THE HUMAN RIGHT TO WATER AND WATER SECURITY

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A Thesis Submitted to the School of Graduate Studies in Partial Fulfillment of the Requirements for the Degree Master of Arts

McMaster University MASTER OF ARTS (2012) Hamilton, Ontario (Philosophy)

TITLE: The Human Right to Water and Water Security

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NUMBER OF PAGES: vi, 108

ABSTRACT

In this thesis I argue that the utility of employing the human right to water within discussions of water security is intimately related to the population under consideration, such that its use can be more or less effective depending on *whose* water security one is considering. This is owed to the fact that employing the human right to water in discussions of water security is useful only in the case of states that are able to satisfy the conditions necessary for the successful implementation of the human right to water as a positive legal right: i) being possessed of adequate amounts of the resource in question, ii) being possessed of the political willingness to provide the resource, and iii) being possessed of the capacity, including the infrastructure, to supply the end user with the resource.

ACKNOWLEDGEMENTS

This thesis would not have been possible were it not for the support and dedication of my supervisors, Elisabeth and Adeel. I am truly indebted to you both.

Matt, your behind the scenes antics were a necessary prerequisite for my finishing this project. Thank you.

Kim and Daphne, you both fill University Hall with the warmth characteristic of a home. I will miss you both terribly.

To Anna and Sid, who were always there to remind me of the worth of my work.

To Terry and Richard, your excitement has never failed to inspire me.

And to mom and dad, I know you would both be proud.

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Introduction

If current rates of consumption persist, it is doubtful that the world's water, food, and energy needs can be satisfied into 2050.[1] Indeed, given population projections, the advance of climate change, and the increasing demands of developing nations, this may be an optimistic assessment. With this concern in mind, there has been a growing movement to recognize and attend to the existence of global insecurities concerning our vital resources.

In this vein, a body of scholarly literature has emerged regarding the idea of "water security". These contributions speak to the set of concerns that surround the depletion of freshwater supplies. However, at the same time, the legal and political discourse has come to admit of a "human right to water", that is meant to redress existing and emerging water inequities. It is important to note that, although the General Assembly Resolution (A/RES/64/292) referred to the human right to water and sanitation, this thesis will only be concerned with the aspect of the right that pertains to water.[2] Bearing this in mind, the conclusions reached as a result of this narrower study can be extended to the right to sanitation, as well. Now, despite the recent emergence of the idea of water security and the human right to water, there has been no sustained attempt to understand their relationship to each other. This is the task of the present work.

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[1] Holger Hoff. "Understanding the Nexus" Background Paper for the Bonn 2011 Conference: The Water, Energy and Food Security Nexus. (Stockholm, Stockholm Environment Institute, 2011): 4, www.water-energy-food.org/documents/understanding_the_nexus.pdf (accessed October 2012).

[2] United Nations General Assembly. *The Human Right to Water and Sanitation: Resolution.* Adopted 3 August 2010. A/RES/64/292. http://www.unhcr.org/refworld/docid/4cc926b02.html (accessed July 2012).

This thesis will begin with an attempt to set out and clarify the contours of the concept of water security. Its next move is to investigate the idea of the human right to water, with special attention being given to the question of whether such theoretical tools are actually capable of effecting meaningful change. With a clear understanding of water security, and a plausible account of the political effect of human rights, this essay will finally attempt to discern whether the human right to water is a useful tool in achieving water security and, if so, for whom.

Ultimately, it will argued that the utility of employing the human right to water within discussions of water security is intricately related to the population under consideration, such that its use can be more or less effective depending on *whose* water security is the subject of concern.

Chapter 1

Water Security: Origins and Contours

This chapter will proceed in three parts: 1.1) after examining the factors that inform the concept of water security, 1.2) a definition will be suggested that heeds the discourses' most important dimensions, and 1.3) it will be suggested that water security ought to, first and foremost, attend to the plight of the *bottom billion*[3]. These are the individuals living in countries that have failed to grow economically along with the rest of the world and who, as a result, continue to suffer the consequences of stagnated development: high infant and maternal mortality rates, chronic malnutrition, high unemployment rates and the absence of physical and technological infrastructure.

1.1 Water Security: A Concept's Evolution

In 2000, *The Hague Declaration on Water Security* approached its subject as a goal to be achieved in light of seven challenges: meeting basic needs, securing food supply, protecting ecosystems, sharing water resources, managing risks, valuing water, and governing water wisely.[4] For the purpose of meeting these challenges, the Declaration called for the need to enhance capacity through "knowledge dissemination…knowledge sharing between individuals, institutions and societies at all

[3] This use of this term mirrors Paul Collier's use of it in his book, *The Bottom Billion: Why the Poorest Countries are Failing and What Can be Done About it* (New York: Oxford University Press, 2007).

[4] World Water Council. Second World Water Forum, "Ministerial Declaration of the Hague on Water Security in the 21st Century," March 2000. http://www.idhc.org/esp/documents/Agua/Second_ World_Water_Forum%5B1%5D.pdf (accessed June 18, 2012).

appropriate levels."[5] This chapter, and more importantly, this thesis, is meant to contribute to this effort.

By delineating the concept and specifying its definition, I will, in later chapters, be able to draw out the implications of its relationship with the human right to water for the purpose of answering the following question: will declaring a human right to water help the global community achieve water security? But, before delving into a study of the concept of water security, it is important to first examine its relationship to two other areas under discussion within the water security literature: water stress and water scarcity.

1.1.1 Water Stress and Water Scarcity

The current demand for water has resulted in the need to talk in terms of classifications specific to the availability of water. The division between water stress and water scarcity is a product of this discussion. Importantly, the relationship between water stress and water scarcity is informed by a difference of degree in terms of water resources vulnerability.[6]

Primarily, water stress and water scarcity can occur at various levels of water supply and demand both across nations and sectors.[7] This entails that each one is a relative concept.[8] The problem that arises with respect to the use of these concepts, however, is the disagreement that permeates discussions about how they should be

[5] Ibid., 3.

[6] Amber Brown and Marty D. Matlock, "A Review of Water Scarcity Indices and Methodologies," *The Sustainability Consortium,* White Paper 106 (2011): 1, http://www.sustainabilityconsortium.org/wpcontent/themes/sustainability/assets/pdf/whitepapers/2011_Brown_Matlock_Water-Availability-Assessment-Indices-and-Methodologies-Lit-Review.pdf (accessed November 7, 2012).

[7] FAO, "Coping with water scarcity: Challenge for the Twenty-First Century," 4.

[8] Ibid.

measured and defined.[9] Until now, the four most popular classification schemes[10] have each been criticized for reasons pertaining to either their overt simplicity or daunting complexity.[11]

Despite the criticisms that have been mounted against it, the Falkenmark indicator will be employed here. This water stress indicator "defines water scarcity in terms of the total water resources that are available to the population of a region; measuring scarcity as the amount of renewable freshwater that is available for each person each year."[12] Using this indicator, a region experiencing water stress will be characterized by a per person allowance of between 1,700 and 1000 cubic meters of water per year.[13] To add some perspective, one Olympic size swimming pool contains roughly 2,500 cubic meters of water. Further, a region characterized by a per person allowance of less than 1000 cubic meters of water per year is classified as experiencing water scarcity, while those falling below an allowance of 500 cubic meters (or less) per person per year are said to be experiencing absolute water scarcity.[14]

It is crucial to note that each year the hydrological cycle recovers roughly 44,000 cubic kilometers of water, which is equivalent to 6,900 cubic meters of water per person

[9] Chris White. The Global Water Forum, "Understanding Water Scarcity: Definitions and Measurements." Last modified 2012. Accessed June 2012. http://www.globalwaterforum.org/2012/05/07/understanding-water-scarcity-definitions-and-measurements/.

[10] 1) the Falkenmark indicator, otherwise known as the water stress indicator; 2) the criticality ratio; 3) the water scarcity index proffered by the International Water Management Institute (IWMI), and 4) the water poverty index.

[11] White, "Understanding water scarcity: Definitions and measurements."

[12] Ibid., 2.

[13] United Nations Development Programme (UNDP). Human Development Report 2006*, Beyond Scarcity: Power, Poverty, and the Global Water Crisis* (New York: Palgrave Macmillan, 2006): 137. http://hdr.undp.org/en/media/HDR06-complete.pdf (accessed May 2012).

[14] Ibid.

per year.[15] Given these figures, the issue in the forefront of the water crisis does not pertain to whether there is enough water to go around. Rather, given its uneven geographical distribution, the effects of poor industry practices, population growth, the growth of slums, desertification, and climate change, the issue is that there are immense disparities across lives with respect to water availability, understood as annually renewable water resources:

> Latin America has 12 times more water per person than South Asia. Some places, such as Brazil and Canada, get far more water than they can use; others, such as countries in the Middle East, get much less than they need. Water-stressed Yemen (198 cubic metres per person) is not helped by Canada's overabundance of fresh water (90,000 cubic metres per person). And water-stressed regions in China and India are not relieved by Iceland's water availability of more than 300 times the 1,700 cubic metre threshold.[16]

It should be noted that this thesis does not touch upon considerations of population management and its relationship to water equity. As a result, the conclusions reached are informed by an assumption concerning a growing global population given the current geographic distribution of individuals.

Now, the discrepancies between the rich and the poor within water stressed and water scarce regions are even more striking than the water inequities across nations highlighted above. For instance, "[r]esidents of the prosperous Parklands district in Nairobi receive water 24 hours a day. Residents of the Kibera slums [also in Nairobi] are forced to spend an average of more than two hours a day waiting for water at standpipes

[15] UNDP, "Human Development Report 2006, Beyond Scarcity", 134.
[16] Ibid., 135.

that function for 4–5 hours a day or less."[17] Differences like these reveal the intricacies of evaluating water stress and water scarcity in particular regions. And this, in turn, helps to explain why many of the available definitions, measurements, and indicators of water stress and scarcity have fallen under criticism for advancing distorted perceptions of life as it relates to available water supply in these regions.

Moreover, it is important to note that water scarcity can be talked about in terms of physical water scarcity and economic water scarcity. Physical water scarcity describes a situation in which water demand in all sectors has outstripped supply.[18] Economic water scarcity refers to the absence of the requisite financial and infrastructural resources necessary for providing individuals with treated, potable water.[19]

Ultimately, whereas water stress and water scarcity provide ways of classifying states of affairs as they pertain to water availability, water security is a goal to be achieved in light of the circumstances described by these indicators.

1.2 Water Security in the Literature

Globally, growing water stress has led to the development of the concept of *water security.* In her paper, "Water Security: Global, Regional, and Local Challenges", Patricia Wouters cites the three most common understandings of this notion:

1. A safe water supply and sanitation, water for food production, hydro-solidarity between those living upstream and those living downstream in a river basin, and water pollution avoidance so that the water in aquifers and rivers remains useable – that is, not too polluted for use for water supply, industrial production,

[17] Ibid., 53.
[18] The Water Project, "Two types of Water Scarcity", accessed June 13 2012, [available: http://thewaterproject.org/water_scarcity_2.asp#phys]
[19] Ibid.

agricultural use of the protection of biodiversity, wetlands, and aquatic systems in rivers and coastal waters.[20]

2. Adequate protection from water-related disasters and diseases and access to sufficient quantity and quality of water, at affordable cost, to meet the basic food, energy and other requirements essential for leading a healthy and productive without compromising the sustainability of vital ecosystems.[21]
3. The reliable availability of an acceptable quantity and quality of water for health, livelihoods and production, coupled with an acceptable level of water-related risks.[22]

This array of definitions showcases water security as a complex concept, informed by a diverse set of international, human, environmental, economic, and political security concerns: *international*, insofar as there exists the potential for transboundary conflicts over water resources; *human,* given the importance of water resources in safeguarding human dignity[23]; *environmental*, due to the role water maintains in the health of ecosystems[24]; *economic,* owing to the status of water as a commercial good, a public service and a public trust[25], and *political*, as a result of the initiatives that must be undertaken by national governments and sub-national groups in order to ensure the development and management of water treatment facilities. It is important to note, however, that UNDP's focus on human dignity does not supersede a concern for human

[20] Patricia Wouters, "Water Security: Global, Regional and Local Challenges," *Institute for Public Policy and Research* (2010): 7, http://www.academia.edu/558169/Water_Security_-_Global_Regional_and_Local_Challenges (accessed November 2011).

[21] Ibid.

[22] Ibid.

[23] *Human security* is a concept concerned with safeguarding the dignity of human life. United Nations Development Programme (UNDP). Human Development Report, *New Dimensions of Human Security* (New York: Oxford University Press, 1994): 22. http://hdr.undp.org/en/reports/global/hdr1994/chapters/ (accessed May 2012).

[24] *Environmental security*, moreover, is a concept that pertains to ecological integrity and the need to prevent the degradation of natural processes. Michael Renner, "Introduction to the Concepts of Environmental Security and Environmental Conflict," in *Inventory of Environmental and Security Policies and Practices*, Ronald A. Kingham (ed.), (The Hague: Institute for Environmental Security, 2006) www.envirosecurity.org/ges/inventory/IESPP_I-C_Introduction.pdf (accessed June 2012), 1-16.

[25] Maude Barlow, *Blue Covenant: The Global Water Crisis and the Coming Battle for the Right to Water* (Toronto: McClelland and Stewart, 2007).

life, health, and wellbeing. Rather, human dignity is an umbrella concept that includes these concerns, as well. Nevertheless, with all of this in mind, water security is best understood as a new dimension of already existent security discourses.

Given its wide-ranging relevance, one could take many stances with respect to what the proper definition of water security *should* be. For instance, should its definition reflect a tighter conceptual bond with the established concept of human security? This decision would place the protection of human dignity at the concept's core. Or, should its definition relate more intricately to the concept of environmental security? This maneuver would translate water security into an issue of ecological integrity. Perhaps, a system of conceptions should be endorsed, within which water security could be spoken about in terms of its various contexts: *human water security, environmental water security, agricultural water security, industrial water security, political water security,* and *economic water security*?

Despite any ostensible merit, none of these choices provides for a satisfactory account of the concept. On the one hand, those who would like to maintain that water security is essentially an issue of human security fail to respect the primacy of the hydrologic cycle and its role in ensuring the sustained availability of water in the environment. Those who would like to maintain that water security is fundamentally an environmental concern, on the other, face hostility from those who believe that environmental considerations could be adequately accounted for by an anthropocentric focus that is more easily taken up within a policy context.[26] Moreover, not only would

[26] Personal communication with Dr. Zafar Adeel, UNU-INWEH.

endorsing a system of conceptions potentially hinder the possibility of constructive policy dialogue across sectors, but this approach could also lend the concept of water security to overuse. This is because such a system of conceptions would require a definition of water security broad enough to allow for its applicability within the above-mentioned contexts – a strategy which would be unable to exclude the possibility of the concept's applicability within *any* and *all* contexts.

Taking all of this into account, the definition of water security *should* be able to appease the human rights advocate as well as the ecologist. It *should* be able to account for the various discourses that inform it, without simply being put forward as a composite of conceptions. And, given the diverse states of affairs that characterize the individual lives of the global human community, it *should* be able to address the relevant factors particular to life in any region. The primary reason underlying the endorsement of a concept that establishes such a common ground is to make it easier for everyone to speak the same language. The increasing need to speak in familiar terms is best exemplified by the gap between policy and the specialized knowledge that informs it. The likelihood of speaking past one another is magnified in the absence of a shared understanding of the issues and the goals to be achieved. For this reason, the concept of water security is an attempt to speak to such a common understanding. In turn, accounting for all of these elements is the task of the next section.

1.2.1 Water Security Defined

In this section, I suggest the following definition of *water security*: *the realization of the conditions for the individual experience of assured access to safe water.* Through

an examination of its constituent parts: a) *the realization of the conditions for;* b) *the individual experience;* c) *assured access;* d) *safe water,* this section will show that the strength of this overall definition is derived from an ability to balance the most pressing concerns of water security discourse.

a) *The realization of the conditions for*

In addition to the geological and sociopolitical realities of life in various nation-states, the conditions necessary for guaranteeing water security will vary according to the development status of the region in question. For instance, ensuring water security for developing (or developed) landlocked regions will require policy makers to address a particular set of conditions, some of which will be less important when addressing water security in developed (or developing) coastal areas. Most simply, the achievement of water security in the Horn of Africa will require meeting a set of preconditions distinct from those that need to be met for water security in Cuba, or Switzerland.

Above, it was mentioned that water security is a complex concept, informed by a diverse set of international, human, environmental, economic, and political security concerns. Of relevance here is the fact that water security will sometimes be a matter of addressing, or balancing, one set of these concerns over or against another set. The definition of water security has to strategically leave room for these actualities. And, moreover, it has to provide a way for officials to assign a greater weight to the most pressing concerns given the challenges facing a particular region. Hence, the definition's reference to 'the realization of the conditions for' grants the concept a level of flexibility that will enable it to function meaningfully within a variety of contexts.

b) *The individual experience*

In this section I will suggest that the individual, as opposed to the polity, is the proper unit of concern for water security. By appealing to the work of Martha Nussbaum and the recent wave of literature concerning the Responsibility to Protect (R2P), I will show that the recent preoccupation with individual interests in the academic and in the international arena ought to be carried over to the realm of to water security, as well. The appeal to the Capabilities Approach (CA) and the R2P serve as examples of the work that has already been done to support a focus on the individual.

In her book, *Women and Human Development: The Capabilities Approach*, Martha Nussbaum draws attention to how the most common approaches to quality of life assessments in the international arena are unable to provide reliable evaluations of individual wellbeing. According to Nussbaum, these approaches place an emphasis on average utility that undermines the separateness of persons, which works to distort the analyses of persons' quality of life in particular areas. With this in mind, understanding why the individual should be the proper subject of concern for water security becomes easier once the problems associated with aggregate data are examined.

First of all, Nussbaum highlights the greatest pitfall of average utility calculations: that quality of life assessments which are based on the majority of lives are unable to speak for the lives of a potentially destitute minority – "[h]ere again, we run into the problem of respect for the separate person – for an aggregate figure doesn't tell us where

the top and the bottom are."[27] This is true of any utilitarian calculus, since it will always take the happiness of the majority as its goal – and of quality of life assessments, like Gross National Product (GNP) per capita.

In spite of its seemingly helpful character, GNP per capita fails to account for the distribution of wealth within a country.[28] For, the resultant figure could predominantly reflect that affluence of a dominant few, making it appear as though the quality of life within a country is higher than it is in actuality. Moreover, GNP per capita cannot incorporate goods that are not correlated with income, such as educational and employment opportunities, and political liberties – "[c]ountries that do very well on GNP per capita have often done egregiously badly on one of these other distinct goods: think of South Africa under apartheid, or Singapore under its extremely constraining political regime."[29]

In an effort to call attention to this deficit, Nussbaum argues in favour of the CA. The CA contends that there is a correlation between the nature and breadth of the opportunities available to particular populations and the quality of life of these populations. By inquiring into the actual 'beings and doings' of individuals, the CA strives to establish whether people are thriving in a fully human way, and more importantly, whether they have been given the opportunities to thrive in a fully human way.[30]

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[27] Martha C. Nussbaum, *Women and Human Development: The Capabilities Approach* (Cambridge: Cambridge University Press, 2000), 61.

[28] Ibid., 60.

[29] Ibid., 61.

[30] Ibid., 84.

Nussbaum's CA helps to support my suggestion that the individual should be considered the proper subject of water security because of the support it finds in the *principle of each person's capability*. This principle states that, "the capabilities we strive for should be understood to be valuable for each and every person, and that it is the capability of each that we should consider, when we ask how nations are doing."[31] This means that, if one wants to know about how nations are doing, one must ask the separate question about how individuals are doing. To do otherwise would be to i) distort the quality of life of the nation under assessment, ii) alter the global perception of that community, and iii) disregard the suffering of the most disadvantaged members of that society by using methods designed to exclude them as outliers.

Given *the principle of each person's capability*, water security should be concerned with whether individuals are thriving in a fully human way. It should be concerned about what individuals actually have the opportunity to do and to be – if just from the fact that water grounds the very opportunity for life. Are young girls able to go to school and become influential figures in their communities? Or, is their time consumed with providing the family water supply? Are the young and the old alike even afforded the opportunity for good health? Or, is good health predominant among the wealthiest of society? Neglecting to inquire about the individual lives is to equivalently disrespect the human dignity that they possess – "that is the core of what exploitation is…to foster a good for society considered as an organic whole, where this does not involve fostering the

[31] Ibid., 12.

good of persons taken one by one."[32] This failure could itself be interpreted as a threat to human security.

The *principle of each person's capability*, further, can inform the basis of an indicator for a new kind of quality of life assessment in the international arena. Such an indicator would be able to numerically assign values according to the range of opportunities both open to and seized by individuals of different communities.

Next, the R2P has been advanced as "a new international security and human rights norm to address the international community's failure to prevent and stop genocides, war crimes, ethnic cleansing and crimes against humanity."[33] Although, for fear of overuse, it has been made clear that the R2P cannot be invoked for any purpose outside of the four mentioned above,[34] R2P is noteworthy for the fact that it places more normative emphasis upon the protection of individual interests than it does on state sovereignty.

Traditionally the idea of sovereignty has been associated with the possession of "supreme authority within a territory."[35] And, since the Peace of Westphalia in 1648, it has been further identified with the assurance of non-interference. This powerful conceptual combination nurtured the understanding that sovereignty entails "absolute

[32] Ibid., 74.

[33] International Coalition for the Responsibility to Protect (ICRtoP), "The Responsibility to Protect", http://www.responsibilitytoprotect.org/ (accessed June 14 2012).

[34] United Nations General Assembly. *Implementing the Responsibility to Protect, Report of the Secretary General.* 12 January 2009. A/63/677. http://www.unhcr.org/refworld/docid/4989924d2.html (accessed June 2012): Section 10b, p. 8.

[35] Dan Philpott. "Sovereignty" *The Stanford Encyclopedia of Philosophy (Summer 2010 Edition)*, ed. Edward N. Zalta. http://plato.stanford.edu/archives/sum2010/entries/sovereignty/ (accessed June 16 2012).

power within a community, absolute independence externally, and full power as a legal person in international law."[36]

In response to the atrocities of the twentieth century, the international community has come to assert the non-absolute nature of sovereignty – that is, it has moved to treat sovereignty such that it could no longer be expected to extend unconditionally to all state matters.[37] The R2P represents the culmination of this movement in the international arena. The seeds of the R2P are found in the following two paragraphs from the 2005 World Summit Outcome:[38]

> 138. Each individual State has the responsibility to protect its populations from genocide, war crimes, ethnic cleansing and crimes against humanity. This responsibility entails the prevention of such crimes, including their incitement, through appropriate and necessary means. We accept that responsibility and will act in accordance with it. The international community should, as appropriate, encourage and help States to exercise this responsibility and support the United Nations in establishing an early warning capability.
> 139. The international community, through the United Nations, also has the responsibility to use appropriate diplomatic, humanitarian and other peaceful means, in accordance with Chapters VI and VIII of the Charter, to help to protect populations from genocide, war crimes, ethnic cleansing and crimes against humanity. In this context, we are prepared to take collective action, in a timely and decisive manner, through the Security Council…We also intend to commit ourselves, as necessary and appropriate, to helping States build capacity to protect their populations from genocide, war crimes, ethnic cleansing and crimes against humanity and to assisting those which are under stress before crises and conflicts break out.

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[36] Timothy Endicott. "The Logic and Freedom of Power" in *The Philosophy of International Law*, Samantha Besson and John Tasioulas (eds.), (New York: Oxford University Press, 2010), 245.

[37] Ibid.

[38] U.N. General Assembly, 63rd Session. *Implementing the Responsibility to Protect, Report of the Secretary General* (A/63/677). 12 January 2009. Section 1.

More specifically, the R2P is derived from Francis Deng's conception of sovereignty as responsibility which bestows upon states the right to non-interference if and only if they have met the basic needs of the body politic.[39] That being said, if these obligations are left unfulfilled, the international community has a rightful claim to interfere for the purpose of either hindering state misconduct, or for the purpose of assisting the state in the achievement of its protection responsibilities through capacity building.[40] Thus, within the R2P framework, responsiveness to basic needs informs the basis of legitimate authority.[41]

It is important to remember that the state grants an individual a political identity, but a person's identity is first and foremost derived from their status as a human being – a being who belongs to a broader community not subject to division by territorial boundaries. The R2P supports my decision to denote the individual as the proper unit of concern for water security because of its ability to remind us of this broader membership – a membership, moreover, that has the ability to generate a form of solidarity that is willing to respond when the organs of the state have proven themselves unresponsive.

Lastly, R2P has another application with respect to its potential role in the allocation of trans-boundary water resources. For, the appeal to a human community not subject to division by territorial boundaries provides a different perspective from which to understand water sharing. In the same way, human rights provide a way of understanding

[39] Francis M. Deng, Sadikiel Kimaro, Terrence Lyons, Donald Rothchild, and I. William Zartman. *Sovereignty As Responsibility: Conflict Management in Africa* (Harrisonburg: R.R. Donnelley and Sons Co., 1996).

[40] Ibid., xviii.

[41] Ibid., xvii.

distribution in terms of a fundamental equity that cannot be manipulated by borders, religious or state politics, or money.

c) *Assured Access*

In an earlier paper[42] Pat Wouters defined water security as a concept that pertains to "the state of having secure access to water; the assured freedom from poverty of, or want for, water for life."[43] The use of the word 'assured' in this excerpt and in the definition of water security presented in this section should be interpreted as the psychological experience of a guarantee – a guarantee that offers freedom from fear and uncertainty by not only having enough 'water for life', but also, i) having enough safe water for a healthy life, ii) the experience of reliable partnerships, iii) and the confidence imbued by the knowledge that one's community is prepared for, and moreover, has the capacity to respond to, extreme events.

i) The situation facing the Palestinian Authority illustrates a case in which there is (among other things) a lack of access to water resources. For, despite the 1995 Oslo II Agreement, otherwise known as *The Israeli-Palestinian Interim Agreement*, which recognized the Palestinian right to water and delineated the allowable aquifer extraction quantities for both territories, Palestinians continue to struggle with water shortage as a result of Israel's exploitation of the three aquifers that underlie both territories.[44] French

[42] Pat Wouters. "Water Security: What Role for International Water Law?" chap. 13 in *Human and Environmental Security: An Agenda for Change*, ed. Felix Dodds and Tim Pippard (London: Earthscan, 2005) http://www.academia.edu/461570/Water_Security_What_Role_for_International_Water_Law (accessed December 2011).

[43] Wouters, "Water Security: What Role for International Water Law?", 168.

[44] Marwan A. Hassan et al., "Palestinian Water I: Resources, Allocation and Perception"

Parliamentary MP Jean Glavany has likened the situation in the West Bank to 'water apartheid', while others[45] have compared it to a form of ethnic cleansing for the purpose of replacing "one population with another."[46] The fear and uncertainty surrounding the acquisition of water is further illustrated in the following account of life in the Gaza Strip:

> Here in Palestine water is like medicine: you need it, but it has side effects. In the Gaza Strip, water ffects your skin and hair when you have a shower, your eyes when you wash, and your kidneys when you drink it – and that's just the effects I know about.[47]

Although the political causes of the water crisis facing Palestinians are distinct, this situation provides a powerful example of the barriers to acquisition that water security should strive to combat.

ii) Just as importantly, water security must be concerned with the anxiety that attends the lack of reliability of those in positions of power who purport to be able to provide access to water. To more clearly elucidate this point, it is worth recounting an experience of my trip to Africa with the Water Without Borders group, in February 2012.[48] Once in Kenya, we travelled to Usoma Village, where a local Coca Cola plant had entered into an agreement with the community to provide free clean water from a tap just outside the plant compound. Despite the agreement, the plant unexpectedly shut down the tap for roughly three weeks earlier in the year, thereby cutting off the promised water

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Geography Compass 4.2 (2010): 120, DOI: 10.1111/j.1749-8198.2009.00293.x (accessed May 2012).

[45] Ben Ehrenreich, "Drip, Jordan: Israel's Water War with Palestine" in *Harper's Mazagine*, (December 2011), 52 – 61.

[46] Mark Zeitoun, "Bitter Harvest," in *Water Around the Mediterranean*, ed. Francesca de Chatel and Stuart Reigeluth (Belgium: Creative Commons, 2012), 26.

[47] Mohammed Shehada, "A Gaza Water Diary," in *Water Around the Mediterranean*, ed. Francesca de Chatel and Stuart Reigeluth (Belgium: Creative Commons, 2012), 53 – 57.

[48] The Water Without Borders program is an interdisciplinary graduate program between McMaster University and the United Nations University – Institute for Water, Environment and Health (UNU-INWEH).

supply. During this period, Coca Cola neither offered an explanation for the shut off, nor did it provide any information as to when the tap would be turned back on. No other improved source was offered in its place. As a consequence, the community had to revert back to using untreated water from Lake Victoria.[49] It was reported that the sense of uncertainty that pervaded the community for that three-week period lingered even after the tap was turned back on.

In this exchange, Coca Cola proved itself an unreliable resource, and the consequence of its failure is the doubt that will continue to occupy the minds of each person who approaches the tap with the expectation of having clean water pour out. This is the type of anxiety that, especially given the vulnerable nature of the population, should not be considered distinct from the discourse on water security.

iii) Lastly, the use of the word 'assured' should also concern the confidence that is produced by the understanding that one's community has employed the knowledge to minimize the threat of an extreme event. The Indian Ocean earthquake and resulting tsunami that hit India, Indonesia, Malaysia, the Maldives, Myanmar, Somalia, Sri Lanka, and Thailand in December 2004 presents the global community with a case study in the importance of emergency preparedness. The deleterious effects on local and regional water supplies required an integrated response from international relief organizations.

But, it is my contention that many of these negative effects could have been mitigated from within the affected communities, given the prior dissemination of the requisite knowledge and resources. In order to show how this could have been the case,

[49] One of the largest freshwater lakes in the world, Lake Victoria is also one of the most polluted lakes in the world.

one need only examine the nature of the four most pronounced effects of the Indian Ocean Tsunami on drinking water supplies:[50]

> 1) In those areas hit hardest by the impact of breaking waves, many of the supply and distribution systems, regardless of their type, were completely destroyed or otherwise rendered inoperable;
> 2) In other areas, where the impact was less forceful, rising waters inundated surface sources and unprotected wells with seawater, sand, debris and, in many cases, faecal matter from coastal areas where open defecation was common and sanitation facilities were largely unimproved;
> 3) Even protected sources such as shallow wells, many of which had high levels of salinity before the tsunami, underwent subsurface saline water intrusion, raising the saline level to a point that rendered them unfit for human consumption;
> 4) Wells and other sources of supply that did survive the tsunami itself were often used at rates beyond safe recharge. In some cases, excess use may have increased saline water intrusion, resulting in water that was no longer potable.

With regard to effect (1), mangroves have been proven to protect coastlines from severe weather events. Moreover, effects (2) and (3) could have been prevented, since the weakness of shallow and unprotected wells are well known. Further, effect (4) was made worse by the unsustainable practices employed in the time leading up to the tsunami.

With the nature of these effects in mind, if community practices had been informed by educational programs on the interrelationships between water, water storage, human health, and the environment, many of the water challenges the affected communities still face today[51] could have been mitigated. Given this understanding,

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[50] Thomas Clasen, Lucy Smith, Jeff Albert, Andrew Bastables, and Jean-Francois Fesselet. "The Drinking Water Response to the Indian Ocean Tsunami, Including the Role of Household Water Treatment." *Disaster Prevention and Management*. 15.1 (2006): 192, DOI: 10.1108/09653560610654338 (accessed August 2012) – *numeration added.*

[51] Such as the saline water intrusion that occurred in response to the over extraction of freshwater from aquifers in the aftermath of the tsunami, and the faecal contamination from the practice of

issues of emergency preparedness should not be considered separate from the domain of water security.

d) *Safe Water*

One of the conclusions drawn from the Marcelino Botin Water Forum of 2004 spoke to the fact that physical water scarcity was not the underlying cause of the world's water crisis.[52] Instead, "poor water resources governance" – understood as the general mismanagement of all water resources – was blamed for the world's water woes.[53] The 2006 Human Development Report further strengthened this conclusion.[54] Now, less than a decade later, the landscape of the water crisis has further eroded to include the issue of compromised freshwater resources.[55] This section will put forward a specific addition to the definition of water security based on the current state of freshwater resources.

Freshwater makes up roughly 3% of the global water supply, but only 0.5% of this resource is readily available for human use.[56] This is the water contained in aquifers, rainfall, lakes, reservoirs, and rivers. However, rising contaminate levels in run off from cities, agriculture and other industry, have compromised the quality of available freshwater resources to the point where it requires (in most cases) extensive treatment. The search for uncontaminated freshwater, in turn, has led to the over extraction of non-

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open defecation.

[52] Peter P. Rogers, M. Ramon Llamas and Luis Martinez-Cortina. *Water Crisis: Myth or Reality?* Marcelino Botin Water Forum 2004 (London: Taylor and Francis, 2006). www.fundacionbotin.org/file/10647/ (accessed November 2011).

[53] Rogers, Llamas and Martinez-Cortina, *Water Crisis: Myth or Reality?*, VIII.

[54] UNDP, *Human Development Report 2006*, v.

[55] Barlow, *Blue Covenant,* 2 – 6.

[56] Al Fry, "Facts and Trends," World Business Council for Sustainable Development (2006): 1, http://www.unwater.org/downloads/Water_facts_and_trends.pdf (accessed May 2012).

renewable groundwater resources, like aquifers.

As mentioned earlier in the chapter, the point at issue is not that we might run out of water *as such*, since the hydrologic cycle ensures the continuous recycling of water both on, and to a lesser extent, beneath the earth's surface. Rather, the point at issue concerns the availability of *safe* water. The World Health Organization (WHO) defines safe water as water that "does not represent any significant risk to health over a lifetime of consumption, including sensitivities that may occur between life stages."[57]

In keeping with the focus on safe water above, a recent report released by the Pacific Institute for Studies in Development, Environment, and Security reiterated the importance of understanding the water crisis in terms of water quality, as opposed to quantity.[58] Years before, a report released by the Food and Agriculture Organization of the United Nations (FAO) on behalf of UN-Water in 2007 highlighted the need to understand the causal relationship between water quality and water scarcity, and the effects this interpretation would have on water scarcity indices.[59]

However, safe water is increasingly available only through improved sources[60], which have themselves been the subject of controversy over the fact that some 'improved

[57] World Health Organization (WHO). *General Guidelines for Drinking-Water Quality,* Fourth Edition (2011): 1, http://www.who.int/water_sanitation_health/publications/2011/dwq_chapters/en/index.html (accessed November 2012).

[58] Meena Palaiappan, Peter H. Gleick, Lucy Allen, Michael J. Cohen, Juliet Christian-Smith, and Courtney Smith, "Water Quality," chap. 3 in *The Worlds Water: The Biennial Report on Freshwater Resources (Volume 7),* ed. Peter H. Gleick (Pacific Institute for Studies in Development, Environment, and Security: Island Press, 2011): 45, DOI: 10.1007/978-1-59726-228-6 (accessed June 2012).

[59] Food and Agriculture Organization of the United Nations (FAO). "Coping with water scarcity: Challenge for the Twenty-First Century," March 22 2007: 10, http://www.fao.org/nr/water/docs/escarcity.pdf (accessed May 2012).

[60] "Household connection, public standpipe, borehole, protected dug well, protected spring, rainwater." Source: World Health Organization. Water Sanitation and Health. "What does sustainable

sources' provide water that is not conducive to good health. This is because an improved source is defined as any source that, "through technological intervention, increases the likelihood that it provides safe water."[61] And, the fact that an improved source *increases the likelihood* of safe water, does not meant that it *actually* is able to provide water of acceptable quality for health.

Nevertheless, increasing the prevalence of improved water sources is still the predominant strategy for provisioning water of a minimum quality. And, importantly, improved water sources are a by-product of good water governance. Consequently, while the object of concern has shifted since the Marcelino Botin Water Forum of 2004, the relevance and importance of its conclusions have not.

Now, before this section of chapter one comes to a close, the significance of a particular set of interdependencies must be addressed. This is owed to the fact that delineating the limits of the relationship between the human right to water and water security is more pressing given the broader interrelationships between water, food, and energy security.

1.2.2 The Water, Energy and Food Security Nexus

The achievement of water security cannot be talked about in isolation from food and energy security. This is because these three spheres form an interdependent system

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access to safe drinking water and basic sanitation mean?" WHO, 2012. http://www.who.int/water_sanitation_health/mdg1 /en/index.html (accessed October 2012).

[61] UNICEF and World Health Organization Joint Monitoring Programme on Water Supply and Sanitation, "Progress on Drinking Water and Sanitation: 2012 Update*"* UNICEF/WHO (2012): 5, http://www.unicef.org/media/files/JMPreport2012.pdf (accessed May 2012).

based on the shared need for certain increasingly scarce resources (e.g., freshwater, oil, biofuel). Currently, the demand for these resources continues to outstrip supply across all three of these sectors. This, in turn, has raised concern over the prospect of satisfying water, food, and energy needs into 2050.[62]

Many of the factors that were mentioned above as elements influencing freshwater availability, such as climate change and rapid population growth, have also contributed to this degenerative backslide across sectors. Nevertheless, given each sector's shared demand for large amounts of these resources, the need for innovative management solutions as they apply to these three sectors as a whole, has made itself apparent.[63] The nexus approach has been advanced for specifically this purpose.[64]

Without delving into the specifics of the nexus approach or its connection to the Green Economy, the take-home insight here is simply that the relationship between the human right to water and water security can be more broadly construed as a step toward establishing the utility of human rights based approaches as they are employed to address global security issues. Bearing this connection in mind, the nature of the relationship between the human right to water and water security will have implications for food and energy security, as well.

[62] Hoff, "Understanding the Nexus", 4.
[63] Ibid., 7.
[64] Ibid.

Concluding Remarks: Section 1 and 2

In the first section of this chapter, I advanced an understanding of water security as *the realization of the conditions for the individual experience of assured access to safe water*. This was done in order to account for the most important dimensions of water security discourse. In formulating the definition this way, more weight was given to human security concerns than to any other security discourse. However, implicit in the definition are the considerations of these other discourses, which can only be given their appropriate weight after the particularities of specific context are understood. In the coming section, I will make a policy suggestion that is derived from a moral imperative.

1.3 Water Security: A Policy Perspective

The definition of water security advanced in section 1 of this chapter as: *the realization of the conditions for the individual experience of assured access to safe water* – should, without further qualification with respect to whose water security one ought to be most concerned with, be considered incomplete. In its current formulation it is unable to discriminate between individual lives for the purpose of addressing the needs of some above others. In this section, it will be suggested that water security ought to make addressing the plight of the most disadvantaged members of the global community a priority. The need to give priority to the worst off, further, is made more pressing in light of the interdependencies between water, food, and energy security.

1.3.1 The Bottom Billion

The Millennium Development Goals (MDGs) were aims acceded to by world leaders at the *Millennium Summit* in 2000 for the purpose of broadly addressing the greatest challenges facing the global community. Each main goal is comprised of subsidiary targets and indicators, which assist in the monitoring of goal progress. According to the Joint Monitoring Programme (JMP) for Water Supply and Sanitation, the MDG drinking water target (target 7.8.C), which set out to *reduce by half the proportion of people without sustainable access to safe drinking water,*[65] was achieved in 2010 – "over 2 billion people gained access to improved water sources."[66] Recently, however, the claimed 'achievement' of this goal has been contested.

Nevertheless, despite the undeniable success of this achievement, the drinking water target only set out to *halve* the proportion of people without access to safe water, which in turn left scores of people unaccounted for since 2010, "[o]ver 780 million people are still without access to improved sources of drinking water."[67] And, this is actually an underestimate. What is more, those left unaccounted for – the upwards of 780 million people this thesis will refer to as the bottom billion – are the poorest residents of the most impoverished regions of the world: the Middle East, Sub-Saharan Africa, Oceania, South Asia and South-Eastern Asia. As such, one is left having to accept two (rather incongruous) characteristics of the current water security landscape: i) the MDG drinking water target has been 'achieved', and ii) the most disadvantaged continue to thirst for

[65] UNDP. MDG Monitor, "Tracking the Millennium Development Goals," UNDP (2007). http://www.mdgmonitor.org/goal7.cfm (accessed May 29, 2012).
[66] UNICEF/WHO, *Progress on Drinking Water and Sanitation: 2012 Update*, 2.
[67] Ibid.

improved water sources at the expense of their health and wellbeing. Consequently, there is something especially troublesome about the 'achievement' of the drinking water target, since it seems that the worst off have not benefited from the policy and development initiatives that followed as a result of the race to achieve the MDGs.

As is evidenced by the literature on MDG progress, the United Nations is sensitive to this tension, recognizing it with respect to a number of different MDGs and their targets. In fact, an MDG progress report released in 2011 lamented the failure to have adequately addressed the needs of the worst off, with respect to many of the targets that underpin each goal. This is the case for the hunger target (target 1.C), which set out to *halve, between 1990 and 2015, the proportion of people who suffer from hunger,*[68]

> The poorest children are making the slowest progress in reducing underweight prevalence. In Southern Asia, for example, there was no meaningful improvement among children in the poorest households in the period between 1995 and 2009, while underweight prevalence among children from the richest 20 percent of households decreased by almost a third.[69]

This is also the case for the under five mortality target (target 4.A), which set out to *reduce by two thirds, between 1990 and 2015, the under five mortality rate,*[70]

> Though important gains have been made, the poorest, most marginalized children, especially in hard-to-reach areas, have been left behind…reinvigorated and sustained efforts are needed to consistently improve access to the most vulnerable, through

[68] UNDP. MDG Monitor, "Tracking the Millennium Development Goals," UNDP (2007). http://www.mdgmonitor.org/goal1.cfm (accessed May 29, 2012).

[69] United Nations Department of Economic and Social Affairs, "The Millennium Development Goals Report 2011," Statistics Division UN DESA (2011): 14. http://www.un.org/millenniumgoals/pdf/(2011_E)%20MDG%20Report%202011_Book%20LR.pdf (accessed May 2012).

[70] UNDP. MDG Monitor, "Tracking the Millennium Development Goals," UNDP (2007). http://www.mdgmonitor.org/goal4.cfm (accessed May 29, 2012).

> both routine immunization and campaigns.[71]

The sanitation target (7.9.C), which has been advanced in combination with the drinking water target (target 7.8.C), further echoes the same disparity,

> An analysis of trends over the period 1995-2008 for three countries in Southern Asia shows that improvements in sanitation have disproportionately benefited the wealthy. Sanitation coverage for the poorest 40 per cent of households has hardly increased, and four out of five people in the bottom two quintiles continue to practise open defecation.[72]

These failures are, moreover, both correlated with and exacerbated by the continued rise of slums in the poorest, least developed countries (LDCs),

> In 2010, the highest prevalence of slum conditions was found in sub-Saharan Africa. There, 62 per cent of the urban population were sheltered in slums, followed by Southern Asia (35 per cent) and South-Eastern Asia (31 per cent). Particularly critical is the situation in conflict-affected countries, where the proportion of urban populations living in slums increased from 64 per cent in 1990 to 77 per cent in 2010.[73]

What's more, the disquieting nature of these findings has been magnified by the fact that the pace of official development assistance (ODA) is expected to decline in the coming years.[74] And, even though, the MDG progress report forecasts that ODA will increasingly be concentrated within the LDCs,[75] there is, to-date, no progress to report with respect to target 8.B meant to *address the special needs of the least developed countries*.[76]

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[71] UN DESA, "The Millennium Development Goals Report 2011," 27.
[72] Ibid., 56.
[73] Ibid., 57.
[74] Ibid.,60.
[75] Ibid.
[76] UNDP. MDG Monitor, "Tracking the Millennium Development Goals," UNDP (2007). http://www.mdgmonitor.org/goal8.cfm (accessed May 29, 2012).

The disquiet experienced as a result of the disparities cited above serves to reinforce the strong moral impulse to associate the success in international development with making the lives of the worst off better. It is this moral impulse that ought to be fostered with regard to water security. But, before a stronger justification can be advanced for why this ought to be the case, more needs be said about the intuition that underlies this impulse. And, for this we turn to Derek Parfit's theory of prioritarianism.

1.3.2 Egalitarianism and Prioritarianism: Background [77]

Prioritarianism is an ethical theory that stems from egalitarian notions of morality. Derek Parfit first introduced the *priority view* in his essay *Equality or Priority?*[78] Contained within the pages of that work is Parfit's conviction that by advancing equality as an intrinsic good – which involves a focus on the relations between lives – egalitarianism fails to address the troublesome nature of inequality as a non-relational quality. This second question is, in his opinion, one of greater moral significance.

For this reason, prioritarianism is not concerned with a person's relative standing, that one is "worse off than *others*" – but rather, it is concerned with how well off a person is in comparison to how well off he might have been.[79] That is, prioritarians are concerned with *absolute* levels of wellbeing, such that it would be just as important to benefit certain individuals even if others who were better off did not exist, "the [priority]

[77] The background theory provided in this section is from a paper I submitted to Dr. Vorobej for Philosophy 4B03 in the spring of 2010. I am pleased that this work has been able to find a new context.

[78] Derek Parfit, "Equality or Priority?" *Ratio*, 10.3 (1997): 202-221, DOI: 10.1111/1467-9329.00041 (accessed March 2012).

[79] Parfit, "Equality or Priority?", 104.

view would make the same judgment about a particular life even if it were the *only* life ever lived."[80]

Moreover, Parfit maintains that on the moral scale "benefits to the worse off matter more."[81] For this reason, the prioritarian is interested in the relationship between a benefit's maximum value – a value which it acquires against the background of the recipient's quality of life – and the role proper distribution plays.

However, even though Parfit might have been the first to put a name to the prioritarian intuition he was not the first to surmise the principle's existence. For, John Rawls captured the prioritarian ideal years earlier in his *difference principle*, which states that, "social and economic inequalities…are to be to the greatest benefit of the least-advantaged members of society."[82] His reference to 'social and economic inequalities' in this excerpt is a reference to the distribution of primary goods, understood as "things citizens need as free and equal persons living a complete life; they are not things it is simply rational to want or desire, or to prefer or even to crave."[83] Thus, the *difference principle* is concerned with the distribution of goods for the purpose of safeguarding a "complete life"' for every citizen, especially with respect to the lives of the least advantaged.

In like manner, Joseph Raz spoke to a prioritarian undercurrent in his discussion of the presuppositions of egalitarianism:

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[80] Dennis McKerlie, "Equality and Priority" *Utilitas,* 6.1 (1994): 39, DOI: http://dx.doi.org/10.1017/S0953820800001308 (accessed March 2012).

[81] Parfit, "Equality or Priority?", 104.

[82] John Rawls, *Justice as Fairness,* Erin Kelly (Ed.), (London: The Belknap Press of Harvard University Press, 2003), 42 – 3.

[83] Rawls, *Justice as Fairness,* 58.

> Wherever one turns it is revealed that what makes us care about various inequalities is not the inequality but the concern identified by the underlying principle. It is the hunger of the hungry, the need of the needy, the suffering of the ill, and so on. The fact that they are worse off in the relevant respect than their neighbours is relevant. But it is relevant not as an independent evil of inequality. Its relevance is in showing that their hunger is greater, their need more pressing, their suffering more hurtful, and therefore our concern for the hungry, the needy, the suffering, and not our concern for equality, makes us give them priority.[84]

In this excerpt, Raz focuses his attention on the non-relational relevance of suffering. He maintains that there is something more striking that underlies inequality, of which inequality is a consequence, but which remains distinct from it.

It is important to note that the priority view does have 'a built in bias towards equality' and because of this Parfit concedes that it can be called egalitarian in a *looser* sense, as 'non-relational egalitarianism.'[85] This is because the natural way to conceptualize the goal of prioritarianism is to bring those at the bottom, up – up to a level potentially equal to our own, but not for reasons of equality *per se*. In other words, this is not because prioritarianism values equality in itself. In giving priority to those who are worse off the prioritarian does not *directly* aim to reduce inequality, s/he might just end up doing so.[86]

[84] Joseph Raz, The Morality of Freedom (New York: Oxford University Press, 1986), 240.
[85] Parfit, "Equality or Priority?", 106.
[86] ibid.

1.3.3 Priority, the Bottom Billion and Water Security

The United Nations is concerned with advancing the equal rights of all people.[87] And, it is this preoccupation with equality that makes it possible to characterize their purpose as one concerned with advancing egalitarian norms.[88] At the same time, however, the mission of the United Nations supports a rudimentary utilitarian principle of justice, one that advances the wellbeing of the majority as its end.[89] In turn, these normative preoccupations make it difficult for the United Nations to give priority to the needs of the worst off above the needs of other populations. This is, of course, assuming that global, or overall wellbeing would not be maximized by having given priority to some above others.

But, given the realization that putting the needs of some above others in particular circumstances does not mean excluding the interests of the second group, the ostensible unfairness of priority decision-making could be mitigated. Hospital triage systems present one with an example that supports this point. For, in circumstances that pertain to sustaining life – from which the concerns of water security are not distinct – the claims of some individuals take on an urgency that the claims of others do not share. However, just as this lack of urgency does not preclude the second group from treatment in emergency room settings, it should not be interpreted to mean the denial of assistance within the context of international development.

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[87] United Nations General Assembly, *Universal Declaration of Human Rights.*10 December 1948. 217 A (III). http://www.unhcr.org/refworld/docid/3ae6b3712c.html (accessed July 2012).

[88] United Nations. Charter of the United Nations, "Chapter I: Purposes and Principles," 24 October 1945. http://www.un.org/en/documents/charter/chapter1.shtml (accessed June 21, 2012).

[89] ibid.

Given the foregoing considerations, it is the uptake of the prioritarian principle within water security discourse that is being suggested here. For, to endorse priority in practice when the provision of vital resources and assistance becomes the subject of debate is to i) abide by established practice in other domains, such as in health care policy, and ii) to be true to the intuition that the international community should be unable to make claims of progress or achievement when those in most need of assistance have failed to receive it. For these reasons, the bottom billion – the portion of the global population that morally counts for more – should be given priority with regard to the goals of water security. And, giving the bottom billion priority in this manner could further other goals, such as food and energy security, which are desperately required in these regions, as well.

Concluding Remarks: Section 3

Given the urgency that characterizes the claims of the bottom billion for assistance, this section advanced a policy perspective that was informed by the moral imperative to assist the worst off. This suggestion, more specifically, was made through an appeal to the prioritarian principle that was believed to lie at the root of the discomfort produced as a result of having to accept two incongruous claims: i) the MDG drinking water target has been 'achieved', and ii) the most disadvantaged continue to thirst for improved water sources. In chapter 2, I turn to the examination of the nature of the human right to water.

Chapter 2

The Human Right to Water: Nature and Challenges

The last chapter examined the contours of the concept of water security and explained how each of its constituent parts accounts for the most important dimensions of water security discourse. This chapter sets out to examine the nature of the human right to water, and how it is employed within the discourse of international law.

In order to achieve this end I will begin by reviewing the substantive differences between the two dominant normative frameworks that are operational in the majority of social arrangements, those of morality and law. Next, I will move to discuss the nature of rights, in general, and human rights, in particular, in order to provide an understanding of the special place that these standards occupy within the realm of international politics. These considerations will then be put to use in analyzing the current literature that surrounds the human right to water. Following this investigation, five challenges will be raised in light of the literature and the broader discourse surrounding the human right to water. Whether or not these challenges can be overcome or reconciled will be a matter left for the next chapter. Given either their reconciliation or their resistance to remedy, it will be determined whether the human right to water should be employed as a means by which to achieve water security.

2.1 Morality and Law

A normative framework is any system of standards, or norms, that is concerned with orienting human behaviour – whether that pertains to the ethically correct way to behave, global justice, or the health of a community. In order to more clearly understand what this means, the analogy of a game, such as chess, can be employed.[90] The game of chess is constituted by a normative framework within which rules, or norms, are employed for the purpose of guiding player conduct. Within this particular normative system, all of the players assent to the supremacy of norms as a condition of participation – and, it is in this respect that the norms operating within the game can be said to be 'binding' on all players.[91]

Given this understanding, morality and law provide examples of two familiar normative frameworks. Morality, on the one hand, is a system of standards that takes the terms of proper conduct as its end. It can further be spoken about in terms of two other distinct normative systems: actual and justified morality.[92] An actual morality is any normative system whose standards are informed by the de facto practices and beliefs of a given society, culture or countercultural group. A justified morality is any normative system whose norms reason can objectively attest to, such as utilitarianism. Similarly, law

[90] Andrei Marmor. "How Law is Like Chess", Legal Theory, 12 (2006): 347-371, DOI:10.1017/S1352325206070121 (accessed July 2012).

[91] ibid., 9.

[92] James Nickel makes the distinction between actual and justified moralities (Nickel 2007, 46-7), while Brian Orend talks about the same divide in terms of social and critical moralities (Orend 2002, 24-5).

is also system of standards – however, it is constituted by an institutional framework.[93] Like morality, law takes the terms of proper conduct as its end, but this institutional system furnishes legal norms with a binding force that is different from that of moral norms.

At this point one may be confused as a result of having to accept the idea that the standards of morality differ from the standards of law, especially given their shared concern over the terms of human conduct. Delineating the contours of the relationship been morality and law has occupied a central place in the study of jurisprudence.

Historically, philosophers operating within the natural law tradition have maintained that legal validity is directly dependent on its moral justifiability. They believed, more specifically, that the law – or *what is* – should be directly determined by *what ought to be.*[94] Then came John Austin (1790-1859). Austin was one of the first legal philosophers to have studied law outside of the natural law tradition as a legal positivist. He came to express the character of law independently of *what ought to be*: "[t]he existence of law is one thing; its merit and demerit another. Whether it be or be not is one enquiry; whether it be or be not conformable to an assumed standard, is a different enquiry."[95] This is not to say that Austin believed that *what ought to be* could never inform law. He simply preferred a less direct route: *what ought to be* inspires social

[93] Michael Giudice, "Joseph Raz's Legal Philosophy", *Internationalen Vereinigung fur Rechts*, (2009), http://ivr-enc.info/index.php?title=Joseph_Raz%27s_Legal_Philosophy&oldid=1491 (accessed July 20, 2012).

[94] David Hume originally proffered this distinction in *A Treatise of Human Nature*. On his understanding, prescriptive conclusions about *what ought to be* the case could not be inferred from descriptive premises about a particular state of affairs, or *what is*.

[95] John Austin. (1832). *The Province of Jurisprudence Determined*. ed. Wilfrid E. Rumble (Cambridge: Cambridge University Press, 1995), 157.

practice and convention, which in turn, inform the law. Hence, the issue of contention between the two schools is the manner in which morality could be said to inform the law.

Today, legal positivism predominantly informs our understanding of law, so it is important to remember that although the terms of morality often align themselves with the terms of law, moral justifiability is not a necessary condition for legal validity:

> …at least some intentional law-makers have no moral aims. They are entirely cynical. They use law-making purely as an instrument of profit, retaliation, or consolidation of power…Whole legal systems may, indeed, be run by cartels or self-serving officials for whom the system is primarily an elaborate racket or a huge joke.[96]

One need only look to historical examples, such as slavery, to realize this point.[97] Nevertheless, the message that is being emphasized here concerns the fact that while morally justified law is law's paradigm case,[98] there is nothing inconsistent about the ideal type having to coexist alongside other, less ideal, forms.

2.2 Rights

Herein, one has hopefully garnered an understanding of i) what a normative framework is, ii) what a norm is, and iii) the fact that law and morality occupy two distinct normative frameworks. At this point, the discussion turns to a specific class of norms, rights.

A right, most simply, is a justified claim or entitlement to something – be it an object, a liberty, or an immunity. It is classified as a norm more generally because it

[96] John Gardner. (2010). "Law and Morality" in *The Routledge Companion to Ethics,* ed. John Skorupski (London: Routledge, 2010), 1.
[97] Brian Orend. *Human Rights: Concept and Context* (Peterborough: Broadview Press, 2002), 26.
[98] Gardner, "Law and Morality" , 3.

expresses a particular standard about what ought to be the case from the perspective of the individual,

> "the modern vocabulary and grammar of rights is a many-faceted instrument for reporting and asserting the requirements or other implications of a relationship of justice *from the point of view of the person(s) who benefit(s) from* that relationship. It provides a way of talking about 'what is just' from a special angle: the viewpoint of the 'other(s)' to whom something (including, *inter alia*, freedom of choice) is owed or due, and who would be wronged if denied that something."[99]

The distinctive feature of a right, moreover, is the correlative duty it imposes on another party (or parties), which can be either positive in that it demands something be provisioned, or negative in that it demands non-interference.[100] Arguably just as important, is the fact that a right is a claim to an entitlement that does not need to be declared, one need only be "*entitled to utter* such a claim, and expect that it be fulfilled."[101]

Now, a right can be taken up by either one or both of the normative systems mentioned above, as a moral and/or a legal right. A moral right is an entitlement that is justified by any actual or justified morality, while a legal right is an institutionally protected entitlement that derives its status from the system within which it was enacted. It is this fact that has led many scholars[102] to believe that legal rights have a particular sort of practical force – that they are more likely to determine and influence the judgments of governmental officials. Thus, human rights, which are fundamentally a class of moral

[99] John Finnis. *Natural Law and Natural Rights* (Oxford: Claredon Press, 1980), 205.
[100] This feature is what made W.N. Hohfeld argue that only claim-rights are "rights in the strict sense" (Hohfeld in Orend 2002, 21).
[101] Orend, *Human Rights: Concept and Context*, 24.
[102] Peter Gleick, Maude Barlow, David Boyd, and Brian Orend.

rights, are increasingly thought to be dependent on legal enactment to become effective in practice.[103]

2.2.1 Human Rights

Human rights are specific minimum standards of decency imposed on governments for the purpose of constraining the legislative, judicial and executive behaviour of nation-states.[104] The Universal Declaration of Human Rights (UDHR) – the fundamental human rights document of customary international law – formally codifies this special set of moral rights, and it has spurred the creation of many human rights treaties. Bearing this in mind, human rights represent norms of high political priority that pertain primarily to relations between the individual and state.[105] Moreover, the effective nature of the relationship between the individual as rights-holder and the government as duty-bearer changes in light of the normative framework from within which one is speaking.

Within the last twenty years, many have embraced human rights based approaches for the purpose of drawing attention to humanitarian causes. Recently, for these individuals, growing water scarcity coupled with the recognition that potable water is a precondition for the enjoyment of many fundamental human rights, such as the right to life and the right to a healthy environment, has incited discussion about the need to conceptualize water as a human right.

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[103] Orend, *Human Rights: Concept and Context*, 33.

[104] James W. Nickel. *Making Sense of Human Rights*. Second Edition (United Kingdom: Blackwell Publishing, 2007), 10.

[105] Ibid., 9-10.

2.2.2 The Human Right to Water

Chronologically, General Comment No. 15, which was a non-binding document released by the United Nations Economic and Social Council in 2002, was the first official document that recognized the human right to water in light of its special relationship to two other human rights contained within the International Covenant on Economic, Social, and Cultural Rights (ICESCR): the right to an adequate standard of living (article 11), and the right to the highest attainable standard of health (article 12).[106] Further, the General Comment explicitly called nation-states to begin to realize the three-tier obligation to respect, protect, and fulfill this right.[107]

Less than a decade later, the international community witnessed the emergence of two United Nations resolutions that declared the right to water and sanitation a human right. In July 2010 the General Assembly put forward a resolution (A/RES/64/292) recognizing access to clean drinking water and sanitation a human right.[108] [109] 122 countries voted in favour of this resolution, none voted against, and 41 countries – three of which were: Canada, the United States, and Australia – abstained from voting.[110] A few months later, in September 2010, the United Nations Human Rights Council put

[106] United Nations Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant),* 20 January (2003): 1-2. E/C.12/2002/11. http://www.unhcr.org/refworld/docid/4538838d11.html (accessed July 2012).

[107] Ibid., 9-11.

[108] United Nations General Assembly. *The Human Right to Water and Sanitation: Resolution.* Adopted 3 August 2010. A/RES/64/292. http://www.unhcr.org/refworld/docid/4cc926b02.html (accessed July 2012).

[109] This formulation is particularly troublesome given the recognized the need to focus on 'safe' water as opposed to just 'clean' water.

[110] Ibid.

forward its own resolution (A/HRC/15/L.14),[111] which stated that because the human right to water was already implicitly contained within two, almost universally ratified, treaties – the ICESCR and the United Nations Convention on the Rights of the Child (CRC) – the human right to water was a legally binding right. It is important to note that the second resolution advanced by the Human Rights Council was itself a non-binding document, but the connection it established between the human right to water and these two treaties, which are binding on all signatories under international law, revealed an existent legal commitment to the human right to water. In consequence, the three-tier burden that was first mentioned in General Comment No. 15 of respecting, protecting, and fulfilling the human right to water – which requires the provision of a minimum of 50 liters of water per person per day for personal and domestic use[112] – falls on all the governments that were party to these treaties.

At this point in the discussion, one might be tempted to question the need to draw attention to water as a human right in light of the other human rights that have already been established to protect human life, dignity, health and overall wellbeing. Despite its apparent similarities, the human right to water is distinct from already established human rights insofar as: i) it exists as the fundamental precondition that must be met before the human rights to food, life, and health can be realized,[113] and ii) it speaks to the provision

[111] United Nations Human Rights Council (HRC), *Human Rights and Access to Safe Drinking Water and Sanitation*, 24 September 2010. A/HRC/15/L.14. http://daccess-dds-ny.un.org/doc/UNDOC/LTD/G10/163/09/PDF/G1016309.pdf?OpenElement (accessed July 2012).

[112] Peter H. Gleick, "Basic Water Requirements for Human Activities: Meeting Basic Needs", Water International 21.2 (1996): 83, DOI:10.1080/02508069608686494 (accessed July 2012).

[113] CESCR, E/C.12/2002/11, 1.

of an increasingly scarce resource that is resistant to substitution and which is required for all natural and synthetic functions.[114]

With this history established, the next section is devoted to examining the various attitudes and arguments that have been expressed both in the time leading up to and following the recognition of the human right to water.

2.2.3 Discourse on the Human Right to Water

Maude Barlow, author and activist, has been a force in the battle for the human right to water. Three years before the Human Rights Council resolution, Barlow argued that, "[w]hat is needed now is a binding law to codify that states have the obligation to deliver sufficient, safe, accessible and affordable water to their citizens as a public service."[115] In an attempt to respond to this need, she proposed the adoption of *The Blue Covenant* – a piece of international law that would address the three most important components of the global water justice movement within international law: i) water conservation, ii) water justice, and iii) water democracy.[116] The underlying impetus for legal enactment is that it would guarantee the primacy of the state with respect to water stewardship and provision – which would, consequently, limit the private sector's ability to profit from this resource. Given this understanding, Barlow's decision to argue in favour of the human right to water can be interpreted as a strategic one, since it establishes a relationship between the individual and the state that cannot be duplicated between the individual and private non-state actors, who can fulfill needs – as opposed to

[114] Hence, the water, food and energy nexus.

[115] Maude Barlow. *Blue Covenant: The Global Water Crisis and the Coming Battle for the Right to Water* (Toronto: McClelland & Stewart, 2007), 164.

[116] Ibid.,156.

rights – equally well.[117]

Despite the positive legal advances that were made as a result of the two United Nations resolutions of 2011, Barlow has recently expressed a renewed fear of the private sector and the role it might come play in the provision of water in light of a gap that was left open in the Human Rights Council resolution that allowed states to contract water services to non-state actors.[118] She responded to this threat in a recent publication, *Our Right to Water: A People's Guide to Implementing the United Nations Recognition of the Right to Water*:

> To truly implement the spirit of the right to water and sanitation for all, we must confront the current economic system and work to create new economic, social and resource policies based on the principles of inclusion, equity, diversity, sustainability, and democracy…To truly share the world's water sources in an equitable and responsible way, we must recognize water as a shared common heritage to be fiercely protected, carefully managed, and equitably shared. Because it is a flow resource necessary for life and ecosystem health, and because there is no substitute for it, water must be regarded as a public commons and a public good and preserved as such for all time in law and practice.[119]

With this call to action in mind, it is important to note that Barlow does not believe that the private sector should not have a hand in helping to alleviate water poverty – or, that water should be free.[120] She simply maintains that the private sector should not be able to implement full cost recovery principles[121] to turn a profit at the expense of those who

[117] Maude Barlow. "Our Right to Water: A People's Guide to Implementing the United Nations' Recognition of the Right to Water and Sanitation", *The Council of Canadians* (2011): 9, www.canadians.org/water/documents/RTW/righttowater-0611.pdf (accessed July 2012).

[118] Ibid., 13.

[119] Barlow, "Our Right to Water", 21.

[120] Michael McCullough. Student Reporter, "The Grand Dame of Water: Maude Barlow is Controversial and Charming," Personal Interview with Maude Barlow April 9, 2012. http://www.studentreporter.org/the-grand-dame-of-water-maude-barlow-is-controversial-and-charming (accessed September 2012).

[121] "Full cost recovery means that the state or private water supplier should be able to recover the full costs of supplying water to all users. The cost recovery principle may lead to an unaffordable price of water

need water.[122]

However, given the current state of affairs, casting a negative tone over the private sector and water pricing has the potential to do more harm than good. This is because it draws attention away from the seriousness of the issue at hand and it diminishes the prospect of productive discussion as traditionally polarized paradigms (public good vs. private profit), which are prone to incite emotional as opposed to rationalized discussion, are appealed to.

Peter Gleick, scientist and co-founder of the Pacific Institute, has been a long-time advocate for the human right to water. He believes that the current water crisis is "one of the most fundamental failures of the 20th century development."[123] Taking the position of the Human Rights Council – just 11 years earlier – he originally based his arguments on the fact that it is a derivative right that already exists implicitly, and in some cases explicitly, within international law, declarations and state practice.[124] He cites articles 11 and 12 in the ICESCR as implicitly requiring the realization of the human right to water, and he highlights the explicit reference to water in the United Nations Convention on the

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for some, especially remote, impoverished communities, because of the enormous costs associated with ensuring clean water to such communities. Under a full cost recovery scheme involving poorer communities, water providers have an incentive to provide some base level of water at relatively lower prices to avoid political conflict with the poorer communities. However, those providers then must charge higher prices for any water used above the base level to recoup any losses incurred by providing the base level quantities. While this may appear equitable in principle, often the base level water price is unaffordable to poorer communities and often the base quantity, provided at a "reduced" price, is inadequate" (Bluemel 2004, 964).

[122] McCullough, "The Grand Dame of Water": Maude Barlow is Controversial and Charming," Personal Interview.

[123] Peter H. Gleick, "The Human Right to Water," *Water Policy* 1 (1998): 488, http://humanright-ias.com/cmslogin/news/file1/file1-1312.pdf (accessed August 2012).

[124] Ibid.

Rights of the Child.[125]

Furthermore, Gleick's argument is informed by a list of potential benefits he surmises would follow as a result of its legal integration: 1) it will renew the efforts of governments to meet the water needs of its people, 2) integration at the level of international law will most likely lead to legislative efforts at the national level, 3) it will bring attention to the poor water management practices around the world, 4) issues at the watershed level could be addressed and minimum allocations could be specified for local resource users, and 5) it will help set priorities for water policy.[126] And, in a lecture he gave in the fall of 2011, Gleick went on to add another reason to his list, specifically, that supporting the human right to water is the morally right thing to do.[127]

Gleick, moreover, also maintains the compatibility of water as a human right and an economic good. Originally, water was regarded as an economic good in order to deter wastefulness.[128] However, the primary valuation of water as an economic good excluded those who were unable to participate in this economic calculus.[129] The human right to water was advanced, in turn, for the purpose of addressing this inequity.[130] But, its status as a human right should not be construed as a reversal of its economic value in all cases. In light of these conflicting approaches, Gleick argues that water is a human right that should only be free in very specific circumstances:

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[125] Ibid., 489.
[126] Gleick, "The Human Right to Water", 490.
[127] This lecture can be accessed here: http://www.youtube.com/watch?v=uFYS6YkNlqs
[128] Erik B. Bluemel, "The Implications of Formulating a Human Right to Water" *Ecology Law Quarterly* 31.957 (2004): 963, http://www.internationalwaterlaw.org/bibliography/articles/general/Erik_Bluemel-Right_to_Water.pdf (accessed August 2012).
[129] Ibid.
[130] Ibid.

> I believe that water should be paid for, even basic water requirements, but that when a basic water requirement cannot be paid for by individuals – for reasons of poverty, emergency, or circumstance – it is still the responsibility of local communities, local governments, or national governments to provide that basic water requirement though subsidies or outright entitlement.[131]

However, unlike Barlow, he is less clear on whether the private sector should be able to profit from providing water as a service. He admits, moreover, the difficulty that surrounds the prospect of determining the proper cost of this vital resource.[132]

In like manner, David R. Boyd, adjunct professor at the School of Resources and Environmental Management at Simon Fraser University, maintains that – on balance – the legal recognition of the human right to water stands to benefit the global community in light of its ability to bring attention to the current disparities in water access: "[the human right to water] is a powerful tool that can be used to focus attention and resources on improving access to water for those individuals and communities who currently endure the hardships imposed by the absence of safe water."[133] That being said, he is careful to note that the human right to water should not be interpreted as a 'silver bullet' – since, its endorsement in the absence of a coordinated effort by governments and non-state actors is an inadequate means by which to assist in alleviating these disparities.

Bruce Pardy, law professor at Queens University, approaches the human right to water from the perspective of national law. According to Pardy, the constitutional entrenchment of the human right to water embodies a false panacea in light of the fact

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[131] Peter H. Gleick, "The Human Right to Water," *The Pacific Institute* (2007): 4-5, http://www.pacinst.org/reports/human_right_may_07.pdf (accessed August 2012).

[132] ibid.

[133] David R. Boyd, "The Right to Water: Moving from International Recognition to National Action," in *The Global Water Crisis: Addressing an Urgent Security Issue*. Papers for the InterAction Council, 2011-2012. ed. Harriet Bigas. (Hamilton, Canada: UNU-INWEH, 2012): 133.

that it does not actually address the real causes of water shortage: "pollution, depletion, corruption, financing, monopoly, conflict of interest and mismanagement."[134] On his understanding, constitutional enactment represents an impotent attempt to address the conditions that underlie the global water crisis.

Further, he maintains that the increased authority governments are given over water regulation once a right has been constitutionally enacted should be enough to give conscientious individuals pause. For example, in the case of South Africa, the government's positive obligation to respect, protect, and fulfill the enacted right only extended to drafting policy for the purpose of achieving water access "gradually and eventually."[135] Consequently, the actual provision of water failed to fall within the jurisdiction of this constitutionally enacted right. Moreover, the emphasis on state control over water regulation might, in some countries, have the effect of eliminating "the democratic right of citizens to determine the ideological premises of the water system they wish to run."[136] Patricia Avila further reinforces this fear with respect to indigenous populations.

Patricia Avila, researcher for the Center for Ecosystem Research at National Autonomous University of Mexico, advances an argument against the legal uptake of the human right to water on the grounds that it further marginalizes indigenous populations. Specifically, she maintains that legal integration allows the state to forcibly dismantle indigenous water management systems for the purpose of pursuing public (and private)

[134] Bruce Pardy, "False Panacea: The Human Right to Water," in *The Global Water Crisis: Addressing an Urgent Security Issue*. Papers for the InterAction Council, 2011-2012. ed. Harriet Bigas. (Hamilton, Canada: UNU-INWEH, 2012): 140.

[135] Ibid., 138.

[136] Ibid., 139.

water management interests. It is in this respect that indigenous traditions are being assimilated for the purpose of pursuing national goals – "there is exclusion of the indigenous institutions and of use and custom guaranteeing both the communitarian management of water and the resolution of conflicts."[137] What's more, the *legal defenselessness* of indigenous peoples, to employ a phrase used by Avila, ensures their inability to substantively challenge the status quo.[138] Avila's argument against the human right to water given its impact on indigenous populations is especially interesting given Barlow's argument in favour of the right for the purpose of safeguarding these vulnerable populations.

2.3 Challenges

It is my contention that five considerations have gone underappreciated within these discussions: i) the questionable efficacy of international law as a framework capable of inciting desired changes in behaviour, ii) the fact that the human right to water is currently considered a derivative right, and the implications of its status as such, iii) the efficacy of human rights as mechanisms of change, iv) the limits of treaty monitoring, and v) the rhetorical import of (human) rights language.

i) The Questionable Efficacy of International Law

The human right water can be said to exist: in customary international law as a principle of state practice, in conventional international law within treaties, in national

[137] Patricia Avila. "Access to Water and Conflict: An Indigenous Perspective from Latin America," in *The Global Water Crisis: Addressing an Urgent Security Issue*. Papers for the InterAction Council, 2011-2012. ed. Harriet Bigas. (Hamilton, Canada: UNU-INWEH, 2012): 144.

[138] Ibid.

law as a civil or constitutional right, and in actual or justified moralities as a moral norm. Further, it can exist within one or all of these frameworks at the same time. In fact, the goal of the human rights advocate is to realize its assimilation within each one of these systems.[139]

The problem with arguments that call for legal enactment is that not all legal frameworks share the same legal authority, normative force, jurisdiction, or the same ability to effectively govern. One of the reasons for this is that the rule of law cannot exist without a basic architecture that has the capacity to enforce compliance – "independent courts; separation of power between legislatures; executive officials and judiciary; representative democracy; accountable bureaucracies; and so on."[140] The domestic legal systems of nation-states are, in the majority of developed countries, able to provide this basic architecture, and are thus better able to effectively enforce compliance. International law, however, lacks many of the foundational components of the rule of law. And, this deficit, in turn, raises many questions about the prospect of state compliance with respect to legal integration at the international level.

ii) The Human Right to Water as a Derivative Right

Now, the human right to water – as a derived right based on an inclusive interpretation of the ICESCR – exists as an article of conventional international law. However, as a derivative right of interpretation, the human right to water only has as much power as the socio-economic right from which it is derived, and it is this quality

[139] Nickel, "Making Sense of Human Rights", 46.
[140] Pardy, "False Panacea", 140.

that accounts for its subordinate status.[141] The primary rights of relevance here are: the right to an adequate standard of living (article 11 of the ICESCR), and the right to the highest attainable standard of health (article 12 of the ICESCR). The problem here is that these two articles speak to distinct water demands. Water for health speaks to a minimum provision of 4 to 6 liters per day, while water for an adequate standard of living, speaks to a provision of anywhere from 25 to 100 liters per person per day.[142] This means that the realization of the human right to water could mean different things depending on the primary article in question. This type of indeterminacy could threaten the human right to water with accusations of practical insignificance.

The prospect of realizing the human right to water is further complicated by its derivative status in light of the fact that its existence depends on the acceptability of these socio-economic rights. This is problematic, because some have argued that as second-generation rights, socio-economic rights are not real rights.[143] Moreover, the fact that not all socio-economic rights violations are remediable to the same degree, since the ability to respect, protect and fulfill these rights is "highly dependent upon circumstance, location, and economic means of subsistence",[144] runs counter to the premise that human rights violations ought to be remediable at all times, for all people, everywhere.

Many of these difficulties are attributable to the subordinate status of the human right to water as a derivative right of already contentious second-generation socio-economic and cultural rights. And, in turn, it is questionable whether advancing the

[141] Bluemel, "The Implications of Formulating a Human Right to Water", 968.
[142] Gleick, "Basic Water Requirements for Human Activities', 83 – 92.
[143] Maurice Cranston. *What are Human Rights?* (New York: Basic Books, 1973).
[144] Bluemel, "The Implications of Formulating a Human Right to Water", 971.

human right to water as an inherent,[145] or derivative right is to sufficiently safeguard the concern for life that underlies it: "[c]onstructing a human right under such economic, social, and cultural rights doctrines could therefore provide for a rather ineffectual and inconsistently applied right to water."[146]

iii) The Efficacy of Human Rights as Mechanisms of Change

In a recent paper, Anna Russell analyzed the relevance of human rights as mechanisms of positive change in development settings by using the human right to water as a case study. Her findings suggest that the human right to water does not provide an effective mechanism of achievement within the realm of international development.

Through a series of literature reviews and interviews, Russell found that human rights are often viewed by practitioners directly involved with development initiatives as not relevant or applicable to their work,[147] or just an "academic debate…that was difficult to operationalize."[148] She cited the hesitation many expressed at the prospect of discussing the right to water and attributed it to the discomfort that surrounds the transfer of water issues into a specialized legal field, and a distaste for the politics of a debate that is disconnected from the practical realities of life on the ground.[149]

Given the abstract nature of human rights talk, Russell also noted the lack of understanding surrounding human rights language and standards in the water sector

[145] This is the language used in: Barlow, "Our Right to Water", 4.
[146] Bluemel, "The Implications of Formulating a Human Right to Water", 971.
[147] Anna F.S. Russell, "International Organizations and Human Rights: Realizing, Resisting or Repackaging the Right to Water?" *Journal of Human Rights,* 9.1 (2010): 6, DOI:10.1080/14754830903530292 (accessed August 2012).
[148] Ibid.,7.
[149] Ibid.

itself.[150] Further, she highlighted the frustration that permeated discussions regarding the allocation of overstretched resources to the strengthening of human rights efforts, which many considered a misuse of resources, since i) rights language increases the prevalence of unrealistic expectations,[151] and ii) human rights are most likely to be the outcomes of development programs, not mechanisms by which to achieve development goals.[152] Russell did, however, highlight the benefits of human rights based approaches in terms of "raising awareness and creating accountability"[153] – but, again, these features concern the outcomes of successful development programs, and are not reflective of effective strategies for development.

Russell's article empirically disproves the claim that human rights embody effective mechanisms in the development context. Further, this finding casts doubt on the ability of the human right to water to positively affect the lives of the bottom billion – those whose needs, it was argued in the first chapter, should be addressed as the primary goal of water security.

Interestingly enough, Russell is not the only one to highlight the inadequacy of human rights as effective mechanisms for change. Oona Hathaway, in a "large-scale quantitative analysis of the relationship between human rights treaties and countries' human rights practices",[154] reaches the counterintuitive conclusion that, "treaty ratification is not infrequently associated with worse human rights ratings than otherwise

[150] Ibid., 11.
[151] Ibid., 12.
[152] Ibid., 7.
[153] Ibid.
[154] Oona A. Hathaway, "Do Human Rights Treaties Make a Difference?" *Yale Law Journal,* 111. (2002): 1939, http://digitalcommons.law.yale.edu/fss_papers/839 (accessed August 2012).

expected."[155] Hathaway primarily attributes this paradoxical finding to what she maintains is the dual nature of international treaties as instrumental and expressive instruments.[156] One the one hand, they are instrumental insofar as "they create law that binds ratifying countries," and on the other, they are expressive to the extent that they "declare or express to the international community the position of countries that have ratified."[157] Problems arise, in turn, when the expressive character of treaty ratification is divorced from its instrumental function:[158]

> When countries are rewarded for positions rather than effects – as they are when monitoring and enforcement of treaties are minimal and external pressure to conform to treaty norms is high – governments can take positions that they do not honor, and benefit from doing so…Countries that take the relatively costless step of treaty ratification may thereby offset pressure for costly changes in policies. Because monitoring and enforcement are usually minimal, the expression by a country of commitment to the treaty's goal need not be consistent with the country's actual course of action.[159]

It is important to note that these two functions can work in such a way as to reinforce the underlying principle of the other, or they can work in opposition to each other.[160] But, as Hathaway contends, "[t]here is arguably no area of international law in which the disjuncture between the expressive and instrumental aspects of a treaty is more evident than human rights."[161]

Indeed, it seems that the very bedrock of international human rights law embodies this divorce. For the UDHR, which was proffered for the very purpose of advancing "an

[155] Ibid., 1935.
[156] Ibid.
[157] Ibid., 1941.
[158] Ibid., 2006.
[159] Ibid., 1941.
[160] Ibid., 2005.
[161] Ibid., 2007.

enlightened international political morality",[162] is an expression of a moral ideology that states would naturally desire to express their conformity with, if only with the spirit and not the force of law. This helps to explain Hathaway's claim that human rights treaties are paradigmatic of the divorce between the instrumental and the expressive functions of treaty ratification.[163]

iv) The Limits of Treaty Monitoring

Hathaway's conclusion concerning the misleading nature of treaty ratification is further substantiated by the shortcomings of treaty monitoring bodies. However, before these shortcomings can be elucidated, one must first attend to a couple of basic points.

First, there are six 'core'[164] treaties within international law: the International Convention on Economic, Social and Cultural Rights (ICESCR), the International Covenant on Civil and Political Rights (ICCPR), the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD), the Convention on the Rights of the Child (CRC), and the Convention Against Torture (CAT).

Second, each of these treaties has a corresponding monitoring body: the Committee on Economic, Social, and Cultural Rights (CESCR), the Human Rights Committee (which is concerned with monitoring the ICCPR), the Committee on the

[162] Nickel, *Making Sense of Human Rights*, 10.
[163] Hathaway, "Do Human Rights Treaties Make a Difference?", 2008.
[164] In the preface of their book, "The Future of UN Human Rights Treaty Monitoring" Philip Alston and James Crawford (2000) speak primarily to these six treaties, since they contend that they embody the most important international standards (xv). Christof Heyns and Frans Viljoen further highlight the 'core' nature of these six treaties within, "The Impact of United Nations Human Rights Treaties on the Domestic Level" in *Human Rights Quarterly* 23(2001): 484.

Elimination of All Forms of Discrimination Against Women, the Committee on the Elimination of All Forms of Racial Discrimination, the Committee on the Rights of the Child, and the Committee Against Torture.

It is these agencies that are the primary subject of concern in this section. For, some claim that they are plagued by problems that have plunged the entire human rights system into crisis.[165] According to James Crawford, these issues are byproducts of the existent states of affairs that characterize the domain of treaty monitoring: the effects of backlog in state reporting, delays in processing reports and communications, resource constraints, procedural issues, problems of communications procedures, composition of committees, problems with recent or proposed reforms, and limited political support from states. [166]

What is worse is the fact that the system could not support its proper function. That is, the two dimensional monitoring process that is informed by (i) state reporting and (ii) the hearing of individual complaints actually "depends for its continued functioning on a high level of state default."[167] If state adherence to the rules of treaty membership were the norm, on the other hand, the delays and associated shortcomings that would result would be extreme.[168] Just considering the current state of affairs, it has been estimated that it would take anywhere between seven and twenty-four years to curtail the

[165] James Crawford. "The UN Human Rights Treaty System: A System in Crisis?" in *The Future of UN Human Rights Treaty Monitoring,* ed. Philip Alston and James Crawford (Cambridge: Cambridge University Press, 2000): 3, DOI: http://dx.doi.org/10.1017/CBO9780511522284 (accessed October 2012).
[166] Ibid., 4 – 10.
[167] Ibid., 6.
[168] Ibid.

backlog.[169]

It is important to note that the practice of shadow reporting by nongovernmental organizations is a valuable exercise that assists governments with their periodic reporting obligations. However, these reports are meant to supplement government reports, not stand in their stead. The practice of shadow reporting, in turn, is limited in its ability to redress the chronic delay in government reporting. And, even though it addresses the need to report, it does not attend to the features of the treaty system that currently allow its proper function to depend on state default.

Further, one can now see the complexity that informs the question of not only whether the human right to water will be ratified and subsequently implemented by states, but whether it can be effectively monitored in light of the problems examined above. For, if the status quo of treaty monitoring makes it so that the human right to water cannot be effectively monitored, there is nothing to reverse the trend that Hathaway highlighted regarding the increasingly expressive function of treaty ratification. In turn, the human right to water will represent an empty gesture. And, compliance with the terms of treaty membership will become less of a possibility for both states (who now have an increased reporting obligation) and monitoring bodies (who now have an additional oversight obligation).

To add to the skeptical tone of this conversation, the prospect of effective monitoring becomes even less likely in light of recent comments made by the High

[169] Ibid., footnote 5.

Commissioner for Human Rights in a report[170] that addresses the strengthening of the treaty body system: "I cannot overemphasize the fact that despite the savings that may be possible, what was absolutely made clear through the process is that the approach of absorbing new mandates within existing resources is not sustainable."[171] Although monitoring the human right to water would not constitute a new mandate as such, it would necessitate an increased expenditure of resources given the gravity of the global water crisis. Hence, until the treaty monitoring system can function effectively, the human right to water could represent a futile way to speak to the underlying goal of water security.

v) The Import of Rights Rhetoric

Historically, the language of rights has been deployed as a means of directly influencing political activity. However, over the past twenty years, it has been increasingly taken up as a subject by academics, journalists, lawyers, the layperson, and the media. In turn, it now pervades almost all branches of social discourse. Such overuse has reshaped certain elements of rights-discourse into a rhetorically loaded language that, for some[172], seems more manipulative than informative, and more symbolic than politically useful.

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[170] Navanethem Pillay, "Strengthening the United Nations Human Rights Treaty Body System," *The Office of the High Commissioner for Human Rights* (2012), http://www2.ohchr.org/english/bodies/HRTD/docs/HCReportTBStrengthening.pdf (accessed October 2012).

[171] Ibid., 9.

[172] See Kenneth Cmiel, "The Recent History of Human Rights," *The American Historical Review* 109.1 (2004): 117-135, http://www.jstor.org/stable/3524636; Arabella Lyon and Lester C. Olson, "Special Issue on Human Rights Rhetoric: Traditions of Testifying and Witnessing," *Rhetoric Society Quarterly* 41.3 (2011): 203-212, http://dx.doi.org/10.1080/02773945.2011.575321; Onora O'Neill, "The Dark Side of Human Rights," *International Affairs,* 81.2 (2005): 427-439, DOI: 10.1111/j.1468-2346.2005.00459.x

In his writings on human rights, Kenneth Cmiel established a causal connection between the diverse range of meanings that society has ascribed to human rights and what he terms, their *expressively thin* character:

> The language of human rights is fluid. The term has meant widely different things at different points in time. It may be too much to say that 'human rights' is an empty signifier, but given the range of usages of over time – the phrase can mean diametrically opposed things…[173]

This divergence in meaning is what has led some to refer to the public life of human rights representation.[174] That is, human rights increasingly play a public role that is distinct from their substantive meaning. For example, just one Google search will reveal an array of symbolism that supports a very powerful depiction of this public image: a burning heart, a set of unlocked handcuffs, satirical cartoons that poke fun at a 'human right to silence', doves, and images of badly injured children and adults.

The strategic use of this kind of imagery goes on to inform divergent conceptions of human rights and the types of obligations and commitments that ought to stem from them. In turn, many of the political and legal realities, within which human rights and human rights mechanisms have to function – and which, moreover, have been the subject of the current portion of this thesis – are ignored or underestimated. One example of such an underappreciated reality is illustrated in the common idea that human rights and the obligations that stem from them are universal, even though the institutional conditions upon which they depend vary across nations – "[t]he obligations created by signing and ratifying Covenants are *special*…the rights which are their corollaries will also be *special*

[173] Cmiel, "The Recent History of Human Rights," 126.
[174] Lyon and Olson, "Special Issue on Human Rights Rhetoric," 204.

or *institutional rights*, not *universal human rights*."[175]

Further, the rhetorical import of these convictions ought to remind readers of Anna Russell's observations, concerning the frustration that permeated discussions with development practitioners regarding the allocation of overstretched resources to the strengthening of human rights efforts. More specifically, this was the fact that rights language seems to increase the prevalence of unrealistic expectations.[176]

With these concerns in mind, it may be prudent to question whether it would be a good idea to treat the issue of water security using rhetoric that is open to problems of thinness, manipulation, or unrealistic expectations. For, the goal of water security could be lost sight of, given the potential of rights language to import diverse meanings that can cloud its significance as the goal to be achieved.

Concluding Remarks: Chapter 2

This chapter examined the nature of the human right to water and the challenges that it embodies. This was done to set the scene for a discussion about what the human right means for water security,[177] which will be taken up in the next chapter. For, if the challenges raised in this chapter can be reconciled, then the human right to water may still represent a useful mechanism by which to achieve water security. If, on the other hand, these challenges fail to be conducive to remedy – such that the human right to water represents an empty gesture, rather than a powerful influence on state behaviour – the

[175] Onora O'Neill, "The Dark Side of Human Rights," 431.
[176] Russell, "International Organizations and Human Rights", 12.
[177] Peter Gleick has recently noted a shift from discussions about whether a human right to water exists to what its existence actually means for the global community. This thesis is a response to this shift.

need to pursue other avenues should become more apparent.

Chapter 3

Overcoming the Challenges and Some Considerations About Implementation

What the human right to water means for water security is intricately related to whether the five challenges raised in the last chapter can be responded to in a way that makes them lose their intimidating façade. Indeed, if this is possible, a positive relationship between the human right to water and water security can be established. With this end in mind, the first part of this chapter will attempt to respond to each of the challenges raised. The second part of this chapter will be devoted to evaluating the nature of these rebuttals in light of their broader implications for the utility of employing human rights discourse within discussions of water security. In its final segment, this chapter will move away from discussing the relationship between water security and the human right to water in the abstract, to consider the conditions necessary for this partnership to be effective in actual political practice.

3.1 Responses

i) The Questionable Efficacy of International Law

The first challenge focused on the state of international law as a developing forum of regulation that currently lacks the basic architecture of the rule of law, as well as the negative implications that such a deficit would create with regard to compliance with international legal norms. Given this state of affairs, the positive connection that many

scholars have made between international law and the goal of equitable water distribution, should be questioned. A few things can be said in response to this challenge.

The first is that the strength and practical force of international law can arguably be found not in its ability to directly effect change, but in its indirect normative influence on both non-state actors and national law, an effect otherwise known as *vertical cross over*[178]:

> Formally obligatory international norms can legitimize and fortify the organizing and consciousness-raising efforts of non-governmental organizations. Their work in turn often leads to further development of both international and national rights law.[179]

On this understanding, the focus of concern falls on the various normative effects that international law, in both its written and customary forms, has the potential to inspire rather than directly determine. Two further examples of how this is possible are highlighted in the following excerpt: "[n]ational human rights ombudsmen regularly appeal to international norms in opposing local efforts to legislate lower standards. Constitutional courts increasingly look to international treaties and the jurisprudence of international courts in interpreting national constitutional rights."[180] That being said, this sort of indirect impact can only occur given the requisite institutional structure that has the capacity to translate the normative influence of international norms into practice, so this kind of indirect effect is still limited by the existence of certain fundamental preconditions.

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[178] Dinah Shelton, *Commitment and Compliance: The Role of Non-binding Norms in International Legal Systems,* (New York: Oxford University Press, 2003) 7, DOI:10.1093/acprof:oso/9780199270989.001.0001 (accessed September 2012).

[179] Douglass Cassel, "Does International Human Rights Law Make a Difference?" *Chicago Journal of International Law* 2.1 (2001): 122.

[180] Cassel, "Does International Human Rights Law Make a Difference?", 126.

The second response is premised on the understanding that, despite the fact that it has been imperfectly realized by states, the real utility of international law is derived from the role it plays as a legitimate authority.[181] The idea here is that the importance of international law is intimately related to the moral nature of its requirements, such that if its subjects are willing to abide by its directives it will more effectively guide them towards morally acceptable actions.[182] With this in mind, it is clear that the fact that states do not always comply with the principles of international law does not count against the authoritative role that it is able to play in its ideal form, as an institution that provides normative guidance to those trying to morally navigate an increasingly complex and globalized world. Joseph Raz speaks specifically to this insight about the normative guidance provided by our legal institutions in the following assertion:

> Ours is an attempt to explain the notion of legitimate authority through describing what one might call an ideal exercise of authority. Reality has a way of falling short of the ideal. It is nevertheless through their ideal functioning that they must be understood. For that is how they are supposed to function, that is how they publicly claim that they attempt to function…that is the normal way to justify their authority (that is, not by assuming that they always succeed in acting in the ideal way, but on the ground that they do so often enough to justify their power), and naturally authorities are judged and their performance evaluated by comparing them to the ideal.[183]

The final point to make, when considering the efficacy or influence of international law, is that one should be wary of too quickly buying into the idea that it is

[181] Whether international law actually is a legitimate authority is another question which will not be addressed in this thesis – of importance here is simply the fact that it satisfies the role of a legitimate authority.

[182] Matthew H. Kramer, "Legal and Moral Obligation" in *The Blackwell Guide to the Philosophy of Law and Legal Theory* Martin P. Golding and William A. Edmundson eds., (Blackwell Publishing, 2005), 183.

[183] Joseph Raz, "Authority and Justification," *Philosophy and Public Affairs,* 14.1 (1985): 15, http://www.jstor.org/stable/2265235 (accessed September 2012).

hardly ever complied with, since according to Louis Henkin, "almost all nations observe almost all principles of international law and almost all of their obligations almost all of the time."[184] Hence, on the whole, it is a mistake to think that international norms are unable to directly effect change, as well – "[t]he direct impact of international human rights law in Europe is not only comparable to that of domestic constitutional law in developed democracies, but greater than that of domestic law in nations where the rule of law has yet to take hold or is crippled by corruption."[185]

ii) The Human Right to Water as a Derivative Right

The second challenge issued from the specific type of connection that was established between Human Rights Council Resolution A/HRC/15/L.14 and ICESCR. More specifically, this relationship enabled the human right to water to be characterized by two problems: i) although its connection to the ICESCR revealed an existent legal commitment to the human right to water, the right itself exists as not only a derivative right of interpretation, but also as a derivative right of second-generation rights, which have long been considered contentious in some circles, and ii) as non-binding documents within international law,[186] the Human Rights Council Resolution, the General Assembly Resolution, and to a lesser extent General Comment No. 15, could not themselves be appealed to in order elicit the legal obligations characteristic of binding instruments, such as the ICESCR.

[184] Louis Henkin. *How Nations Behave: Law and Foreign Policy*, Second Edition (New York: Columbia University Press, 1979), 47.

[185] Cassel, "Does International Human Rights Law Make a Difference?", 132.

[186] All non-binding instruments of international law can also be referred to as forms of 'soft law'.

One way to contest this challenge is to rid the human right to water of its derivative status by arguing for its explicit entrenchment within a binding instrument of international law, such as a treaty or convention.[187] A move like this could, given its capacity to establish the primacy of the right, better orient the obligations of states. But, such a move would be too quick, since the utility of binding legal instruments within international law has recently been the subject of great debate. Indeed, some have gone so far as to argue that the 'conventional wisdom' that has led individuals to believe "that the most effective international commitments are legally binding," is mistaken.[188]

Unlike hard (binding) law, which has increasingly been leaving a lot to be desired in terms of efficacy and compliance, soft (non-binding) law presents one with an alternative perspective from which to measure the pursuit of standards. The utility of soft law, more specifically, is tied to its ability to speak to the following aspects of international regulation:[189]

i) [States] may use the soft law form when there are concerns about the possibility of non-compliance, either because of domestic political opposition, lack of ability or capacity to comply, uncertainty about whether compliance can be measured, or disagreement with aspects of the proposed norm;
ii) Legally binding norms may be inappropriate when the issue or the effective response is not yet clearly identified, due to scientific uncertainty or other causes, but there is an urgent requirement to take some action;
iii) Soft law "allows for more active participation of non-state actors;

[187] The CRC does explicitly refer to the human right to water. But, unless it can be extended to include those over the age of the majority, it remains unclear how it can be extended as a positive argument in favour of the human right to water for people of all ages.

[188] Kal Raustiala, "Compliance & Effectiveness in International Regulatory Cooperation," *Case Western Reserve Journal of International Law,* 32.3 (2000): 423.

[189] Shelton, *Commitment and Compliance,* 12-13.

iv) Soft law generally can be adopted more rapidly because it is non-binding. It can also be quickly amended or replaced if it fails to meet current challenges.

With this in mind, the greatest strength of soft law is related to a particular sort of flexibility that destabilizes at least one of the three principles that have traditionally informed hard law: obligation, precision, and delegation.[190]

So, how can one counteract the derivative challenge, if not to argue against the soft law source of the human right to water, or in favour of its entrenchment within a hard law instrument? One way would be to say that both the General Assembly and the Human Rights Council Resolutions, since their public disclosure in 2010, simply have not had enough time to inspire the progress that they were meant to. And, that in due time, given their nonbinding, flexible appeal, they could be sufficient catalysts for the realization of the human right to water. But, to go only this far at this point in time would be to essentially allow the challenge to go without remedy.

On the surface of it we have reached an impasse, but we must look deeper at one other aspect of the problem that has the potential to deliver us from the derivative challenge. Despite their current soft law form, both Resolutions suffer from a lack of specificity that makes compliance, even under the best conditions, difficult.[191] The General Assembly Resolution simply refers to the existence of the human right to water and sanitation without delineating the implications of such a right in terms of water provision. The Human Rights Council Resolution, in like manner, simply establishes the

[190] Kenneth W. Abbott and Duncan Snidal, "Hard and Soft Law in International Governance," *International Organization,* 54.3 (2000): 422, DOI: http://dx.doi.org/10.1162/002081800551280 (accessed October 2012).

[191] Shelton, *Commitment and Compliance,* 4.

derivative and legally binding nature of the human right to water in light of its intimate relationship with articles 11 and 12 of the ICESCR, but fails to identify the exact content of the right. Further, the allocation of obligations, and moreover the extent of the obligations of other states that emanate from the right to water, remain equally dubious. That being the case, the vagueness that characterizes these documents is detrimental to the acceptance and implementation of the right to water in light of the fact that, "[s]tates seem more willing to adopt clear and ambitious commitments when they are in non-binding form. Being clear, they are more effective."[192]

With these considerations in mind, I suggest we go further with the knowledge of the increasing importance of non-binding instruments of soft-law, and call for increased specificity with respect to the terms of both Resolutions. It is important to note, however, that upholding soft law, on one hand, and arguing in favour of specificity and precision, on the other, is not inconsistent because the relationship between hard and soft law is not characterized by a binary division.[193] That is, hard and soft law are not opposed in such a way that it would be a contradiction to support particular qualities of one alongside characteristics of the other. Further, law only has to exhibit flexibility in at least one of the three principles of hard law mentioned above – obligation, precision, and delegation – in order to be categorized as 'soft'. In this case, the precision of hard law is endorsed alongside a call for flexibility with respect to obligation and delegation.

Lastly, approaching this challenge from the perspective of soft law is also helpful to those who are skeptical of second-generation socio-economic and cultural rights. For,

[192] Shelton, *Commitment and Compliance,* footnote 15.
[193] Abbott and Snidal, "Hard and Soft Law in International Governance", 422.

one is less likely to incur hostility from those who oppose the status of second-generation rights as 'real' rights when they are actively engaged in the decision to take up the fulfillment of the norm in any manner they see fit, instead of having it thrust upon them as if they were simply passive recipients of obligation.

iii) The Efficacy of Human Rights as Mechanisms of Change

The studies cited in chapter two spoke not only to the inefficacy of human rights, and human rights mechanisms, but also highlighted their potential to set back development and other efforts given their inapplicability, specialized legal nature, and political underpinning. With this in mind, the response to this challenge will itself take the form of a challenge to the ideal of compliance within international law.

It has been argued that the focus on compliance, first and foremost, is both misplaced and counterproductive in the international arena.[194] Through an examination of the relationship between compliance, "understood as conformity between behaviour and a legal rule or standard,"[195] and effectiveness, "understood as the degree to which a legal rule or standard induces desired changes in behaviour,"[196] Kal Raustiala goes on to establish two seemingly counterintuitive conclusions: i) "low levels of compliance are not inherently an indication of low effectiveness,"[197] and ii) "high levels of compliance may signal low effectiveness."[198]

The first of these conclusions is related to the observation that, "[i]f a legal standard is

[194] Raustiala, "Compliance & Effectiveness in International Regulatory Cooperation", 388.
[195] Ibid.
[196] Ibid.
[197] Ibid.
[198] Ibid.

quite demanding, even widespread failure to meet it may still correlate with observable, desired changes in behaviour."[199] When this is the case, the inability to actually meet the standard need not necessarily be seen as a failure. The second seemingly counterintuitive conclusion is substantiated by "the relationship between the stringency of the legal standard and the baseline of behaviour. When the legal standard mimics or falls below the baseline – whether intentionally or coincidentally – compliance is high but effectiveness low."[200] In other words, when compliance is achieved in light of already existent states of affairs, the impetus for further change is diminished, if not entirely eliminated. Whereas in the case of the first conclusion, a focus on compliance had a tendency to mask the significance of the underlying state of affairs and the efforts that inform them, in the case of the second conclusion, a focus on compliance potentially negates the desire for any further change.

On the surface of it, human rights norms suffer from noncompliance for a variety of reasons. However, if one were to *only* study human rights norms from the perspective of (non)compliance, then – as we have seen – many conclusions about the negative utility of human rights and human rights mechanisms could be drawn. But, as Raustiala's first counterintuitive conclusion points out, this is to potentially neglect the effective nature of human rights norms.[201] On this understanding, the human right to water could be an effective mechanism of change, despite the fact that compliance with its terms within international law may be low.

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[199] Ibid., 394.

[200] Ibid.

[201] It is this dissatisfaction with traditional conceptions of compliance that has harnessed the growing popularity of soft law norms and mechanisms within international law.

Given the relative infancy of the human right to water, its use as an example of Raustiala's distinction may be considered premature. For this reason, two other human rights will be used to substantiate the claim that a right can be an effective mechanism of behavioural change, despite low compliance rates: the right to gender equality, as it is contained within the Convention on the Elimination of Discrimination Against Women (CEDAW), and the right to education, as it is expressed in the ICESCR and in the Convention on the Rights of the Child (CRC).

Gender equity rights have traditionally suffered from a lack of compliance in the Middle East and North Africa (MENA) region. Some of the gains that have been made in spite of this state of affairs include: increased rates of female literacy and school attendance, the establishment of the Center for Egyptian Women Legal Assistance (CEWLA), which assists women who find themselves in abusive relationships, and in some cases women who are seeking a divorce, and the refusal of Tunisian women to be marginalized within the political process surrounding the formation of a new constitution. Moreover, outside of the MENA region, one prominent example of the lifeline that human rights norms can provide is from Kabul, where women began to oppose the cultural customs that allow for honour killings and the general mistreatment of women.

The right to education is another human right that has historically suffered from the absence of compliance in the developing world, and moreover, it is also the right that finds itself most subject to attack in times of natural emergency or political upheaval. Although issues of access and quality continue to persist, the efforts to reverse this negative historical trend have not stagnated. Currently, the human right to education has

informed the basis of campaigns, such as the Right to Education Project, which is a research and advocacy group that calls governments to account for their actions (or more properly, their inaction). Moreover, it has spurred initiatives such as the Bachpan Bacho Andolan Child Friendly Village in India, which works to eliminate child labour and slavery by removing children from these marginalized positions and providing them with an education. Lastly, increased budgeting for education in South Africa further solidifies the push for the realization of the right to education.

In both cases, what this shows is that a focus on compliance is misplaced, and in some instances, neglectful of the effective nature of the norm in practice. The gains that have been made with respect to gender equality and education are valuable despite the opposing forces that threaten to undo that progress. This line of reasoning is very similar to the response issued against the first challenge (the efficacy of international law). For, the fact that these international norms have inspired progress – in however small or seemingly unimportant ways – entails that they are useful if only in an indirect manner.

iv) The Limits of Treaty Monitoring

The fourth challenge was informed by the problems that have recently come to characterize the human rights treaty monitoring system as a system dependent on a high level of state default.[202] The response to this challenge will proceed by first highlighting some new measures that have been proposed to strengthen the treaty body system, and second, by arguing that the failures of treaty monitoring bodies are practical malfunctions

[202] Crawford, "The UN Human Rights Treaty System: A System in Crisis?", 6.

that are distinct from the importance and value of the norm(s) embedded at the heart of the treaty.

In June 2012, after three years of consulting with treaty body experts, state parties, human rights institutions and civil society members, a list of proposals was advanced by the High Commissioner for Human Rights, Navanethem Pillay, for the purpose of strengthening the treaty body system. The list, specifically, included the following proposals:[203]

- Establishing a comprehensive reporting calendar ensuring strict compliance with human rights treaties and equal treatment of all States parties;
- Enhancing independence and impartiality of members, and strengthening the election process;
- Establishing a structured and sustained approach to capacity building for States parties for their reporting duties;
- Ensuring continued consistency of treaty body jurisprudence in individual communications;
- Increasing coordination among the treaty bodies on their work on individual communications and their adoption of common guidelines on procedural questions;
- Increasing accessibility and visibility of the treaty body system, through webcasting of public meetings and use of other new technologies;
- A simplified focused reporting procedure to assist States parties to meet their reporting obligations with cost savings for them and the UN while maintaining the quality of the process;
- Alignment of other working methods to the maximum extent without contradicting the normative specificities of the treaties;
- Limitation of the length of documentation.

Although little can be said about the effectiveness of these measures,[204] they can be

[203] Pillay, "Strengthening the United Nations Human Rights Treaty Body System", 10-11.

[204] Pillay was able to highlight some already recognized benefits: time required for state reviews has been decreased, best practices are increasingly being employed within treaty bodies that are operating as a system, operational costs are increasingly being cut, and there is increased outreach and visibility with

interpreted as a renewed attempt to specifically address the weaknesses of the failing treaty monitoring system.[205]

However, a stronger response to this challenge issues from the fact that the value of a legal norm should not be muddled by the practical difficulties surrounding aspects of its implementation. A criminal law, in like manner, should not be criticized on the grounds that officials and police officers are overtaxed by the obligations and duties implied by already existing laws. In both cases, the norm embedded at the heart of the discussion is more important than the difficulties that infect the system upon which its proper function depends.

Further, there is one more aspect of the debate that needs to be considered in this response. Specifically, this is the fact that the human rights system has grown drastically over the last two decades, "…States have increased ratification under international human rights treaties. The six core international human rights treaties in force in 2000 had attracted 927 ratifications. In 2012, this total increased by over 50% to 1,586 ratifications."[206] Accordingly, the obligations of monitoring bodies increased drastically over this time period, as well. Such rapid growth, moreover, goes a long way towards explaining the systems' defective nature.

Given the insights that informed the response considered in this section, there is

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regard to the outcomes of human rights mechanisms, which are now, moreover, being catalogued in *The Universal Human Rights index* (Pillay 2012, 31-33).

[205] It is important to note that the focus on 'strengthening' as opposed to 'reforming' is not just a semantic emphasis. Pillay highlights the failures of past 'reforms', and her decision to focus on strengthening existing tenets of the system is based on an understanding of those failures (Pillay 2012, 10).

[206] Pilllay, "Strengthening the United Nations Human Rights Treaty Body System", 17. It is important to note that the figure used for 2012 represents nine international human rights treaties (as opposed to the core 6) and three optional reporting protocols.

both reason to be skeptical and optimistic about the prospect of improvement. That being said, one has arguably more of a reason to be optimistic. This is because once the system is strengthened, such that it is able to accommodate a workload commensurate with its size, it will be able to effectively comply with its own terms.

v) The Import of Rights Rhetoric

The fifth challenge issued from the overuse of human rights language in different and competing contexts, and the direct implications of such use on the decision to call water a human right, as well as the indirect consequences facing water security discourse as a result of having employed this increasingly thin language.

This challenge is difficult to respond to given the pervasiveness of rights symbolism that has permeated social discourse. Nevertheless, one response could rest on the unique significance of water as a vital resource. That is, an argument could be made from water's status as the fundamental precondition that must be met before any other human rights can be realized, which is further related to its status as an increasingly scarce resource that is resistant to substitution and which is required for all natural and synthetic functions. Further, this approach attempts to separate the human right to water away from questionable (and commonly ridiculed) human rights, such as that expressed within article 24 of the UDHR which says that, "[e]veryone has the right to rest and leisure, including reasonable limitation of working hours and periodic holidays with

pay."[207] In turn, as a right that is distinctly different from all other human rights, accusations of vapidity, or thinness could themselves be called equally thin or empty.

Another response could be mounted, conversely, from the perspective of denying the thrust of the initial challenge. This would involve arguing that rights discourse is increasingly strengthened by its public life. For, its increased presence in academia and in the media, just to name two outlets, could testify to a heightened public awareness of the human rights issues currently facing particular populations within the broader human community. In turn, a common sense appeal can be made that looks something like this: surely, more rather than less attention on such crucial issues is a good thing.

However, as much as the first response attempts to separate the human right to water from other human rights, the language of rights and the assumptions that permeate it, continue to pose a threat to meaningful discussion. And, as long as this is the case, the decision to call water a human right could detract from the goal of water security by drawing attention away from the substantive content of the right, with the focus falling instead on its public representation. And lastly, as much as the second response attempts to appeal to one's common sense concerning the benefits of an increased public presence, the trouble still pertains to the type of attention that human rights issues receive, which is intricately related to how they are understood.

[207] United Nations General Assembly, *Universal Declaration of Human Rights.*10 December 1948. 217 A (III). http://www.unhcr.org/refworld/docid/3ae6b3712c.html (accessed July 2012).

3.2 How Should these Responses Inform our Understanding of the Human Right to Water?

At this point, it is time to take stock of all of the information at play in order to more properly give these responses and the challenges from which they originate their proper place within the broader discussion of what the human right to water means for water security. The prerequisite condition for this end, however, is an understanding of how these responses ought to inform our understanding of the human right to water.

As one will recall, five challenges have been responded to in this chapter: i) the questionable efficacy of international law; ii) the human right to water as a derivative right, iii) the efficacy of human rights as mechanisms of change, iv) the limits of treaty monitoring, and v) the import of rights rhetoric.

Despite their apparent differences, the responses to the first four challenges can be grouped together in light of a shared focus on the normative value of the instrument or norm under scrutiny. With respect to the response to challenge (i), the indirect influence of international law on the behaviour of states and non-state actors was emphasized alongside its role as a legitimate authority capable of providing normative guidance in an increasingly globalized and complex world. In the case of the response to challenge (ii), the increasing popularity of soft law was highlighted for the purpose of advancing a new perspective from which to understand the pursuit of standards, and to reveal the normative impetus that certainly does exist for many to meet these standards, even if parties choose to do so in diverse and divergent ways. The response to challenge (iii), moreover, shed light on how a focus on compliance is detrimental to progress, as it tends

to mask the significance of the underlying state of affairs and negate the desire for any further change. And lastly, the response to challenge (iv), reminded readers that the practical malfunctions of a system that outgrew itself should not detract from the value of the norm embedded at the heart of the ratified law.

As a result of having safeguarded the normative value of the instrument or norm under scrutiny, each of these four challenges can be interpreted as having lost their intimidating façade. And, given this state of affairs, these four responses can now be utilized as arguments in favour of the human right to water as a mechanism for the achievement of water security.

However, challenge (v) still poses a threat to any such positive argument. In turn, the question that must now be answered is whether this fault presents us with a good enough reason to completely steer clear of any discussion of the human right to water? And the answer to this question, as it will be substantiated below, is no.

To reiterate, challenge (v) was premised on the question of whether it would be a good idea to treat the issue of water security using rhetoric that is open to problems of thinness, manipulation, and unrealistic expectations. The fear here was that the goal of water security could be lost sight of given the potential of rights language to import diverse meanings that could cloud its significance as the goal to be achieved.

The concern embedded at the heart of this challenge can be quieted if a negative answer to the following question is possible: is a concept's susceptibility to misunderstanding a good enough reason to abandon it? An examination of the concept of justice provides us with the answer we are looking for, since there are multiple and

competing conceptions of justice – some of which issue from theology, others from law and morality, and still others which originate from political theory – that raises the probability of misuse, and in turn misunderstanding. And yet, despite this conceptual diversity, the concept has not been abandoned.

Moreover, not only is the concept of justice continually employed despite certain discursive pitfalls, such as the failure to disclose which conception one is presupposing in the literature or in discussion; but it is my contention there is an awareness of the importance of continuing to do so because of what is at stake if it ceases to be a subject of debate. That is to say that the risk we take by abandoning the sometimes conceptually jumbled issue of justice is much greater than the risk we take by proliferating warped media representations, or having disjointed conversations about the subject.

Further, it is important to observe that the difficulties that one encounters with respect to the concept of justice are not innate to the concept of justice itself, since the problem concerns our failure to delineate what we mean when we are writing and speaking, and moreover, to properly educate ourselves as to the origins and boundaries of the subject. This is as true for the academic, as it is for the lawyer, the activist and the media. In turn, the same can be said in response to challenge (v). For, just as the difficulties that surround justice should not lead us to abandon it, so too should the rhetorical import of rights language not lead us to abandon the human right to water in discussions of water security. If anything, the human right to water could represent a new platform upon which to assess the credence of rights language.

The re-evaluation of challenge (v) highlighted the narrow-mindedness of thinking that we should stay away from talking about water security in terms of human rights just because rights language is susceptible to misunderstanding. And, after situating challenge (v) within a broader context, readers were given a greater appreciation of its actual weight in the discussion of the human right to water.

Given the findings of this section, it seems that there are at least five good reasons to believe that the human right to water, construed (first and foremost) as a moral right to a minimum of 50 liters of clean[208] water per person per day, is a valuable mechanism for the achievement of water security, defined as *the realization of the conditions for the individual experience of assured access to safe water*.

First, its status within international law bestows upon it particular benefits. This is because, despite its relative immaturity, international law is a growing body of regulation that has the potential to normatively influence states and non-state actors with respect to the creation of national laws and policies that are increasingly reflective of shared norms. This feature, moreover, is integral to the role international law is able to play as a legitimate authority in an increasingly complex and globalized world. In light of the context afforded by this feature of the human right to water within international law, the broader human, environmental, political and economic issues that inform the concept of water security are more likely to be subjects of discussion within a forum that is able to accommodate and respond to the cross-cutting, trans-boundary nature of these concerns.

[208] Again, as mentioned before, there is a discrepancy here that at first glance appears to derail the relationship, since 'clean' water and 'safe' water are not the same thing. However, as long as one focuses on the fact that the human right to water is a valuable tool, as opposed to a sure fire guarantee, then the positive relationship between the two is not torn down by this discrepancy.

Second, the derivative weakness of the human right to water revealed that its place within the two non-binding documents of international law – General Assembly Resolution A/RES/64/292 and Human Rights Council Resolution A/HRC/15/L.14 – are potentially two of its greatest strengths. This is owed, primarily, to the status of these documents as forms of soft law, which as I noted earlier, is a new perspective from which to understand the pursuit of standards that reveals that the normative impetus certainly does exist for many to meet international norms, even if parties choose to do so in diverse and divergent ways. This leaves open the possibility that water security can be realized in equally diverse and divergent ways, as well, which further has the potential to honour the various capacities and capabilities of states.

Third, the human right to water, like the right to gender equality and the right to education, has the potential to effect meaningful change in at least two ways: i) in light of its ability to unite the claims of the oppressed,[209] and ii) through its ability to confer a stamp of legitimacy on the efforts of those who are already working for change. It is effects like these that should lead one to believe that the absence of compliance cannot on its own inform conclusions of ineffectiveness. In terms of water security, findings like these remind us that much can be done with the intention of achieving water security, even if the goal actually fails to be achieved.

Fourth, the recently proposed measures to strengthen treaty monitoring can be interpreted as a renewed commitment to protect human rights by the international community. This commitment, further, steadies the prospect of realizing water security

[209] Michael Ignatieff. "The Attack on Human Rights" *Foreign Affairs,* 80.6 (2001): 109, http://people.duke.edu/~mbf3/Attack%20on%20Human%20Rights.pdf (accessed November 2011).

via the human right to water, since the success of these measures increases the probability that there will exist a more effective and efficient system that can monitor changes on an individual level.[210]

Fifth, despite the risk of manipulation and misunderstanding that is imported alongside the use of rights language, the heightened visibility of the human right to water has the potential to garner valuable attention for water security, and the issues that inform it. As discussed above, the duty will be ours to become informed about the content, limits and implications of the human right to water. And, this will hopefully curtail the rise in unrealistic expectations such that a focus on the human right to water could not be said to replace or cloud the goal of water security.

Now, keeping these arguments in favour of the human right to water in mind, we must now go back to the distinction between morality and law that was made in chapter two. For, in as much as the normative influence of morality can incite valuable positive change both in the presence and in the absence of a legal system, the importance of law in terms of accountability, protection, and enforcement cannot be underestimated. This is because, despite the distasteful politics that may permeate institutional arrangements, the human right to water is also a positive legal right. And, as such, it requires the provision of a resource by the state. In this case, it is the provision of safe water.[211]

[210] Of course, this does also imply that it is simply too soon to argue in favour of the human right to water as a mechanism to achieve water security.

[211] For the sake of brevity, the term 'resource' will continue to be used from this point on.

3.3 Implementation

At this point it seems that, at least in the abstract, there is good reason to promote water security by way of the human right to water. However, it must immediately be admitted that these considerations are distinct from the conditions that would *ensure* that a human right to water would actually be respected by the governments that it purports to apply to.

More specifically, it seems clear that in order for the demands of the human right to water to be respected, as opposed to acknowledged or understood, a government must: i) be possessed of adequate amounts of the resource in question, ii) be possessed of the political willingness to provide the resource, and iii) be possessed of the capacity, including the infrastructure, to supply the end user with the resource.

The first of these conditions emerges from the common sense notion that one must first possess the resource before one can effect its distribution. The second condition, on the other hand, is informed by Hathaway's conclusions concerning treaty ratification. For, in the absence of a political will, treaty ratification is more likely to be solely expressive, as opposed to instrumental and expressive. Finally, the third condition is informed by the concept of economic water scarcity highlighted in chapter one of this work. This type of scarcity pertains to the absence of the financial and infrastructural resources necessary for providing individuals with safe water.[212] Infrastructure, in this case, not only refers to the physical capacity to supply the end user with the resource in question, but it also refers to

[212] The Water Project, "Two types of Water Scarcity." http://thewaterproject.org/water_scarcity_2.asp#phys (accessed June 13 2012).

the technology (e.g., desalination, and chemical treatment) that is required to supply end users with the resource of a particular quality (i.e., safe water).

Currently, it seems that *most* states are able to satisfy at least the second and third, if not all of these conditions. However, it must be noted that condition (i) will become increasingly difficult for states to satisfy in the coming years, as water stress and water scarcity levels continue to increase globally. Nevertheless, it seems plausible to suggest that a good portion of states could, at the moment, accomplish the legal integration of the human right to water, and realize water security with it.

Even so, it seems quite clear that there are many states that would be unable to meet one or more of these three criteria. Thus, more needs to be said about the relevance and applicability of the human right to water. But, I shall not go on further about this point here, since the relationship between the human right to water, water security, and the bottom billion, will be taken up as the subject of the next chapter.

Concluding Remarks: Chapter 3

This chapter accomplished three things. First, responses to the five challenges raised in the last chapter were provided for the purpose of ridding these challenges of their overwhelming character. Second, four of the five responses were shown to be arguments in favour of the human right to water, while the other, upon further examination, was proven to be less of an obstacle than initial conclusions would have led one to believe. Third, the resultant understanding gained from an appreciation of the above allowed me to argue that there are at least five good reasons to believe that the

human right to water is a valuable mechanism for realizing water security; but, it seems, *only* in the case of states that are able to satisfy the following conditions: i) being possessed of adequate amounts of the resource in question, ii) being possessed of the political willingness to provide the resource, and iii) being possessed of the capacity, including the infrastructure, to supply the end user with the resource.

Chapter 4

The Human Right to Water, Water Security and the Bottom Billion

In this chapter I will contend that the human right to water can do little, if anything, to help the bottom billion achieve water security. Now, most of the states that house this portion of the global population are suffering from water stress and physical water scarcity. In turn, many if not all of them will obviously be precluded from satisfying their citizens' human right to water. But, the problem is substantially greater than this. To see how, this chapter will attend to Paul Collier's work on the "four traps" that face the bottom billion: the conflict trap, the natural resource trap, the landlocked with bad neighbours trap, and bad governance in a small country trap.[213] With this work setting the scene for understanding the special nature of the problems facing these states, the argument of this chapter proceeds mainly by implication. That is, given Collier's conclusions about the increased susceptibility of the bottom billion to these four traps, it can further be surmised that the this group will be unable to satisfy the other two conditions necessary for the successful implementation of the human right to water: ii) the political willingness to provide the resource, and iii) the capacity, including the infrastructure, to supply the end user with the resource.

I will start this chapter with a summary of the work up to this point in order to provide a context for this facet of this thesis' main argument. Then, Collier's traps will be delineated for the purpose of later substantiating the claim that at least two of the three

[213] Paul Collier. *The Bottom Billion: Why the Poorest Countries are Failing and What Can be Done About it* (New York: Oxford University Press, 2007).

conditions necessary to successfully implement the human right to water within the societies of the bottom billion cannot be met. This finding will further be used to support the conclusion that the viability of human right to water as unhelpful mechanism for the achievement of water security within the context afforded by bottom billion societies is dubitable. Instead, following Russell's findings, the human right to water ought to be shelved for future discussion as a desirable development outcome.

4.1 Summary

The purpose the first chapter was to formulate a definition of water security that was able to account for the most important dimensions of water security discourse. This was done primarily by employing a definition that allowed for variation within the conditions required for water security. In doing so, the intention was to honour the unique circumstances facing nation-states. Given the multifaceted nature of the subject, the interdependencies between water, food, and energy security were made explicit at this point, as well. Further, the third part of the first chapter offered a policy perspective from which to understand how the concept of water security ought to be deployed. As a perspective informed by prioritarian intuitions surrounding the moral weight of the interests of the worst off, its use was meant to give priority to the water needs of the bottom billion – the upwards of 780 million people living in the poorest residents of the most impoverished regions of the world: the Middle East, Sub-Saharan Africa, Oceania, South Asia and South-Eastern Asia. This portion of the global population, moreover, has yet to benefit from the development efforts ushered in by the MDGs. Hence, the policy

perspective offered in chapter one highlighted the need to give priority to the interests of the bottom billion, since from a prioritarian vantage point their interests morally count for more.

In the second chapter, the discussion turned to normative frameworks for the purpose of providing a context for understanding the moral and legal import of the human right to water. Then, in light of contemporary discussions about the human right to water, five challenges were raised against the prospect of utilizing the human right to water as a mechanism for the achievement of water security.

It was the task of the third chapter to show that these challenges could be responded to in a way that mitigated the threat they posed for talking about water security in terms of the human right to water. And, given the successful nature of these responses, it was later argued that *in most cases* the human right to water is a valuable normative mechanism for the achievement of water security.

Now, this chapter is *not* about most cases. It is *not* about the roughly six billion people who are living in developed countries, or those who are on the development track, or those who have benefitted from the MDGs. Rather, it is about the residual one billion, the bottom billion – the portion of the global population that has literally been left behind, and, according to Collier, continues to fall apart.[214]

What's more, the desperate nature of their situation is intensifying, as it is now being compounded by the global water crisis. Given this state of affairs, the global community cannot afford to advance a solution that would neglect special circumstances

[214] Collier, *Bottom Billion,* 3.

of the worst off. For this reason, this chapter addresses the relationship between the human right to water, water security, and the bottom billion for the purpose of deciphering whether the human right to water is a useful normative mechanism for realizing water security with regard to this portion of the global population, as well. The implication of this relationship is not positive, and as a result it works to further strengthen the moral imperative of the prioritarian policy perspective offered in chapter one.

4.2 Collier's Four Traps

The Conflict[215] Trap

Seventy-three percent of people in the societies of the bottom billion have recently been through a civil war or are still in one.[216]

The conflict trap speaks to a state of affairs that is characterized by three factors: slow growth (or stagnation or decline), low income, and a natural resource export dependence (e.g., oil, diamonds, coffee). According to Collier, the societies of the bottom billion are characterized by at least two of these factors, and in some cases, by all three. Susceptibility to these factors not only makes the prospect of conflict more likely, but it also increases the likelihood of becoming trapped in poverty. The causal nature of the relationship between these factors is open to debate, but this is in many ways a question external to the point at hand.

[215] According to Collier, conflict is understood as including civil war, rebellions, and coups.
[216] Collier, *The Bottom Billion*, 17.

It is important to note that the conflict trap is not just about the time during the conflict, as it extends to the consequences of the conflict. For instance, the forced migration of individuals negatively impacts health, as people are introduced to diseases indigenous to other regions.[217] And, upon returning after the cessation of fighting, instead of resources being funneled into rebuilding and infrastructure efforts, they are diverted to military spending in order to prevent a conflict relapse: "once over, a conflict is alarmingly likely to restart…Only around half of the countries in which a conflict has ended manage to make it through a decade without relapsing into war. Low income countries face disproportionately high risks of relapse."[218]

The Natural Resources Trap

The societies of the bottom billion are disproportionately in this category of resource-rich poverty: about 29 percent of the people in the bottom billion live in countries in which resource wealth dominates the economy.[219]

According to Collier, this paradoxical situation is primarily informed by an economic condition known as *Dutch Disease* – "[t]he resource exports cause the country's currency to rise in value against other currencies. This makes the country's other export activities uncompetitive."[220] These other export activities, in many instances, could have grown rapidly and provided a stable revenue source.[221] Of course, it is

[217] Ibid., 28.
[218] Ibid., 27.
[219] Ibid., 39.
[220] Ibid.
[221] Ibid., 40.

important to note that this situation only becomes a 'trap' in the context of poverty and stalled economic growth.[222]

What's more, susceptibility to the resource trap is increased given the absence of restraints on the practices of resource-rich 'democracies', which characterize a high proportion of the political arrangements within which the bottom billion live:

> The sort of democracy that the resource-rich societies of the bottom billion are likely to get is itself dysfunctional…In the transition to democracy there are strong incentives for different groups to compete for election, but there are no corresponding incentives for them to build restraints. Restraints are a public good that it is in nobody's particular interest to supply.[223]

In turn, elections are open to the highest bidder and ballots are bought rather than won. Further, in the absence of a system of checks and balances that are usually present in properly functioning democracies, the poor investment decisions of these resource-rich 'democracies' have no way of being curtailed, and this only contributes to the continued stagnation of these economies. This state of affairs, moreover, is only made worse by the high likelihood of conflict, given the fact that natural resources can both motivate conflict and become a source of financing for the conflict.[224]

The Landlocked with Bad Neighbours Trap

The landlocked-with-bad-neighbours trap concerns the interplay of two variables: geography, and the development status of one's neighbour. In his research for the World Bank, Tony Venables made the following discovery: "the transport costs for a landlocked

[222] Ibid., 38.
[223] Ibid., 51.
[224] Ibid., 21.

country depended upon how much its coastal neighbour had spent on transport infrastructure."[225] And, Collier employed this finding to explain why Uganda is poor and why Switzerland is rich:

> Switzerland's access to the sea depends upon German and Italian infrastructure, whereas Uganda's access to the sea depends upon Kenyan infrastructure…if you are landlocked with poor transport links to the coast that are beyond your control, it is very difficult to integrate into global markets for any product that requires a lot of transport.[226]

Hence, given a landlocked country's distance from the global market, it is advisable that they trade with their neighbours. But, the economic value of doing so is variable, as the Switzerland versus Uganda example highlights.

Collier, however, takes this further. For, he argues that this special confluence of factors is primarily a problem for the 38 percent of the bottom billion living in Africa, which is why he calls it, "overwhelmingly an African problem."[227] The severity of the situation may be decreased when the landlocked country is resource-rich, since this natural surplus then becomes its defining feature.[228] But, although a resource-rich status is beneficial, one must remember that resource-rich countries of the bottom billion remain especially susceptible to the mismanagement and poor governance practices characteristic of the natural resource trap.

Thus, given the insights provided by Collier and Venables, the intensity of the problems these landlocked countries face is compounded by two other possibilities: the neighbours of the landlocked country in question are themselves stuck in one (or more) of

[225] Ibid., 55.
[226] Ibid.
[227] Ibid., 54.
[228] Ibid., 56.

the four traps, which makes trade with them unprofitable, and the country itself is resource-scarce. It is the combination of these two features that, to use Collier's phrase, "condemns a country to the slow lane."[229] Afghanistan, a landlocked country whose neighbours suffer from poor infrastructure, embodies a classic example of this trap.

Bad Governance in a Small Country Trap

The final trap is informed by the consequences of poor governance and policy, with an emphasis on bad economic policy. The stress this trap placed on small countries is owed to the fact that small countries often present a disproportionate hassle to investors who would have to learn the intricate details of a system that cannot necessarily promise legitimacy (given the problems examined above) or healthy returns.

Nevertheless, in order to delineate the extent to which bad governance and poor economic policy affect the prosperity of a country, Collier and Lisa Chauvet devised a scoring system using the World Bank's *Country Policy and Institutional Assessment Index.*[230] The purpose of the scoring system, more specifically, was to reduce 20 aspects of prevalent governance and policy issues to their numerical counterparts in order to gauge how states, especially those comprising the bottom billion, are doing with respect to these aspects.

For effect, Collier and Chauvet decided to call those countries that fell below the cutoff point, 'failing states'.[231] Further, in order to avoid a misplaced focus on temporary

[229] Ibid., 57.
[230] Ibid., 68.
[231] Ibid.

lapses of poor governance and misshaped policy, a country could only be considered a failing state, "if the rating has stayed low for continuous period of four years."[232] With this calculus and its specifications in hand, the results were ostensibly negative: "[m]ore than three quarters of the population of the bottom billion live in countries that have at sometime been failing states…"[233] It ought to be noted that India, which is home to a significant percentage of the bottom billion, is a unique case that does not qualify as a failed state under Collier's and Chauvet's calculus. In fact, it forms an exception to their scheme as it continues to prosper at the same time that a portion of its population comprises a segment of the bottom billion.

Collier cites the lack of political will to redress governance issues as one of the root causes of a country's failed state status.[234] However, he goes on to contend that such failures are also a technical matter: "in the bottom billion there is a chronic shortage of people with the requisite knowledge. Few citizens get the training needed, and those who do get it leave."[235] This is an effect known as *brain drain*, and it is common in Africa and in other developing regions.

4.3 The Realities Revealed by Collier's Four Traps

Now, the issue to be extrapolated in this section concerns the fact that the realities showcased by Collier's four traps cast doubt on the bottom billion's ability to satisfy at the second and third of the three conditions necessary for the successful implementation

[232] Ibid., 69.
[233] Ibid.
[234] Ibid., 67.
[235] Ibid.

of the human right to water: ii) being possessed of the political willingness to provide the resource, and iii) being possessed of the capacity, including the infrastructure, to supply the end user with the resource. The inability to satisfy these conditions, then, supports the conclusion that *with respect to the bottom billion* the human right to water simply cannot be respected and, therefore cannot aid in the realization of water security.

Condition (ii), which refers to the political will to provision (an increasingly scarce) resource, is unlikely to be satisfied by societies of the bottom billion for three main reasons. First, the all-encompassing nature of the focus on conflict – as emphasized by Collier's observations of not only the time during conflict, but also of the time preceding and proceeding it – ensures that all resources, time, and manpower are diverted to military efforts. Anything that would detract from this funneling of resources would, by implication, fail to find support within a regime of that focus.

Second, there is an even simpler reality underlying the inability to meet condition (ii): within the states of the bottom billion, there is a lack of political will to do the right by one's citizens, generally. And, this is best substantiated by the fact that roughly three-quarters of the bottom billion are living in states that are now or have been classified as 'failing', according to Collier and Chauvet's scoring system.[236]

Third, the increasing transition of bottom billion governments from autocracies to democracies further impedes the satisfaction of condition (ii). On the face of it, one would suppose that such a transition would be both positive and valuable, since a democracy has the potential to inspire a political will where one did not originally exist. But, as Collier

[236] Ibid., 69.

points out, these are dysfunctional democracies whose elections are open to patronage, and whose investment and policy decisions are still essentially autocratic.

Next, condition (iii), which refers to the capacity, including the infrastructure, to supply the end user with the resource, is unlikely to be satisfied by societies of the bottom billion for three main reasons. First, the initial point requires one to keep three things in mind: a) 'resource' here refers to safe water; b) as a result of dwindling freshwater reserves, all water that is meant for human consumption must now be treated in order to considered safe, and c) water treatment is a multi-stage process that requires financial resources, physical infrastructure, and trained professionals. The problem here is that these three points come together to reflect a reality that is incongruent with the reality highlighted by Collier: bottom billion states are plagued with technical knowledge and infrastructure problems. And, as a result, it is doubtful that the capacity exists for bottom billion states to even try to supply the end user with the resource in question.

Second, given the bottom billion's susceptibility to the conflict trap, it can further be surmised that even if the requisite infrastructure necessary to produce safe water did exist, the likelihood that it would be damaged by or compromised by conflict is very high. And, moreover, this kind of threat would surely stand in opposition to the intentioned meaning of water security. That is, it would directly oppose the 'assured access' component of the definition of water security, which was likened to the psychological experience of a guarantee that offers freedom from fear and uncertainty regarding and individual's water supply.

Third, given the slow (no) growth cycle that traps bottom billion societies in poverty, it is not only unlikely that they will have the financial resources to build capacity and infrastructure (condition iii), but it is also unlikely that they will be able to *continuously* finance the most expensive and most important stages of water treatment. For, the later stages of water treatment actually kill the microbial substances that get through primary treatment, which just removes debris. And, given the fact that rising contaminant levels in surface runoff have compromised the quality of available freshwater resources to the point where it requires extensive treatment, this leaves societies of the bottom billion in an increasingly compromised position.[237]

One could, however, argue that with respect to the sharing of trans-boundary water resources – especially with respect to the landlocked countries of Africa – the appeal to the human right to water as a moral right could be useful. This is because a human right refers to a basic moral entitlement that is inalienable – an entitlement, further, that cannot be outweighed by the right of another. So, the human right to water could provide a way of understanding distribution and allocation in terms of a fundamental equity that cannot be manipulated by borders, religious or state politics, or money. However, given the corruption of the institutional arrangements within which bottom billion societies exist, and the overall failure to do right by one's citizens on a regular basis, the viability of this appeal is doubtful.

[237] This situation is made worse by the revelation in chapter one that improved water sources are increasingly being deemed unreliable because they are providing water that is inadequate for good health.

Concluding Remarks: Chapter 4

Given the conditions that must be realized in order for a state to successfully satisfy the human right to water, it can be concluded that *when the bottom billion is the population under consideration*, the viability of the human right to water as a mechanism for the achievement of water security is highly dubious.[238] As such, it seems that the utility of the decision to recognize the human right to water within international law is intricately related to the population under consideration, such that its entrenchment can be more or less useful depending on *whose* water security is the subject of concern.

[238] And, this further casts doubt on the ability of human rights based approaches to act as catalysts for the achievement of food and energy security within the special context afforded by the bottom billion. However, establishing this concretely goes beyond the scope of this thesis.

Conclusion

In this thesis I have argued that the idea of water security should be understood as the realization of the conditions for the individual experience of assured access to safe water. Following this, a policy perspective was offered that placed the interests of the bottom billion at the forefront of the ongoing discussion. Next, I considered the worth of the human right to water regarding its ability to realize and effect social change, with a special emphasis upon the issue of water security. This was done, further, with an appreciation of the fact that the conclusions reached could also extend to the right to sanitation, given the united front that the human right to water and sanitation present within the General Assembly Resolution (A/RES/64/292). While I initially delineated a number of potential problems for the human right to water, I concluded that there are at least five good reasons to believe that the human right to water can aid in the realization of water security:

1) Given the context afforded by the human right to water within international law, the broader human, environmental, political, and economic issues that inform the concept of water security are more likely to be subjects of discussion within a forum that is able to accommodate and respond to the cross-cutting, trans-boundary nature of these concerns;
2) The existence of the human right to water as a norm of soft law leaves open the possibility that water security can be realized in diverse and divergent ways, which further has the potential to honour the various capacities and capabilities of states;

3) In its ability to unite the claims of the oppressed,[239] and through its ability to confer a stamp of legitimacy on the efforts of those who are already working for change, the human right to water reminds us that much good can be done with the intention of achieving water security, even if the goal actually fails to be achieved;
4) The recently proposed measures to strengthen treaty monitoring steadies the prospect of realizing water security by way of the human right to water, since the success of these measures increases the probability that there will exist a more effective and efficient system by which to monitor changes on an individual level;
5) The heightened visibility of the human right to water has the potential to garner valuable attention for water security and the other concerns that inform it.

With these points in mind, one might think that it is obvious that the human right to water would serve to advance water security. But, this is only true in the case of states that are able to satisfy the conditions necessary for the successful implementation of the human right to water as a positive legal right: i) being possessed of adequate amounts of the resource in question, ii) being possessed of the political willingness to provide the resource, and iii) being possessed of the capacity, including the infrastructure, to supply the end user with the resource.

In the case of *most* states this may be possible, but in the case of those that are home to the bottom billion, it is not. Armed with this understanding, I was able to conclude that the utility of the decision to recognize the human right to water within international law is intricately related to the population under consideration, such that its

[239] Ignatieff, "The Attack on Human Rights", 109.

entrenchment can be more or less useful depending on *whose* water security is the subject of concern.

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