International aw Review,* 749-785

Neier, Aryeh. 2012. *The International Human Rights Movement: A History*. Princeton: Princeton University Press

Nickel, James. 2008. "Rethinking Indivisibility: Towards a Theory of Supporting Relations between Human Rights," *Human Rights Quarterly* 30: 984–1001

Nickel, James. 2007. *Making Sense of Human Rights*, Second edition. Oxford: Blackwell Publishing

Nickel, James. 2005. "Poverty and Rights," *Philosophical Quarterly* 5: 385–402

O'Neill, Onora. 2005. "The Dark Side of Human Rights." *International Affairs* 81: 427–39

Passmore, John. 1974. *Man's Responsibility for Nature*. London: Duckworth

Petrella, Riccardo. 2001. *The Water Manifesto. Argument for a World Water Contract.* London: Zed Books

Pogge, Thomas. 2002. *World Poverty and Human Rights: Cosmopolitan Responsibilities and Reforms*. Cambridge: Polity

Pogge, Thomas. 2000. "The International Significance of Human Rights," *Journal of Ethics*, 4: 45–69

Pufendorf, Samuel. 1991. *On the Duty of Man and Citizen according to Natural Law*. Edited by James Tully. Cambridge: Cambridge University Press

Rawls, John. 1999. *The Law of Peoples*, Cambridge: Harvard University Press

Reeve, Andrew. 1986. *Property*. Atlantic Highlands: Humanities Press

Riedel, Eibe, and Peter Rothen (eds.). 2006. *The Human Right to Water*. Berlin: Berliner Wissenschaftsverlag

Riedel, Eibe. 2006. "The Human Right to Water and General Comment No. 15 of the Committee on Economic, Social and Cultural Rights." In Riedel and Rothen (2006), 19-36

Risse, Mathias. 2012a. *On Global Justice*. Princeton: Princeton University Press

Risse, Mathias. 2012b. *Global Political Philosophy*. London: Palgrave Macmillan

Rothbard, Murray. 1996. *For a New Liberty. The Libertarian Manifesto*. San Francisco: Fox and Wilkes

Ryan, Alan. 1987. *Property*. Milton Keynes: Open University Press

Salzman, James. 2006. "Thirst: A Short History of Drinking Water." *Yale Journal of Law and the Humanities* 18, 94-121

Sen, Amartya. 2009. *The Idea of Justice*. Cambridge: Harvard University Press

Sen, Amartya. 2004. "Elements of a Theory of Human Rights." *Philosophy and Public Affairs* 32 (4): 315–57

Seneca, Lucius Annaeus. 2010. *On Benefits*. Translated by Brad Inwood and Miriam Griffin. Chicago: University of Chicago Press

Shiva, Vandana. 2002 Water Wars. Privatization, Pollution, and Profit. Cambridge: South End Press

Shue, Henry. 1980. *Basic Rights: Subsistence, Affluence and U.S. Foreign Policy*. Princeton: Princeton University Press

Sprague, John. 2007. "Great Wet Worth? Canada's Myth of Water Abundance." In Bakker (2007), 23-36

Staddon, Chad, Thomas Appleby and Evadne Grant. 2012. "A Right to Water? Geographico-Legal Perspectives." In Sultana and Loftus (2012), 61-78

Sultana, Farhana, and Alex Loftus. 2012. *The Right to Water: Politics, Governance, and Social Struggles*. London: Earthscan

Talbott, Williams, 2010. *Human Rights and Wellbeing*. Oxford: Oxford University Press

Thielboerger, Pierre. Forthcoming. *The Right(s) to Water*.

Tuck, Richard. 1999. *The Rights of War and Peace*. Oxford: Oxford University Press

Tully, Stephen. 2005. "A Human Right to Access Water? A Critique of General Comment No. 15." *Netherland Quarterly of Human Rights* 23: 1, 35-63

UNDP. 2006. *Human Development Report 2006 Beyond Scarcity: Power, Poverty and the Global Water Crisis*

Vallentyne, Peter, and Hillel Steiner (eds.). 2000a. *The Origins of Left-Libertarianism: An Anthology of Historical Writings*. New York: Palgrave

Vallentyne, Peter, and Hillel Steiner (eds.) 2000b. *Left-Libertarianism and Its Critics: The Contemporary Debate*. New York: Palgrave

Vattel, Emer de. 2008. *The Law of Nations*. Indianapolis: Liberty Fund

Veigha de Cunha, Luis. 2009. "Water: A Human Right or an Economic Resource?" Chapter 7 of M. Ramon Llamas, Luis Martinez-Cortina, and Aditi Mukherji (eds.), *Water Ethics: Marcelino Botin Water Forum 2007.* London: CRC Press

Waldron, Jeremy. 1993. "Liberal Rights: Two Sides of the Coin." In Waldron, *Liberal Rights: Collected Papers 1981-1991* (1-35). Cambridge: Cambridge University Press

Wellman, Carl. 1999. *The Proliferation of Rights: Moral Progress or Empty Rhetoric?*, Boulder: Westview Press.

Wellman, Carl. 1995. *Real Rights*. New York: Oxford University Press

White, Lynn. 1967. "The Historical Roots of our Ecological Crisis." *Science* 55: 1203-1207

Williams, Bernard. 2005. "Human Rights and Relativism." Chapter 6 of *In the Beginning was the Deed: Realism and Moralism in Political Argument.* Edited by Geoffrey Hawthorn. Princeton: Princeton University Press

Winkler, Inga. 2012. *The Human Right to Water: Significance, Legal Status, and Implications for Water Allocation.* Portland: Hart Publishing

World Water Assessment Programme. 2009 Water in a Changing World. UNCESCO Publishing

World Water Assessment Programme. 2003. *Water for People, Water for Life*. UNESCO Publishing