

**The Political Economy of Water:
Competing Conceptions of the Water Commons**

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Signed:

A handwritten signature in black ink, appearing to be 'A. Hall', written in a cursive style.

Date: **August 18, 2017**

Abstract

The struggle over water has been historically contentious. This struggle is defined by a struggle over the right to water. The right to water is steeped in a world of legal relations wrapped up in the complex property arrangements that comprise the global economy. These globally constituted arrangements impact water supply at a local level; yet, on a more fundamental level, these property arrangements reflect the dominant mode of production. By way of neoliberal policy reform economic globalisation increasingly encloses all aspects of social reproduction, including water and sanitation services (WSS). As private property increasingly becomes the prevailing form of property of the global economy common or collective rights and institutions are eclipsed.

Although resistance to neoliberalism is widespread and diverse civil society within liberal democracies is comprised of competing and contradictory interests that mitigate against cooperative or shared appeals to a water commons. Diametrically opposed class interests increasingly invoke the language of the water commons when staking claim to water thereby raising critical questions concerning both the nature of the so-called water commons and the efficacy of such an approach. This thesis offers a radical critique of the idea of the water commons, one consisting of a comprehensive understanding of rights within the broader context of liberal democracy: that is, how the struggle over the right to water is defined by broader unequal property relations that characterize the capitalist mode of production. By way of a political economy critique this thesis offers a holistic and robust theoretical understanding of the struggle over the right to water by reinvigorating the question of property in the context of competing conceptualisations of water commons discourse.

Table of Contents

Declaration of Author’s Rights.....	1
Abstract	2
Dedication.....	6
Acknowledgements.....	7
Abbreviations	11
Chapter 1: The Water Problematic: An Introduction and Background.....	12
Specific research questions	17
State of the world’s water	19
Neoliberal rights and the ‘global water crisis’	26
Market trends in the commercialisation of water.....	29
Significance of research.....	30
Purpose of thesis.....	32
Organisation of thesis	33
Chapter 2: The Commons: Common Pool Resources and the ‘Modern’ Commons	38
Background.....	40
Commons literature.....	46
Common pool resources (CPRs).....	48
Tragedy of the commons.....	50
Four property regimes.....	52
<i>Open access</i>	53
<i>Common property</i>	53
<i>State property</i>	56
<i>Private property</i>	56
Summary of property regimes.....	58
Criticisms of common pool resource theory	58
The ‘modern’ commons	59
What are the ‘modern’ commons?	61
Social struggle defines the ‘modern’ commons	66
The moral and ethical basis of the ‘modern’ commons.....	69
The ‘modern’ commons and the state	72
Critique of the ‘modern’ commons.....	75
Conclusion	79

Chapter 3: The Political Economy of the Water Commons: A Materialist Ontological Framework for Studying Water	81
Property and rights; a rationale for analysis	86
The common conception of property	88
Property as a social relation.....	89
Liberal democracy and neoliberalism.....	92
<i>Liberal democracy</i>	92
<i>Neoliberalism: Historical origin to everyday practice</i>	96
<i>Neoliberal principles</i>	99
<i>Neoliberalism as a contested space</i>	105
A materialist account of liberal democracy	106
Conclusion	107
Chapter 4: A Methodological Framework for Studying the Water Commons.....	109
Mixed methodology.....	113
<i>Documentary analysis</i>	114
<i>Critical discourse analysis unpacked</i>	120
Critical realism defined.....	125
<i>Epistemic fallacy</i>	128
The question of human agency and social structures: A critical realist perspective	130
Positionality.....	137
Stratified domains of reality.....	139
Domains of the reality.....	142
Transcendental reasoning: A second ordered argument.....	143
Abductive Logic.....	145
Conclusion	146
Chapter 5: Causal Explanation One – Neoliberal Appeals to global water scarcity	148
Inference to the best possible explanation	149
Scarcity claims and the spectre of tragedy of the commons.....	159
Conclusion	164
Chapter 6: Causal Explanation Two – Neoliberal appeals to liberal individualism	166
Inference to the best possible explanation.....	166
Pro-poor approach	171
Supporting human rights: Rhetorically united, conceptually divided.....	172

The status of the human right to water	183
Conclusion	186

Chapter 7: Causal Explanation Three – Neoliberal appeals to sources of sovereignty backed by the capitalist state 187

Inference to the best possible explanation.....	188
UN water policy trajectory: State centrism to decentralisation.....	188
A shift in state responsibilities with the Brundtland Report: The state redesigned	192
Post-Brundtland: New Delhi Statement, Dublin Statement and Agenda 21	197
The Dublin Statement: Forcing the pace of change.....	198
Agenda 21	200
World Water Reports define the role of the State	201
Conclusion	206

Chapter 8: Causal Explanation Four – Neoliberal appeals to retail-oriented relationships with respect to WSS. 209

Inference to the best possible explanation.....	210
Neoliberalism’s claim: An historical failure to recognize the value of water	211
The UN and the Anthropocene	213
UN anthropocentrism, years in the making: Valuation policies pre-WWDRs.....	220
Valuation and the influence of the WWDRs	225
Conclusion	242

Chapter 9: Conclusion – The Water Commons Problematic Reframed..... 244

Thesis summary.....	244
A struggle over rights not water	248
UN’s role in the neoliberalisation of WSS	251
The commons.....	255
Toward water justice.....	264
Conclusion	273

Bibliography 276

Dedication

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Abbreviations

CDA: Critical Discourse Analysis
CESCR: UN Committee on Economic, Social and Cultural Rights
CRC: Convention on the Rights of the Child
CPR: Common Pool Resources
DSD: United Nations Division for Sustainable Development
ECF: Extended Credit Facility
ECOSOC: The United Nations Economic and Social Council
GATS: General Agreement on Trade in Services
GCT: Global Commons Trust
GWI: Global Water Intelligence
GWP: Global Water Partnership
HIPC: Heavily Indebted Poor Countries
IFIs: International Financial Institutions
IMF: International Monetary Fund
IMFC: International Monetary Fund Committee
IWRM: Integrated Water Resources Management
MPAP: Mar del Plata Action Plan
MDGs: Millennium Development Goals
NAFTA: North American Free Trade Agreement
NGOs: Non-Governmental Associations
OECD: Organisation for Economic Cooperation and Development
OHCHR: United Nations Human Rights Office of the High Commissioner
P3s: Public Private Partnerships
PFIs: Private Financing Initiatives
PSP: Private Sector Participation
SAPs: Structural Adjustment Programs
SPP: Security and Prosperity Partnership of North America
UDHR: Universal Declaration of Human Rights
UNHRC: United Nations Human Rights Council
UN: United Nations
UNCED: United Nations Conference on the Environment and Development
UNDESA: United Nations Department of Economic and Social Affairs
UNEP: United Nations Environment Programme
UNESCO: United Nations Educational, Scientific and Cultural Organization
UNGA: United Nations General Assembly
WCED: World Commission on Environment and Development
WHO: World Health Organization
WTO: World Trade Organization
WSS: Water and sanitation services

Chapter 1: The Water Problematic: An Introduction and Background

Water is referred to as many things: the sustenance or essence of life, the source or bloodstream of all life on earth, even blue gold. On the other hand and more in line with its governance aspects, water is referred to as a social and cultural good, a public good, a global commons and a human right. In contrast and perhaps more controversial many people, organizations and institutions have taken to referring to water as a commodity or an economic good thereby consigning this essential resource to the various allocation mechanisms and processes of the free market. Most recently and irrespective of this debate, all of these references have been situated in the context of an impending ‘global water crisis’ with some commentators referring to a planet with a decreasing availability of water as a planet in peril. These crisis claims are made on the basis of many suppositional factors: a depletion and growing scarcity of freshwater stocks; overuse of water sources and services; inadequate and aging infrastructure; rapid global population growth; increased pollution; and global climate change. Many commentators point to these factors that affect water and sanitation services (WSS) as the ‘global water crisis’.¹ In the face of this purported ‘global water crisis’ the struggle over water has been encapsulated by many references also: the last frontier, water wars, tragedy of the commons, and reclaiming the commons, amongst many others. Whatever the

¹ The concept of the ‘global water crisis’ is often used without discernment and, subsequently, its use has led to misperceptions of what actually constitutes the water crisis. Some writers, activists and commentators use ‘the global water crisis’ to suggest a crisis in the governance and management of WSS whilst others, and this is the common use, employ the concept to indicate the issue of global water scarcity. Both of these issues are contentious, complex and unresolved topics hence their examination throughout this thesis. We argue that the use of the concept ‘global water crisis’ is often intended to rationalise various political projects and economic reforms and it is for this reason that when we use this concept we will do so using parentheses in order to signify our neutral approach to the issue – we use the concept simply to refer to the series of issues encapsulating the debate and not to declare a crisis in terms of government, management or supply. For descriptions of the ‘global water crisis’ see Barlow & Clarke, 2001; Barlow 2007; Gleick 1998-2009; OECD 2008; Postel 1999; Rothfeder 2001; Snitow and Kaufman 2007; UNEP 2009.

reference and irrespective of the context in which it arises, one fact remains: water is essential to life and for this reason it has become a highly contentious topic.

Despite having significant cultural and symbolic meaning in communities around the world, including personal, political, economic, cultural and religious, and notwithstanding the fact that issues related to water possess immense implications in all these spheres mentioned, the biophysical aspect of water contains a singular universalism: that every human and non-human as well as ecosystem has a profound dependence on water for health and survival. Despite this, however, acute and vast global water inequality has existed around the world for far too long. What is clear is that the ‘global water crisis’ is a terrain of contention where competing interests stake claims to the uncertain future of WSS. What is also clear is that because of its importance to all life on the planet, the struggle over water is a definitive contestation over how society ought to be organised – how we produce and distribute socially necessary goods and services – as well as how humanity is to interact with the biophysical world (i.e. use, conservation and stewardship considerations).

Broadly, this thesis highlights the many antagonisms between capitalist social relations and the idea of the water commons with a view to bringing conceptual and theoretical clarity to the idea of the commons in general. The research intends to emphasise the shifting nature of the idea of the water commons within the global economy, paying critical attention to the contradiction between limited protection of non-corporate sector rights to WSS – goods and services thought to be part of the commons – and the increasing economic freedom and extensive rights of the corporate sector to these services, particularly at the transnational level. In this sense, the struggle over WSS is not necessarily over the biophysical matter of water itself but rather the right to water. It will be argued that as a result of two simultaneous processes: an entrenchment of neoliberalism and with that the increasing use of a progressive water commons rhetoric by those promoting the neoliberalisation of

WSS, transnational corporate private property begins to preclude as well as increasingly undermines all non-corporate sector rights to WSS at the national level as well as any hope of non-corporate rights at a transnational level, thus raising questions over the vitality of the idea of the water commons.

The principle focus here is on both the material and discursive struggle over the right to water, that which has most recently taken the form of competing conceptions of the water commons. To decouple water from these competing conceptions – on the one hand those which overwhelmingly focus on the instrumental rationality of water and its uses and on the other hand, notions of water justice – and in order to draw out the many inconsistencies and contradictions contained therein, the thesis starts by stating the main ontological premise: that in order to set water free from these competing conceptions, and in order to properly understand the struggle over water as a *struggle over rights* and not necessarily water itself, then politicians, policy experts, scholars, commentators and activists alike must not separate water from its social context. That is to say, that because all humans and non-humans alike as well as all ecosystems that make-up this planet have a common dependence on water for health, well-being and survival, water is, therefore, relational. Linton (2006, para. 2) suggests:

Whether as a compound of hydrogen and oxygen, as the stuff that flows through the hydrologic cycle, as that of which we humans require eight glasses daily, or as lifeblood of the environmental, water is something that comes to life, acquires meaning and assumes utility through its interactions with people. Like the rest of nature (including human nature!), water can't help but be saturated with human meaning and intent.

Indeed we discover this relational aspect of water in our common reliance on water as well as the dependence of ecosystems on water around the world, but this fundamental premise is further illuminated in the struggle over rights to water: that is, institutional structures, arrangements and processes either facilitate the satisfaction of water needs or stand in its way. Our relationship to water and to each other is embodied in the complex institutional structures, arrangements and processes that we as a society establish to govern and manage water, including production and distribution processes. Moreover, and in a more comprehensive sense, this relationship is embodied in the property relations that define and facilitate these structures, arrangements and processes (MacPherson, 1978). It can be said that the way we treat water as a society is deeply reflective of the way we relate to each other, but also the bio-physical sphere. Some water scholars, most notably Linton (2010) and Swyngedouw (2009), have been arguing for some time now that a significant conceptual shift needs to take place in terms of the way in which we as a society connect the hydrological cycle to WSS created by humans so that a hydro-social process would appropriately consider the totality of relations involved in WSS, social relations included. This ontological position – that all aspects of water must be considered in a social and therefore relational context – guides this research, including discussions touching on human-water relations and even broader questions pertaining to society-nature relations, or what has also been referred to as the society/nature dualism, or the humanity/nature nexus or interchange. David Harvey (1996, p. 49) comments on this very issue, noting, “elements, things, structures and systems do not exist outside of or prior to the processes, flows and relations that create, sustain or undermine them.” Thinking relationally in terms of “associations rather than separations,” as Castree (2002, p. 118) notes, avoids “ontological binarism” often reflected in the society/nature dualism – a question to be addressed in the context of human relations to water.

Considered in its relational context, the question and idea of the water commons, and the conception of the commons more generally, is not simply a philosophical or theoretical exercise. Rather, the so-called commons has compelling significance and relevance in terms of immediate social and environmental justice issues. Because the water commons are intricately related to justice issues their question comprises immense political, economic and legal significance – decisions and actions in these spheres ultimately affect social and environmental justice outcomes (Goldman, 1998; Cavanagh, 2002; Bollier, 2003; Nonini, 2007; Linebaugh, 2008; Reid and Taylor, 2010). Furthermore, the question of the commons and those resources, things or institutions that represent forms of the commons, also represent and act as a measure upon which we may assess: first, the extent to which the way we produce and distribute socially necessary goods and services remains consistent with broader social and environmental justice objectives; and second, the extent to which capitalism and its attendant social relations pervade various aspects of our lives. It may be said, then, that the question of the commons lies at the heart of the way in which we organise the production and distribution of socially necessary goods and services such as WSS.

With all of this said, the question of the water commons conjures up notions of political economy or, generally, the interrelationships between economics and politics. If the study of political economy concerns the interrelationship between political and economic institutions and processes, then the political economy of water – the theoretical enterprise here – includes how various forms of political procedural power and influence affect the allocation of water resources and how prevailing economic interests benefit from and, reciprocally, influence these procedural powers thus strategically shaping the political and economic conditions favourable for expanded capital accumulation and profit maximisation in the water sector. On a more fundamental level, as argued (Mitchell, 2012, p. 89) elsewhere,

The political economy of water ... explores the underlying order that governs the global economy paying critical attention to the political and economic institutions and processes within which various actors, conditioned by the sphere of production and exchange and mediated by the prevailing property relations therein, interact with each other and the non-human world to construct our material existence, including access to water.

Having broadly set up the thesis as a whole this chapter will turn to present the specific research questions. With these in mind, this chapter will then address the state of the world's water both in the geo-political and the biophysical sense. This will be followed by a discussion on the increasing neoliberalisation of WSS, which includes in a later discussion, the increasing commercialisation of water. The chapter will then return to the structure of the thesis, including presenting the significance of research, the purpose of the thesis and the overall organisation of the thesis.

Specific research questions

A central objective of this thesis is to examine the tension between competing claims over the water commons. This objective is anchored in a series of specific research questions. The central question of this research is framed by the prevailing property relations that define the capitalist relations of production. How do property relations facilitate and determine access to WSS?

Second, how is the struggle over water defined: as a struggle over the biophysical matter of water itself or a struggle over rights? If the global economy is characterised by competing interests,

how is the struggle over the water commons unfolding? To this end, how would a critical realist analysis of the struggle over water serve to clarify this question?

Finally, within a forty year policy trajectory, how has the UN conceptualized the water commons as well as rights to the commons (i.e. institutional and administrative arrangements)? In this regard, as the UN operates within a broader neoliberal policy environment that has come to define global politics, has its water policy evolved to reflect this reality?

In terms of this final research question, data collection for this thesis is focused on the neoliberalisation of global water policy. To broadly represent the associated policy prescriptions, this thesis pays specific attention to UN water policy. The UN is the world's preeminent global governing organisation as it relates to human development, and, as such, has far-reaching impact on the development of liberal democracy globally. Yet, the UN has become a terrain of contested visions of development and this certainly is the case for WSS. In one respect, the UN is regarded by many on the progressive left as a global governing institution with the moral authority to forge a progressive vision of development and thus progressive policy initiatives and reform in favour of ordinary people and the environment. This is most notably reflected in the human rights framework of the UN, namely the United Nations Declaration on Human Rights (UDHR) – what is often viewed on the Left as a set of progressive policy positions. In contradistinction, the UN is viewed as a fundamental point in the Washington Consensus triangle of the World Bank, International Monetary Fund and the UN respectively. Consistent with the Washington Consensus point of view, and from the research below on the UN and their policies related to WSS, it is the contention here that the UN is integral to the increasing institutional alignment as it relates to the neoliberalisation of WSS. This thesis considers UN water policy in key policy documents from the early 1970s and spanning a forty year trajectory in order to track the incremental neoliberalisation of WSS.

State of the world's water

Access to and the stewardship of water has received global attention, particularly within the last fifteen years or so (Bakker, 2004, 2005, 2006, 2007, 2010; Barlow, 2007; Barlow and Clarke, 2002; Castro, 2006, 2007, 2008, 2008b, 2013; Castro and Heller, 2009; Hall and Lobina, 2001, 2003, 2007, 2009; Shiva, 2001; Swyngedouw, 2004). This broadened awareness of water issues is predicated on several factors all of which raise concerns over the governance and management of water and all of which equally have an effect on the health outcomes of both people and the biophysical world.² These factors include the depletion of freshwater stocks, rapid industrialisation, unequal access to safe drinking water and adequate sanitation, past and present political and military disputes over water, as well as mounting concerns over global climate change. Though not an exhaustive list, these factors contribute to an awareness of the state of the world's water and raise genuine concerns over the effective governance and management of water resources.

It is widely reported that the world's freshwater stocks are in peril. Much research is dedicated to speculatively illustrating the potential impacts of rapid population growth on freshwater stocks (see UNDP, 2006; World Water Assessment Programme, 2009). Population growth is, of course, an acute concern considering global water demand with the world's population increasing approximately 80 million per year and is expected to reach approximately 9.1 billion by 2050 (2.4 billion of whom will live in sub-Saharan Africa) (UNESCO, 2015). As biologist and environmentalist Constance Hunt notes (2004, p. 48), "over the past century, world population has tripled while water withdrawals have increased more than six fold." Though population growth is a significant concern, over the last decade global water demand has doubled the rate of population

² The point here is to present and give examples of the factors that have raised consciousness over water issues and not to provide an exhaustive list or analysis of these factors. Factors leading to water scarcity are well documented (Barlow 2002, 2007; Gleick 1998, 2000, 2002, 2004, 2006, 2008; Hoekstra and Chapagain 2008).

growth (UNESCO, 2015). Even so, while population growth is an extremely important issue when considering a finite resource such as water, little emphasis in mainstream commentary is paid to the radical transformation of social or common rights and the attendant and rapid expansion of private property rights associated with neoliberal policy reform of the global economy. The incessant need for growth within capitalist economies, measured by the concomitant increase in the industrial production of goods and services, places greater demands on finite resources.³

Industrialisation, including large-scale or ‘hi-input’ agricultural systems, is a major driver of water use. It has been predicted that industrial use of water could double between 2001 and 2025 (Barlow, 2001). UNESCO’s 2015 World Water Development Report (henceforth all UNESCO World Water reports referred to as WWDR⁴) predicts global water demand to increase by 55% by 2050 due in part to manufacturing as well as food and energy production. The agricultural industry is by far the largest user of water today using an estimated 70 percent of the world’s water resources. By 2050 agricultural production will increase by approximately 60% globally and 100% in the Third World (UNESCO, 2015). The energy withdrawals of manufacturing industry are expected to increase exponentially, including water withdrawal increases of up to 400% by 2050 (UNESCO,

³ Over the last 50 years the world’s population has doubled while GDP has increased globally ten-fold (McKinsey Institute, 2009). Although there is a correlation between population growth and increased production of goods and services, growth in financial markets is not relative to the satisfaction of human needs but instead profit maximisation and capital accumulation. In fact, as the global economy continues to grow so too does poverty. It has been widely reported that the levels of economic inequality are greater today in First World countries than they were 30 to 40 years ago. The OECD reported in 2008, “the gap between the rich and the poor has grown in more than three quarters of OECD countries in the past two decades” (OECD, 2008). Despite the negative growth period in G-20 countries over the last two years – a result of the economic downturn – fiscal stimulus, projected to be 1.5 percent of overall GDP, is expected to encourage overall growth. In early 2010 IMF projected 3.9 percent growth in the global economy for 2010 and 4.3 percent in 2011 (IMF, January 26, 2010); emerging markets and Third World economies, though affected by a decreased rate of growth, still grew by 3¼ percent during the economic downturn. Although, as we have established, GDP is not measure of the satisfaction of basic human needs (GDP does not measure public infrastructure, health and education and/or lack thereof), it does point to an increase in industrial activity and this is a concern for the rising poverty levels as it is for freshwater stocks.

⁴ The WWDR report was originally conceived as a triennial report and the first four editions, WWDR1-4, followed in this vein. The publication was re-conceived as an annual report in 2012 with the first successive reports being published in 2014 and 2015.

2015). Industrialisation, as Hoffman (2009, p. 66) notes, “by definition ... entails a shift to a higher-throughput economics in order to sustain economic growth.” This ‘higher-throughput’, however, is predicated on a higher demand for energy as a result of the growth imperative as ever more common resources are transformed into spheres of capital accumulation and profit maximisation. This, in turn, places a greater demand on water resources. The 2015 WWDR notes that global GDP increased by an average of 3.5% per year from 1960 to 2012. A common understanding amongst economists is that an economy below 3% growth per annum is sluggish and below 1%, even if growing, albeit slowly, this may be considered a recession (Harvey, 2010). In this context, the ever increasing growth imperative that defines the capitalist economy places significant demands on both the social and bio-physical world and leads to all manner of social and environmental costs or externalities.⁵

As Hunt (2004, p. 44) points out, “it is often the construction of infrastructure such as dams and diversion tunnels that permits socio-economic growth in dry regions.” The 2009 WWDR3 entitled, *Water in a Changing World*, (2009, p. 129) observes, “As of 2000 there were more than 50,000 large dams in operation. Some 589 large dams were built in Asia from 1999 to 2001. As of 2005, 270 dams of 60 metres or larger were planned or under construction.” The report goes on (2009, p. 130) to highlight the damage to river systems globally: “Of the world’s 292 largest river systems in 2005 (accounting for 60 percent of the world’s runoff), more than a third (105) were considered to be strongly affected by fragmentation, and 68 moderately affected.” To make matters worse, WWDR3

⁵ Externalities occur when the part of the negative costs of production is born by society at large and/or the environment. Teeple (2005, p. 150) suggests, “externalities are accounted for more or less indirectly through environmental destruction and the death or degradation of the health of all living things. The significance of this indirect form of accounting is that the costs associated are placed upon society as a whole or on the individuals directly harmed, rather than on those who benefit from the increased profits of industries that do not account for these negative costs of production and consumption. Externalities are in effect a hidden way of redistributing wealth. In this sense, environmentally induced ill health in all classes, for example, must be seen as the consequence of the shifting costs from one class to another.”

(2009, p. 34) predicts “the world will need almost 60% more energy in 2030 than in 2002.” Increased water diversions, however, as it is implied, are inevitable and support the need for rapid growth and development. Yet, with industrial production comes not only increased water diversion and extraction but also increasing levels of pollution and other socially and environmentally burdensome externalities.

Effluent charges from industrial production, though having harmful consequences when run off into rivers or groundwater sources, are often seen as a normal cost of production, the price of development some might say. For example, arsenic, which is naturally occurring but also a by-product of industrial production can penetrate ground water stocks via industrial and agricultural pollution (Hoffman 2009). The 2015 WWDR (2015, p. 12) reports, “Eutrophication of surface and coastal zones is expected to increase almost everywhere until 2030 ...” and “Globally, the number of lakes with harmful algal blooms will increase by at least 20% until 2050.” Indeed by 2007, 20 percent of all surface water in Europe and 40 percent of US rivers and streams were threatened by industrial pollution (Barlow, 2007). With industrialisation comes urbanisation and thus a great demand on the availability of freshwater in burgeoning urban centres the world over. It is estimated that half of the world’s population live in cities and this is expected to increase to 60 percent by 2030. Currently, approximately 9 percent of the world’s total urban population live in megacities – cities with 10 million people or more – and this is expected to increase by almost 6 percent by 2030 (Hoffman, 2009).

Another factor that is raising awareness of the impending ‘global water crisis’ is the staggering proportions of the world’s population without access to safe drinking water and adequate sanitation. In 2014 The World Health Organization (WHO, 2014, p. 8) reports 748 million people lack access to safe drinking water and another 2.5 billion, or approximately 40 percent of the world’s

population, lack access to basic sanitation. There are 46 countries where currently over half the population lack access to adequate sanitation facilities (WHO, 2014). It was reported in 2007 that 2 billion people live in water stressed regions (Barlow, 2007) and the Food and Agriculture Organization (FAO, 2015) predicts this number to remain relatively consistent at 1.8 billion people by 2025. The OECD (2009, p. 5) predicts, “By 2030, the number of people living under severe water stress, leaving aside possible impacts of climate change, is expected to rise to 3.9 billion, nearly half of the projected world population.” The same report notes, considering the current levels of consumption as well as the expected population growth, by 2030 demand for water will be 40 percent higher than today (OECD, 2009). What’s more, the 2015 WWDR points out the number of people without adequate access to WSS in urban areas is in fact increasing as a result of a rapid growth in slum populations, particularly in the Third World (UNESCO, 2015).

Intimately related to inadequate access to WSS is the rising incidences of water-related diseases and deaths: 1.6 million people die every year due to diarrhoeal diseases (90 percent of whom are children under the age of 5); 160 million people are infected with schistosomiasis – a chronic parasitic disease; 500 million people at risk of trachoma – an infection of the eye that can result in vision impairment or even blindness; and 133 million people suffer from intestinal helminths (parasites) infections (WHO 2009). “Compounding this tragedy ...” Palaniappan (2009, p. 57) argues, “... is the fact that the global community has both the technologies and resources to provide adequate water and sanitation for all and has failed to do so.” Swyngedouw echoes this call (2013, p. 826) in stronger terms, arguing, “Problematic water access is responsible for nothing less than a genocide given that the technical and organizational practices of delivering clean water to all is relatively cheap and technologically straightforward in most cases.”

Also contributing to an increasing awareness of the ‘global freshwater crisis’ is the past and present incidences of political and military conflicts over water. The proposed inclusion of water sources and services under international trade law, and with it the potential for the commercialisation of water, has brought much uncertainty over the juridical status and sovereignty of water sources and WSS and many commentators (see Barlow, 2007; Holland, 2005; Shiva, 2001) point to political conflicts between trading countries. If, for example, water was deemed as an economic good under trade agreements governed by the World Trade Organization (WTO), member countries – legally bound by their WTO accession responsibilities and other such binding mechanisms and legislation such as the General Agreement on Trade in Services (GATS) – could potentially be forced to lower trade tariffs and open their border to trade in water (Rillaerts, 1999; Higgot and Weber, 2003; Ellwood, 2003; Girouard, 2003; Wesselius, 2002; Holland, 2005). Similarly there has been much debate concerning the bulk export of water since the establishment of the North American Free Trade Agreement in 1994 (NAFTA) and the Security and Prosperity Partnership of North America (SPP) in 2005 (the SPP made inactive in 2009).⁶ The United States and Canada in particular have been at a stalemate over the potential legal ramifications of bulk water exports under NAFTA rules and recent discussions and negotiations under the SPP agreement rekindled these discussions. Many trade experts are concerned that once a country begins to trade water in bulk exports international trade law avers that it must continue to do so. This criticism has been extended to many WTO agreements as well. There have been other such export proposals by way of international and regional trade agreements in many other countries including Iceland, Malaysia and Turkey amongst others (Gleick, 2002). Political conflicts over water have also erupted

⁶ NAFTA and the Security Prosperity Partnership of North America (formerly known as the North American Security and Prosperity Initiative) are tri-national agreements between United States, Mexico and Canada (Barlow and Clarke 2001; Gleick 2002). Critics suggest that the possibility of bulk water export under these regional agreements and therefore the incremental commodification of WSS.

in Afghanistan, Pakistan and the Middle East and this has every potential of increasing as demand for freshwater stocks increases. WWDR5 reports (UNESCO, 2015) 158 of the world's 263 transboundary basins lack any kind of cooperative management framework. Of those basins with a framework in place two-thirds include at least three countries but only 20% of those have multilateral agreements (UNESCO, 2015). In other words, there is great potential for future conflict as demand for water continues to increase. Gleick (2002) has documented the long list of military conflicts throughout history (from 1503 to present) where water was but one in a long list of factors for conflict.

Global climate change and water are intricately connected. OECD points out (2014, p. 3), "Climate change can affect water resources through several dimension: changes in the amount and patterns of precipitation; impact on water quality through changes in runoff, river flows, retention and this loading of nutrients; and through extreme events such as floods and droughts." Vast bodies of water have the ability to store and release heat (what is known as the evapotranspiration process) thus regulating and distributing heat across the planet (Smith and Thomassey, 2002). The heat capacity of oceans, for example, as Hoffman (2009, p. 6) points out, allows them to "function as heat reservoirs ... " and "these properties have monumental ramifications in the advent of global warming." Water is returned to the atmosphere during the evapotranspiration process and returns to the planet via precipitation and is either soaked up by the soil thus producing soil moisture or penetrates further to form groundwater (Smith and Thomassey, 2002). However, Smith and Thomassey point to studies conducted in the 1970s which report that one-third of precipitation is captured or diverted for human use and as much as two-thirds of water made available by precipitation is affected by pollution. They go on to suggest that if water usage was to double as

projected in the next twenty years and if water pollution remained at the same levels or higher then water supplies would be in peril.

For all intents and purposes, such assessments are commonplace today. These concerns point to the decreased capacity of depleted and/or polluted water sources to store and release energy, all of which, raise grave concerns regarding global climate change. There are many other concerns with water and climate change; however, the root of these concerns is the way that the warming of the planet affects the hydrological cycle. As water is an integral part of this cycle there are, as Cooley (2009) notes, concerns over “availability, timing, quality, or demand” of water. Mitigating water related climate change impacts is a highly contentious area of research. Though climate change adaptation and mitigation policies and processes emerges from ostensibly participatory modelling and policy formation (hosted by elite governance actors) these tend to produce market environmentalist solutions. The World Bank (2010) reports that the cost of adapting to climate change between 2010 and 2050 will be between \$70-100 billion a year. There are many concerns over the potential pathways to commodification and privatisation of WSS under these market-based approaches. The next section will pay specific attention to these pathways by way of the neoliberalisation of WSS.

Neoliberal rights and the ‘global water crisis’

The growing awareness of the perilous state of the world’s freshwater supply as well as concern over access to this essential resource has been intensified with debate over aspects of water governance and management. Indeed, it is of the utmost importance to draw out and assess the impact these abovementioned factors purportedly have on the so called ‘global water crisis’, as many experts do, and this includes both the biophysical (sources of water) and social (infrastructure

services, including institutional and administrative arrangements). These phenomena, however, should not be viewed and assessed, as they often are, in isolation from each other. Nor should these phenomena be assessed without due consideration of the broader neoliberal climate that insists on perpetual economic growth and therefore increased consumption. This not only has an indelible effect on the outcomes of these above-mentioned phenomena, but also displaces and disrupts existing social models of self-regulation and self-reliance in relation to access to water. This is also to say, a goal of this research is to furnish a broader and holistic understanding of how structural political economic dynamics play out in terms of rights, control and ownership of WSS. This necessarily integrates political economy concerns, discursive understandings of humanity-water relations but also the very real material concerns of how people actually meet their water needs. Alarming, however, as struggles for the world's freshwater supplies become increasingly acute, debate over the solutions and mitigating strategies to the water problematic shifts from broader questions of collective, common or community rights to a neoliberal propensity to situate the individual – *homo economicus* – at the centre of questions regarding access to WSS. As explored in the proposed causal explanations within this thesis, this dominant conception of the individual as a consumer rather than citizen, personified in private property and severed from his or her community as well as from the very hydrosocial cycle⁷ itself, disregards the structural dynamics of the production and distribution of WSS.

Though the debate is much more complex (a more nuanced presentation of the debate will be explored in Chapter 2), broadly speaking, there are two prevailing discourses with regards to the allocation of WSS. First, that water supply and delivery is broadly considered an essential resource to which all humans, irrespective of socio-economic status or any other status or classification, are

⁷ Linton and Budd (2014, p. 170) “define and mobilize the hydrosocial cycle as a socio-natural process by which water and society make and remake each other over space and time.”

granted access on a universal basis and that the water needs of all non-humans including ecosystems is served and met. This conception is referred to as the socio-ecological version for this thesis.

Second, that WSS are economic goods and, accordingly, should be measured as such and therefore allocation of these mediated by a price mechanism whereby citizens enter into contractual market relations so as to gain access. This conception will be referred to as the neoliberal version for this thesis. These two broad conceptions are generally articulated as either state or market ordained rights to WSS. Contained within a liberal democratic terrain, this conflict tends to perpetuate abstract ideas about the way in which an individual is conceived within society based on political liberalism and neoclassical economics so that prospective allocation strategies flow from these ideals. Proponents of market-based solutions support the allocation of individual private rights to WSS via free market mechanisms (i.e. private rights and pricing). Equally problematic, within this realm of liberal democratic politics, opposition to market-based solutions tends to limit resistance strategies within the liberal democratic nation state – overwhelmingly favouring the state-adoption of a human rights-based approach to WSS thereby seeking to guarantee universal access on the basis of inalienable human rights. It should be noted that this has been unsuccessful to date as attempts to meet the human right to water do not preclude market-based mechanisms, as the former Special Rapporteur on the human right to safe drinking water and sanitation to the UN pointed out in her report to the Fifteenth session of the UN Human Rights Council (UNGA, 2010). These positions will be developed and expanded upon later to argue that there is an overwhelming propensity in both discourses to favour notions of individual rights over forms of collective rights that can be exercised by communities or groups. This disproportionate focus on the individual relegates strategies outside the scope of the liberal democratic terrain – those which base notions of access to and stewardship of water not on instrumental rationalities or abstract notions of what it means to be human (such as the retail oriented and human rights based approaches), as neoliberalism does, but

rather on the basis of the hydrosocial cycle. Having documented the theoretical aspects of the neoliberalisation of WSS the following section assesses the material manifestations of neoliberalism particularly in terms of the commercialisation of WSS.

Market trends in the commercialisation of water

It is widely reported and accepted that only 5-10 percent of the world's population currently receives WSS from a private company. This statistic, however, takes on a different composition when assessing the pervasiveness of the commercialisation of WSS. What's more, these numbers paint a decisively different picture when considering high-income countries and particularly urban centres throughout the world. The OECD reported in 2008 that the private sector serves 25 percent of people living in urban centres around the world and one in three people living in urban centres in high-income countries (OECD, 2008). This number increases dramatically when considering the predicted urban-centre population increases of 2030. On the whole the global trend points to growing water markets around the world. Global Water Intelligence (GWI), an online water journal that assesses market trends in the water industry, reports that the number of people receiving water services from a private water company increased from 2 million in 1987 to over 1 billion in 2009 (GWI, 2009). Business prospects in water are bright and the conditions are ripe for further market penetration and expansion particularly in urban centres as trends suggest. That water is still by in large publicly delivered and a non-commodified resource, can be viewed as a motivating force of proponents of commercialisation.

With increasing economic uncertainty over the last decade since the financial crisis, investors have been looking to invest capital in 'secure' and less risky assets - water funds and stocks are one of these untapped markets. In 2015 the Telegraph advised, 'Forget gold – invest in water' suggesting

that “water-related investment are outperforming gold, oil and the wider stock market ...” and that this trend with “run and run” (Dyson, 2015). Countless specialist investment institutions point to the unmatched returns of the water sector. Writing on water in the context of economic crisis, Hoffman (2009, p. 289) suggests that this is a “historic investment opportunity” and that the “current financial crises only serves to catapult forward the transitions under way in the global water industry.” He outlines (2009, pp. 292-293) the potential investment opportunities as a result of the impacts of the current global economic recession, including:

1. Since both public and private sectors face a severe credit crisis, look for renewed interest in the economics of public-private partnerships.
2. As a means of financing, municipalities may rediscover the attraction of special-purpose water and sewer bonds to investors based on stable, and likely increasing, water rates.
3. Regulators may ‘accommodate’ the markets by responding with an upward bias in allowed return in water rate cases.
4. Increased financing costs may provide an impetus for water and wastewater utilities to set rates closer to the market value of water.

This trend towards to the incremental commercialisation of WSS will be explored throughout this thesis and conceived of, most broadly, as the key battlegrounds over the idea of the water commons.

This chapter now moves on to discuss structural components of the thesis, including the significance of research, purpose of the thesis and the organization of the thesis as a whole.

Significance of research

Much has been written from a critical point of view and within the context of economic globalisation about the increasing commodification and privatisation of the world’s WSS (Bakker,

2004, 2005, 2006, 2007, 2010; Barlow, 2007; Barlow and Clarke, 2002; Castro, 2006, 2007, 2008, 2008b, 2013; Castro and Heller, 2009; Hall and Lobina, 2007; Shiva, 2001; Swyngedouw, 2004). For all intents and purposes, these analyses are critical of many of the structures and processes of neoliberal economic globalisation and focus primarily on the changing regulatory structure within which the contestation over rights to water is situated, particularly at a time when water is viewed as increasingly scarce. This literature has tracked the increasing monopolisation of the global water market and exposed the deeply integrated global governance structures through which the transnational managerial water elite facilitate this regulatory shift (e.g. membership in key global governing organisation and/or lobby groups/think tanks associated with global governing organisations etc.) (Barlow, 2007; Barlow and Clarke 2002; Hall and Lobina 2003, 2005, 2006, 2009). In order to fully understand the struggle over water, however, a comprehensive analysis should include a synthesis of this empirical approach, or what this thesis refers to as the appearance of the water crisis (i.e. crisis of scarcity and governance) and a radical theoretical assessment of the essence of the crisis (i.e. a fundamental transformation in the property relations that define our relationship with WSS or what many refer to as the water commons). Too often analyses of the water problematic provide copious documentation of the water scarcity issue and the number of privatisations taking place throughout the world; this is often carried out, however, without meaning as to the processes that presuppose, necessitate and facilitate these significant transformations. What is often absent from this burgeoning literature are analyses fully considering how property relations – those defining capitalist rationalisations and finding expression in neoliberal policies on the one hand, and on the other and conversely, those that define the commons – determine and facilitate peoples' access to WSS. If claims and entitlements and therefore rights to goods and services are influenced or defined by the prevailing property relations or arrangements that flow from the

economic arrangements and political structures of any given society, then, an analysis situated in these property relations would seem essential.

This thesis seeks a balance between the empirical and theoretical. Though there is a considerable body of literature addressing the increasing commodification and privatisation of WSS as well as the subsequent implications of these processes, there is a notable gap in terms of a consistent, applicable and radical theoretical critique. This lacuna is perhaps a result of shifts away from the radical critique of the capitalist relations of production, not to mention a general shift away from the Marxist tradition that seeks to excavate the essence defining social relations within all spheres of life (particularly within recent scholarly work). Indeed, there has been an increase in literature addressing the society and nature nexus, and, to be sure, this includes contributions from scholars working within the Marxist tradition (most notably Bond, Castree, Castro, Loftus and Swyngedouw). As Castree (2002, p. 123) points out, “nature has become a major topic of concern among the shrinking minority of left academics still committed to Marxism.” Yet still, the broader movement of left, critical, or progressive academics away from radical critique as well as the Marxist tradition has had a ripple effect on the many subjects of social, economic, political and ecological inquiry – WSS being but one.

Purpose of thesis

The objective of this thesis is two-fold. First, to explore how the competing conceptions of the water commons may take shape in the context of a struggle over the right to water. Second to assess the extent to which UN water policy developed over the last forty years aligns with a neoliberal agenda that has come to define the global economy in this era of economic globalization. The socio-ecological problematic that is the increasing commodification and privatisation of WSS

cannot be separated from the social, economic, political and ecological context within which this problematic is borne and situated. Nor can we attempt to separate this material reality from the discursive struggles that seek to define such social relations. Though various discursive formations representing the overall ontological inquiry here remain at the level of language games, these struggles are an important ideological battleground. In this way, the idea of the water commons is illustrative of an object of ideology. A focus on ideology is critical to parse the water problematic, however, this must be supplemented with a focus on the relations of production which are the essence of estranged humanity-nature relations. A fulsome analysis of the water commons cannot simply remain at the level of ideology. To find balance and to bring us closer to a comprehensive understanding of the water commons problematic discursive approaches as per critical discourse analysis (CDA) must be infused with a political economy framework.

The second purpose of this thesis is to advance a political economy understanding of the water commons that brings theoretical clarity and conceptual understanding to the many contradictions and inconsistencies inherent to the logic of capitalist enclosure. This theoretical framework is intended to provide a basis from which we are able to wholly contextualise and assess the structure of a global water market based on capitalist rationality. By way of a radical critical realist approach to the discursive construction of the water commons, this thesis seeks to advance a political economy perspective of water that ultimately highlights the antagonistic nature of the idea of the water commons within liberal democracies.

Organisation of thesis

Beyond laying the theoretical, conceptual and empirical foundations for this thesis, Chapter 1 provides the backdrop of the water problematic and introduces the basis and inspiration for theory

development arising from the analysis of the selected data corpus. Beyond outlining these broad objectives this chapter focuses on a number of specific outcomes, namely: considerations of significance and purpose of the research as well as broad research questions and the overall organization of the thesis as charted out here.

Chapter 2 will introduce the key issues occupying a great deal of the intellectual effort when considering the water commons. In recent years, the concept of the water commons has come to define the struggle over rights to WSS. This discursive struggle takes the form of the competing conceptualisations of the water commons. This chapter includes a literature review on the idea of the commons in an effort to provide a conceptual and theoretical footing upon which the competing conceptions of the water commons may be assessed within a broader effort to identify the inconsistencies and contradictions that make up the mainstream commons discourse. For example, on the one hand there are capitalist institutions, including corporations and supranational governing bodies, purporting to improve the quality of the commons; whereas on the other hand there are resistance movements 'reclaiming the commons'.

Chapter 3 offers a nuanced view of the global water crisis, adding complexity to the position that the crisis is simply one of scarcity. This encompasses broader political economy concerns over the mismanagement and governance of WSS. In this context, this chapter shifts to locate the geopolitical context of the global water debate by exploring the global processes of capital accumulation that subordinate water to market forces, increasing pathways to increased commercialisation of water. The overarching aim of this section is to locate the struggle over the right to WSS within the context and development of capital accumulation over the last 40 years, specifically within the era of neoliberal economic globalisation. This chapter will also examine the increasing commercialisation of water as a complex process that takes on many different forms. In some cases commercialisation

represents an outright transformation of water into a commodity (e.g. bottled water or a private river or lake – or a portion thereof) and in other cases commercialisation represents a partial or full corporatisation of WSS or, even still, the full privatisation of these. The point drawn out in this section is that commercialisation takes on many different and unique forms. At the core of the analysis of commercialisation is a fundamental shift in rights arrangements towards retail-oriented models of provision. This section will draw out a legal definition of rights that necessitates a relational view on how access rights, or lack thereof as it may be the case, translate into very real material circumstances that affect the life chances of individuals, families and communities. In this light, this analysis delineates how the four major property regimes (open access, common, state and private property) take shape under the current neoliberal expression of liberal democracy.

Chapter four presents a methodological framework for studying the water commons. This chapter sets out to explain how political economy can be combined with a philosophy *for* science, that of critical realism, to surpass the language games often characterising exercises in discourse analysis. This bridging lays bare the potential to expose the ideological and indeed material interests involved in the discursive production of knowledge concerning the water commons and how power influences discursive construction in terms of the structure-agency interchange. Through this lens, this chapter views the discursive production of knowledge, in this case the competing conceptualisations of the water commons, as a broader ideological struggle wrapped up in the realm of political economy, with competing views laying claims and entitlements to versions of the water commons that align with particular material interests.

Chapters 5-8 organize the analysis of the data collected for this thesis into a series of causal explanations that most broadly and best explain the competing conceptions of the water commons. As Henderson argues, “better explanation is often cited by scientists themselves as a reason for

giving a certain theory extra weight” (Henderson, 2014, p. 689). Drawing from Harman’s idea of *the best possible explanation* (1965), these causal explanations provided here are posed as set of inferences that best explain the neoliberal version of the water commons. Consistent with the critical realist approach, knowledge is fallible, but these explanations, summarized in the form of causal explanations, take us closer to understanding how a particular frame of reference or worldview, represented in particular institutional alignment, may take us closer to understanding how social struggle unfolds and translates into specific material outcomes. As Harman argued with regard to his idea of the best possible explanation, “one infers, from a premise that a given hypothesis would provide a ‘better’ explanation for the evidence than would any other hypothesis, to the conclusion that the given hypothesis is true” (Harman, 1965, p. 89). In this sense, the inferences provided under each causal explanation across the proceeding chapters can be seen as a set of codes that separate the contending discursive representations of the water commons as well as their attendant material interests and realities which make one alignment of the water commons (neoliberal) possible and realized over, or at the expense of, the other (socio-ecological). The development of these causal explanations flows from Bhaskarian logic where abductive inferences (or speculative logic) attempt to explain a regularity. The regularity in this case of the competing conceptions of the water commons is the triumph of neoliberal policy reform over the last forty years. The causal explanations will be explored in the following order:

- i. Neoliberal Appeals to global water scarcity
- ii. Neoliberal appeals to liberal individualism
- iii. Neoliberal appeals to sources of sovereignty backed by the capitalist state
- iv. Neoliberal appeals to retail-oriented relationships with respect to WSS

Chapter 9, the conclusion, seeks to add conceptual clarity to the analysis of the abovementioned causal explanations. This, in part, consists of a conceptual reading and critique of the current trends defining discursive representations of the water commons, largely from the UN case study in the preceding chapters. This section is designed to provide theoretical substance to the water debate as it attempts to move beyond the *appearance* of the so-called water crisis in order to wrestle with the *essence* of the increasing enclosure of water – an intellectual endeavour often missing from the current mainstream water literature. By way of critique, that which will be focused on the antagonisms between the capitalist social relations and socio-ecological versions of the water commons, the purpose of the conclusion is to formulate a comprehensive political economy theoretical understanding of the water commons.

Chapter 2: The Commons: Common Pool Resources and the ‘Modern’

Commons

The essence of private property is the right to effectively exclude others from what belongs to you. This right of exclusion is the institutional basis of the market; yet the origin of this right defies moral justification. Much that was not private property became property through forcible exclusion of ordinary people from what up to the point of exclusion had been traditionally held in common. We know from history and anthropology that, if anything, the norm for human societies includes common or shared property, and we also know that the development of the market means that the process of converting what is held in common to private property increases extensively, until it pervades the planet – part of the process now referred to as ‘globalization’ – and increases intensively, until all features of social life – however intimate, sacred or ancient – fall under the sway of private ownership.

Anton et al., 2000, p. 8

The idea of the commons conjures up a sense of community, universality, responsibility, participation, fairness, equality, justice, transparency, accountability and stewardship; even patriotism and nationalism for some. As elusive as the concept of the commons may be, especially in terms of what actually constitutes a commons, many use the idea of the commons to politically position or define themselves, their community or organisation or movement (e.g. the extent to which the provision of goods and services considered to be shared or held in common are maintained and reproduced by corresponding collective rights or communal ownership; or, conversely, the extent to which the commons and their distribution have been incorporated into global circuits of capital

accumulation). To what extent this discussion of the commons is associated with the growing prominence of private property relations in all facets of our lives is an issue that will be explored later in this chapter; however, what is peculiar to this discussion – that which represents the impetus of this inquiry – is that calls to create, extend, maintain and defend the commons have roots in often contradictory class interests.

This chapter will first introduce the water commons dilemma: defined within this thesis as the competing conceptions of the water commons. The commons has become an extremely contentious topic. Despite the soaring rhetoric associated with the commons, which often adds to the murkiness over what actually constitutes a commons, at the heart of the debate are notions of private ownership and control, and, by extension, production and distributional implications that can have an effect on the accessibility of socially necessary goods and services such as WSS. This, as has been previously noted, is the contentious struggle over the commons – a struggle over rights to socially necessary goods and services broadly defined. This points to an emphasis in this analysis: that is, the water commons are socially and politically produced – this point illustrative of the hydrosocial process. The commons, in all its forms, including the water commons, are more than simply a thing or a resource; the commons are also shared property (property as a relation and therefore being synonymous with rights as discussed in chapter 3), and institutions with corresponding administrative arrangements (formal and/or informal) and behavioural patterns that maintain and reproduce the commons (DeMoor, 2007).

Before taking up our data analysis in Chapters 4-8, which demonstrate the competing conceptions of the water commons, it is important to address the many assumptions associated with the commons in general. These often include idealised versions of the commons, and have little relation to conventional economic definitions of certain goods, including public goods, thus adding

to the confusion over what constitutes a commons. This chapter seeks to parse the relevant attributes of an ideal type commons and compare these against the two competing camps identified in this thesis, namely neoliberal and socio-ecological versions of the water commons.

This will be accomplished by way of a two-strand literature review on common pool resources (or, shared resources often thought to be part of the commons) and the idea of the ‘modern’ commons. As such this review will begin with a body of work that has a tremendous impact on the governance of common property resources, common-pool resource (CPR) theory. Any thorough discussion of CPRs is accompanied by a typology of the various property regimes that facilitate the use of goods and services in society. As such, the synthesis of CPRs will be followed by a brief outline of the prevailing property regimes that govern peoples’ relations with each other via CPRs. This synthesis includes the four prevailing property regimes, including: open access; common property; state property; and private property. Any analysis of any theory would be incomplete without a discussion of its main criticisms. As such this chapter will turn to include a broad critique of CPR theory. This critique will act as a spring board to a discussion about the ‘modern commons’ or, broadly, all of the things, goods and services that people broadly categorize as being part of the commons.

Background

There is little agreement as to what actually constitutes a commons. At one end of the spectrum there are broad ideas that the commons include all socially necessary goods and services that all humans and non-humans, including ecosystems, depend on for survival. By way of a commons-based approach, it has been traditionally thought that the satisfaction of these needs is accomplished outside of the free market. This traditional line of thinking associated with the

commons appears antithetical to capitalist social relations and therefore neoliberal policy prescriptions. In fact, a commons-based approach has been often considered as a response to the encroachment of neoliberal processes and the hegemonic logic of capitalist rationalisation (Caffentzis, 2010). McCarthy (2005, p. 9) points out, “Recent years have ... brought proliferating calls to reverse privatization and create, extend, or return to commons of many kinds.” Many social and environmental activists and groups have rallied around the call for the defence or expansion of the commons, including the water commons (e.g. Blue Planet Project, Council of Canadians, Corporate Europe Observatory [CEO], Waterkeeper Alliance). Perhaps this is a response to what Swyngedouw (2005) refers to as the ‘hegemonic logic of water privatization.’

On the other hand, however, in recent years the concept and the idea of the commons has been incorporated into capitalist discourses. As such there are calls for the defence, maintenance and extension of the commons from unlikely sources such as major development and international financial institutions (IFIs) such as the UN, the International Monetary Fund (IMF) and the World Bank.

For example, even though the World Bank is a leading proponent of private sector participation (PSP) in WSS particularly throughout much of the Third World and promotes such market reform by way of their various agencies in the First World, it has incorporated the rhetoric of the commons in much of its mandate. In an Annual World Bank publication, *Environment Matters*, (1997, p. 6.) Robert Watson, Director of the Bank’s Environment Department noted the following,

In the face of the continuing global environmental threat, it is timely that the Bank should now broaden its commitment to explicitly incorporate global sustainability at the forefront of its assistance strategy. Given the direct and significant linkage between domestic welfare

and poverty reduction and the degradation of the global commons, the global environment must now be regarded as a core business for the Bank Group.

Addressing a meeting of the International Monetary Fund Committee (IMFC) in Ottawa in 2002, then President of the World Bank, James Wolfensohn, stressed the importance of the IMF to implement the 'Monterrey Consensus' which would include, amongst a number of other initiatives "scale[ing] up the delivery mechanisms and financing for global public goods, especially in the fight on pandemic diseases and the sustainability of the global commons." Former President of the World Bank Paul Wolfowitz noted (2005, p. iv) during his tenure "As a multilateral development institution, the World Bank is uniquely positioned to help the world address some of the concerns of the 'global commons,' such as the development of sustainable energy and the alleviation of global health crises." In a 2006, Jessica Einhorn, then Managing Director of the World Bank writing for the New York Times, suggests, "The World Bank is also evolving into the institution of choice for working with developing countries on 'global commons' issues, such as the environment and health." In 2009, the President of the World Bank, Robert B. Zoellick, introducing the annual Environment Matters World Bank publication 'Environment Matters' (2009, p. 1) spoke of the need to "have strong economic growth, help poor people overcome poverty, and serve as stewards of our common environmental heritage."

What is noteworthy here and touches the very essence of this problematic, these organisations have not necessarily changed their position with respect to increased marketisation of socially necessary goods and services, or what many deem the commons. The question becomes, as socially necessary goods and services traditionally thought to be part of the commons, such as WSS come into contact with neoliberal policy prescriptions are the commons compatible with capitalist rationalities?

This is all to highlight two presuppositions with respect to the commons: first, the commons was once thought to be associated with property relations antithetical to the prevailing private property relations of capitalist rationalisation; second, the call for the commons is conventionally equated with resistance to marketisation. Now, in the face of diametrically opposed interests calling for a commons-based approach, the very idea of the commons, including the water commons, is called into question. That diametrically opposed interests call for and make contradictory claims over the commons is a phenomenon that has been given little critical attention, academic or otherwise (save for Caffentzis, 2010; Goldman 1997, 2007; and McCarthy 2005).

Noteworthy is the disconnect or inconsistency between institutions, individuals, and groups on the Left and those on the Right concerning the notions of what actually constitutes the commons in terms of their property relations, as is the case here with the water commons. Today's mainstream use of the commons is a melange of inconsistent modern-day reflections of the commons which reflect the contestation of the water commons between competing class interests, but also an obscuration of any unaffected realisation (i.e. untouched by neoliberal permutations) let alone definition of a commons framework outside capitalist rationality. One of the overarching aims of this thesis is to explore the concept of the commons in relation to neoliberal rhetoric and framing, using UN Water policy, so as to gain an understanding of the nature of the use of commons rhetoric in the evolution of capitalist rationalization with respect to WSS.

The idea of the commons are often associated with specific things or resources (i.e. certain physical and/or biophysical resources) and goods and services; and, perhaps, space or place. Indeed the commons are socially and politically created and can be found in a number of diverse physical and biophysical manifestations and equally diverse physical environments; and though there is much to be said about the analytic vagueness of how we come to define a commons in this sense, there is

also analytic imprecision in terms of how we come to know and or experience the commons in terms of informal and formal administrative arrangements, where these exist. This is not necessarily to speak of the composition of the commons in terms of an overall legal entity. Rather, what is of interest here is how to arrive at an understanding of the elemental components of a commons that contribute towards the satisfaction of meeting material needs.

When defining the commons, the lion's share of both popular and academic literature employ the concept of the commons in a negligent fashion – a point to be made evident and referenced by way of the literature review conducted in this chapter and in the empirical analysis in following chapters (neoliberal versions of the water commons in chapters 4-8 specifically). In these cases, most often the idea of the commons is not specifically defined but instead used to politically or theoretically position oneself or an organisation within a wider debate concerning the production and distribution of socially necessary goods and services.

When there are attempts to define the commons these are frequently conceived in relation to capitalist social relations and its political expression neoliberalism and these attempts are often confined within and circumscribed to the liberal democratic framework. Because many of these accounts fail to consider the political and economic foundations behind the expressions of the commons they often fall short in conveying that the commons, in its various manifestations, are always and everywhere defined in relation to the prevailing property relations that define the capitalist mode of production. These accounts, then, take the market for granted and in doing so naturalise and standardise market relations and therefore reify the outcomes of such social relations. Furthermore, and perhaps due to this lack of definitional rigour, the commons debate is overwhelmingly confined to a narrow binary between the public or private sphere. As such, much of the popular literature on the commons rarely conceives of rights outside of these domains. If and

when it does, as in the case of indigenous rights, it does so within the context of satisfying these rights within a public or private sector setting, thus calling into question the viability of such rights.

The logical extension of such thinking is the limited delegation of the commons to one of the categories making up the already mentioned binary. In this vein, Anton et al. (2000, p. 4) call for an “alternative understanding of public goods, one that does not presuppose either a market society or private property understood as entailing the right to exclude others.” Expanding the scope of an alternative commons project – conceptually, theoretically, politically and practically – is a much weightier endeavour and outside the purview of this thesis; however, it is a discussion that will be returned to in the conclusion of this thesis.

In recent history the commons has been extended to include such things as: social infrastructure; public, social or common assets; public trust or public goods and services; and CPRs, to name just a few. Historically, the idea of the commons has many varied connotations, including: shared interest; communal or collective ownership; common rights; social welfare; cooperation; stewardship; democratic or social control. Traditional examples of the commons include the deep seas, old growth forests and the atmosphere. Recent examples of the commons, though often contested, are many, including (but not limited to): healthcare, education, information systems like the internet, public spaces, among many others. It has been widely understood that because water is of paramount importance in all facets of human and non-human life, the resource and the provision of its services (WSS) has been organised around the world, as a collective concern in which governments and representative institutions and administrations place a great amount of importance and oversight.

This thesis will explore the competing conceptions of the water commons in an effort to draw upon the inconsistencies and contradictions that make up mainstream commons discourse (e.g. resistance movements 'reclaiming the commons' at one end of the spectrum and capitalist institutions, including corporations and supranational governing bodies, purporting to improve the quality of the commons on the other end). Having outlined the water commons problematic – the competing conceptions of the water commons – this chapter now moves to explore commons literature in an effort to distill the essence of what constitutes a commons.

Commons literature

The literature on the commons is highly complex, and is frequently inconsistent and contradictory when it comes to the operationalisation of key concepts. This may be due to the fact that the concept of the commons crosses over various academic disciplines as well as non-academic arenas. This confusion may also be due in part to constantly evolving ideas of what things, resources and goods and services actually make up a commons. Historically the term commons has been used to refer to collective rights to common land. Most recently, the definition of the commons has been extended to include collective rights to things or institutional benefits other than simply rights to natural resources (see 'modern' commons below). For many, the concept of the commons has come to include, then, collective resources and institutions including WSS, healthcare and education, information and the internet, to name a few. In light of this confusion, some suggest that universalizing the commons under a single definition may be perilous (Goldman, 1998, p. 4). In any case, it is of critical importance to explore the various understandings of the commons so as to illustrate the underlying argument. In this era of economic globalisation these and many other

collective resources and institutions are increasingly exposed to neoliberal structures and processes that contest common or collective rights thereby calling into question the very property relations that define resources or institutions that were hitherto considered a part of the commons.

Common pool resource theory (CPR) is a prominent school of commons-based research and as such it is necessary to delve into its insights, as follows. However, much of what might be termed the progressive literature of the commons is critical of CPR theory for its stringent categories that attempt to neatly fix the commons. The following literature review will provide context to a general critique of the technical-managerial tendencies within CPR theory and its minimal attention given to uneven power relations within defined groups or communities. CPR theory does little to mesh with accounts of commons literature that treat political economy concerns as pre-eminent. Inasmuch as technical-managerial language is important in delineating between economic categories and definitions the overarching aim of this review is to insert a class analysis to the many inconsistencies and contradictions in the use of the commons. It is therefore equally important to enter into conceptions of the commons that contest, rival, surpass, and in some cases disregard orthodox categorizations of CPR theory. These accounts, what will be referred to as the ‘modern’ commons hereafter, are an imprecise mix of musing on the commons based not on empirically grounded research (like CPR theory), but rather in moral and ethical claims to the commons, claims many argue are as strong as any other (see Blomley, 2008). This chapter will critically examine the ‘modern’ commons literature to distill the main ideas and contentions within this work.

Common pool resources (CPRs)

CPR theory emphasises natural resources when describing things that make up shared or pooled resources. Elinor Ostrom, the leading expert in CPR theory and 2010 Nobel Prize in Economics winner, points out (2000, pp. 2-3) that common pool resources (CPRs) may consist of either “natural or human-made facilities (or stocks) that generate flows of usable resource units over time.” So although CPRs include biophysical resources or what many commons theorists refer to as the frontier commons or the shared inheritance of humankind such as air, the atmosphere, the high seas, lakes, rivers, groundwater basins, forests, and fishery stocks to name a few (Ostrom, 2000), they also include human-made (designed or constructed) goods, services and institutions such as highways, education, healthcare, WSS, or, in general, facilities utilized for joint-use by a defined community (Ostrom, 2000; Bromley, 1992). This expansive definition includes all resources – natural or human-made – that provide the means by which people may realize common interests. CPRs, then, as Steins and Edwards (1999, p. 241) point out, are essentially “resources that are used in common.”

As such, according to formal economic jargon, CPRs have two fundamental characteristics, which associate them with the concept of a pure public good in economic literature: non-excludability and rivalry or subtractability (Feeny et al., 1990; Ostrom, 1990; Edwards and Stein, 1999; Heritier, 2002). In terms of non-excludability, the physical nature of CPRs makes it difficult if not impossible (as well as in many cases costly) to exclude people from their use, thus characterizing their non-excludability attribute. There are obvious difficulties when it comes to excluding access to resources such as the global atmosphere, the deep seas, or migratory resources such as fish and wildlife. In the same way, consider the difficulty of excluding an individual from a water fountain in a public park or from the light shone from a street lamp, for example.

CPRs are also characterised to be rival in consumption in the sense that “each user is capable of subtracting from the welfare of other users” (Feeny et al., 1990, p. 3). Once someone has used, damaged or disposed of a CPR (e.g. chopped down a tree in a forest, depleted fish stocks in the ocean or polluted the air) then the use or damage of that resource may subtract from another’s ability to use it. This second attribute, then, is also shared with the idea of pure private goods in economic literature. Like private goods, Oakerson (1990, p. 2) points out, “while individual consumers appropriate and enjoy a portion of the benefit stream of a commons, they make that portion unavailable to others, thus, the commons cannot be shared without limit.”

When considering the technical-managerial language of economic literature as it relates to WSS, a critically important distinction to draw out is that these categorisations refer not necessarily to institutional and administrative arrangements that govern the use of WSS or that dictate its ownership structure, but rather they are associated with the point of use or consumption. That is also to say, that a private good can be publicly owned just as a public good can be privately owned – these categorisations do not presuppose any one kind of ownership structure; however, the latter is less often the case because of the difficulty of excluding individuals from public goods, as defined in economic literature. CPRs are often associated with or used synonymously with state provision of goods and services. This conflation is highly problematic from an analytic point of view because this is essentially equating a resource with a regime that can be used to manage that resource. This thesis rejects such a conflation on the basis that decisions regarding things, resources and goods and services are based on social decisions, they don’t necessarily speak to a fundamental characteristic or attributes that would specify a type of institutional and administrative arrangement (though attributes often factor into whether or not a thing is classified as a social good delivered by a state agency or a private good delivered by an individual or corporation for instance). For example, as

Bakker (2007) points out, water is referred to in economic literature as an ‘imperfect public good’. In other words, if a public good is defined by its non-excludability and non-rival attributes water is imperfect because while it may be difficult to exclude someone from water the finite nature of some water sources can make its consumption rival, and therefore water can be seen as an imperfect public good. Again, this conventional classification has little to do with the institutional and administrative arrangements that govern its use and more to do with its classification in terms of a resource.

Such classification may have more to do with the bio-physical character of a CPR and its flow of units and benefits than a relational definition that positions individuals and communities in relation to a good or service. To move closer to such a relational definition of CPRs, however, the discussion must necessarily shift to the elaboration of property regimes associated with CPRs – structured arrangements that critically determine an individual’s relationship to a good or service (defined by access or exclusion therefore having the potential to affect the life chances of its users). Such a discussion is initiated in CPR literature to address concerns related to the rivalry attribute of a CPR where, the overuse of a CPR by a defined user (individual, family or community), may result in the destruction of that resource (Ostrom, 2000). Such a situation has been teased out in syntheses and critiques of Hardin’s (1968) ‘tragedy of the commons’. A cursory appraisal of Hardin’s metaphor is necessary here before outlining the property regimes whose purpose is to avert the so-called tragedy of CPRs.

Tragedy of the commons

The ‘tragedy of the commons’ theory, as outlined by Hardin (1968) in his metaphor of grazing cattle on common land, refers to a commons dilemma where each individual rationally maximises

his or her gain with respect to a resource base and in doing so externalises the negative cost of overuse to the group, inevitably leading to collective ruin (the dilemma is between maximising individual benefits and avoiding collective ruin). Despite its repeated debunking by social scientists from various and diverse backgrounds (notably Ostrom, 1990; Bromley and Cernea, 1999; Berkes, 1987; McCay and Acheson, 1987) and, moreover, despite the fact that Hardin himself later reneged on these earlier claims and admitted that the tragedy of the commons did not simply apply to all CPRs but rather only those CPRs governed by open access regimes – a regime defined by an absence of property arrangements – the original metaphor is still employed today to support claims to the various forms of the commons (as will be evidenced in the empirical data for this thesis – see Chapter 5). As Goldman notes (1998, p. 21), the metaphor “thrives deep in the soul of most commons theorists, even those fervently opposed to Hardin’s model, who ply their trade by identifying, protecting, managing, saving, developing, and making efficient commons throughout the world.”

Bromley and Cernea (1989, p. 7) add, ‘The Hardin metaphor is not only socially and culturally simplistic, it is historically false.’ Bolliers (2000, p. 20) adds that the metaphor may be more appropriately articulated as the ‘tragedy of open access.’ As such, Bromley and Cernea suggest that the fundamental problem with Hardin’s metaphor is that policy practitioners misconstrue property as a thing when in fact property has much more to do with rights and therefore relationships to the resource in question (often referred to as ‘bundle of rights’). Goldman (1989, p. 6) concurs noting, “... the particular type of right depends upon the actual property regime in effect, which can change over time ...” He continues (1989, p. 6),

...each (regime) has its distinct characteristics of resources management and social institutions. To understand the processes of resources degradation or sustained use, one must

start with an understanding of the historically specific nature of property and institutional arrangements at the site.

Examining the commons in the context of property regimes allows us to consider the social relations that exist and are nurtured as a result of specific property arrangements.

Four property regimes

There are four conventional categories of property regimes, and as Bromley and Cernea (1995, p. 5) point out, these are defined by a “structure of rights and duties” that ‘evolve’ and are ‘designed’ in relation to CPRs (Ostrom, 2004) and that seek to address the so-called ‘tragedy of the commons’. These include open access, common property, state property and private property regimes. Property in this context, as Edwards and Steins (1998, p. 242) note, refers to a “reservoir or flow of benefits to which rights can be attached.” Rights in this regard refer to socially legitimated and enforceable claims and entitlements to accruing benefits. On the other hand, property regimes comprise of decision making instruments and institutions that define an individual or community’s access to and ownership and control over a given good or service. Inasmuch as Edwards and Stein (1998) define property rights as a ‘social institution’ the decision over which of the four property regimes categories takes precedence or comes into existence is very much contingent on competing interests struggling over the resource in question and ultimately, a social decision (this claim to be nuanced in Chapter 3 of this thesis). This involves questions of structural and institutional power that factor into the prioritisation of particular property regimes over others, a point often neglected by CPR literature (a critique that will be taken up below). What follows is a typology of the four conventional regimes that govern CPRs.

Open access

Open access is characterised by an absence of property rights (*res nullius*) (Bromley and Cernea, 1999). Put differently, there are no formal ownership rights in an open access regime (Ostrom, 2004); rights are not attached to any defined individual or group thus creating an unregulated environment or ‘free for all’ situation where things are used without limits. Open access regimes may be in place for one of four reasons: (i) the resource in question has yet to be enclosed by any form of regulation because a lack of jurisdictional authority or legal precedence; (ii) institutional failure of some kind (be it state or market for example) have relegated the resource in question back to open access status; (iii) a defined jurisdictional authority such as the state has consciously decided to guarantee access for all its citizens (*jus publicum*), and; an entity with use rights (be it individual, group or state) is unable for whatever reason to successfully or effectively apply those rights thus leaving the resource in an open access state (Bromley and Cernea, 1989; Ostrom, 2000). Examples of classic CPRs governed by open access regimes include the high seas, the atmosphere and some forests and inshore fisheries, to name just a few.

Common property

Many writers (Bromley, 1985; Berkes, 1987; MacPherson, 1978) suggest that because of the dominance of private property in orthodox economics and market-oriented theories of CPRs, this inevitably leads to classification of commons-based good and services in one of two polar categories: open access or private property. Indeed, common property resources have often been mistakenly classified as open access and thus have often been incorrectly considered in terms of Hardin’s ‘tragedy of the commons’ claims. Without properly recognising varying forms of property regimes,

common property resources are the subject of potential privatization programs. When, in fact, common property resources are associated with a spectrum of varying property arrangements, including private property, state property (*res publica*), common property (*res communes*), and, also, open access property (*res nullius*) (Dragun, 1999; Berkes 1987). Most commonly, however, CPRs have attributes of *res communes* and *res publica* (Berkes, 1987). Typically, however, common property regimes exist when a defined group of users decide to establish a regime that conditions and indeed limits (controls) individual action in relation to the commons by way of collective rules and regulations. Thus common property rights in this sense are often referred to as ‘community rights’ (Grafton, 2000). Where common property regimes do exist, they may or may not be legally recognized (Feeny et. al, 1990); where not, social relations are governed by informal rules and regulations often based on traditions or conventions. In these instances, where these rights are not recognised by the state (*de facto*) they are often based on local or customary traditions and social norms (Anderson and McChesney, 2003; Grafton, 2000). Where the rights of a defined group are recognized by the state, as Bromley and Cernea (1989, p. 16) note, these rights are “managed by the public sector as state property ...” “In one degree or another ...” as Oakerson (1990, p. 10) points out, “the rights of individual ownership give way to rights of commons ownership.”

Like open access, common property regimes are defined by multiple users of a particular good or service. Unlike open access regimes, however, use rights are governed by complex property arrangements which are often characterised as “private property for the group” (Bromley and Cernea, 1989), or, as Bromley (1991, p. 25) later notes, “private property for the group of co-owners.” Ciriacy-Wantrup and Bishop (1975, p. 715) in one of the seminal works on property argue:

Economists are not free to use the concept of ‘common property resources’ or ‘commons’ under conditions where no institutional arrangements exist. Common property is not

‘everybody’s property.’ The concept implies that potential resources users who are not members of a group of co-equal owners are excluded. The concept of ‘property’ has no meaning without this feature.

Considered in this regard, it is incumbent upon the group to decide who gains access to the resource or good in question (Bromley and Cernea, 1989). This principle of exclusion is shared with private property, but differs in relation to the subordination of individual to group interests in common property regimes. Individual use rights under common property regimes are considered *usufruct* where rights are held temporarily and where the use of a resource or good does not fundamentally change its nature (Doolittle, 2007). The ejido system in Mexico is case in point. Following the Mexican Revolution of 1910, in an effort to address landlessness and rural land inequality the Mexican federal government used a communal resource sharing institution, known as the *ejido* (Perramond, 2008; Haenn, 2006). As a “communal resource institution” associated with state-owned land, users (*usos*) or *ejidatarios* – “people with vested rights in an ejido” as Haenn (2006) notes, were granted usufruct rights where they did not own the land but were entitled to work the land and enjoy the fruits (*fructus*) of their labour without destroying the subject to which the rights were granted (Haenn, 2006; Oxford Legal Dictionary, 2015). Within such a communal system (Bromley and Cernea, 1989, p. 15), “definite membership and boundaries, with certain common interests, with at least some interaction among members, with some common cultural norms, and often their own endogenous authority systems’ characterise the decisions regarding access and exclusion.”

State property

CPRs can be possessed by an aggregated unit such as an organized political community in the form of the state and extended to individuals as citizens by way of legal entitlements defined in state legislation and realised by way of a public good or service. State property is often referred to as public property in this regard and involves ownership and control by local, regional or national governments (Ostrom et, al, 1999). Although much state property is made available on the basis of universal access by way of social rights (sometimes referred to as social goods), the state, acting as steward and trustee and governing in the interests of its citizens, regulates access to the commons (Stein and Edwards, 1999). Like private property regimes, state property consists of the right to exclude, and like common property regimes, this right is conducted on the basis of the private property of the group and therefore individual rights are subordinated to collective group goals. Rose (1994) likens public ownership to private ownership with the caveat that public ownership is on a much broader scale in the form of a ‘corporately organized governmental body.’ She goes on to point out “‘Publicly’ owned property, so understood, still has a single owner and speaks with a single voice; this corporate body can manage, buy, and sell its property just as any other owner does” (1994, p. 109). In this regard, the state may either directly manage the use of state-owned goods and services or lease them to individuals or groups who are allocated usufruct rights (Bromley and Cernea, 1989).

Private property

All property arrangements have a combination of institutional mechanisms that oversee the use of shared resources and goods. As has been implicitly outlined in the first three property

regimes, there are typically four rights attached to actions that individuals or groups may take in relation to each other, including: (i) access, (ii) withdrawal, (iii) management, and (iv) exclusion. These rights under common and state property regimes are shared and therefore unlikely to be transferable (Feeny et. al, 1990). An additional entitlement, however, is usually associated if not synonymous with private property (*res privatae*), that being the right of alienation, or the right to sell a thing. The right of alienation may be associated with common property regimes, though it is rare. And in the case of a state privatizing and therefore effectively selling a public service to an individual or corporation, this is an instance where the state exercises the right of alienation. While Ostrom (2004) notes that many property theorists argue that property regimes without the right of alienation are considered inefficient because people's use is not guided by incentives, such as trading up for an improved good or service, or selling to a person who may have a better or more efficient use for the good or service, evidence of often low transaction costs of common property regimes show otherwise. Even so, "It is assumed ... that property-rights systems that include the right to alienation will be transferred to their highest valued use" (Ostrom, 2004, p. 4562). The notion of highest value tends to be ill-defined in CPR literature and this critique will be taken up below (i.e. the highest value use in capitalist societies is often determined in the marketplace where moral and ethical imperatives are often superseded by economic imperatives).

Although property held and administered by a defined group – that being corporate (collective) property – is a form of private property as noted above (Bromley and Cernea, 1989), private property is most often associated with individual rights. However, when ownership is an expression of an exclusive individual relationship or right – that is, individually possessing all of the rights that flow from a particular benefit stream – and part of this stream includes the right of transferability, this is private property in the strict sense, a relationship typically played out in the

marketplace. This is the case when, as Tittenburn (1996, p. 14) suggests, “the right to an economic good or service is vested in a private person.” Decisions regarding a thing to which private rights are exercised – the right of access, withdrawal, management, exclusion and alienation – are made in relation to the property holder and not necessarily to the greater good or collective will (Singer, 2000).

Summary of property regimes

PROPERTY REGIMES:	ATTRIBUTES:			
	Exclude	Cooperation	Ownership	Transferability/sale
Open	No	Yes	None	No
Common	Under certain conditions (informal or formal rights arrangements)	Yes	Community/Collective	No
State	Under certain conditions	Governed by Consent (historically the state and therefore state property neglects Indigenous Peoples and subordinates traditional property relations therein representing a continuation of colonialism for many.)	Theoretically Wide / Public	Under certain conditions (depending on preferences of government in power)
Private	Yes	No	Individual/Exclusive	Yes

Criticisms of common pool resource theory

Harvey (2011) notes that CPR literature focuses primarily on CPRs at the local level, those resources shared by a small defined community and therefore the analysis is difficult to scale-up to problems associated to conflicts of a regional, national or global level. The question of scale will be addressed below, but for now the critique in this regard speaks to the narrow view of CPR and, moreover, serves as a departure point for the alternative commons literature to be explored in the next section. Furthermore, CPR literature does very little to address what some commons literature views as the most recent form of enclosure, that being the increasing commercialisation of the social

commons, including the civil, cultural and intellectual commons. What's more, CPR literature takes the free market system as a given and therein it's assumptions on the motivations of and incentives for human behaviour without consideration of broader political economy concerns. In this way CPR literature is rooted in rational-choice theory and with it, a retention of the idea that self-governance is the best overall solution for rights regimes (Schmidt & Mitchell, 2014). As Schmidt and Mitchell (2014, p. 62) note, "... rather than have individuals defined as members of a community, CPR holds that the commons represents the pooled interests of individuals who view the most rational route to securing shared institutions as curtailing self interest in favor of social success." In this way, CPR is very much informed by liberal notions of what it means to be an individual in society and therefore disregards various other notions, including non-western notions of the self. To address these criticisms this chapter shifts to explore the idea of the 'modern' commons.

The 'modern' commons

James Bernard Quilligan of Global Commons Trust (GCT) (a self-described 'commons organization') suggests (Global Commons Trust, n.d.), "The commons are essentially everywhere – all around, between and within us – yet we take them for granted." Even so, and bearing in mind a 2004 IMF staff paper (Brune et al., 2004, p. 195) that observed "The sale of state-owned assets – privatization – has been a defining characteristic of the global economy in the last two decades of the twentieth century ..." when faced with the hypothetical task of cataloguing forms of societal reproduction remaining a public or collective enterprise, or any form of social reproduction still existing wholly outside that of the capitalist marketplace for that matter, one may wonder, 'Where have all the commons gone?' Moreover, as commodification and privatisation pervade all aspects of our lives and as these market processes, as the IMF suggests, are standardised and normalised

amongst citizenry, it is sobering to consider, as Silverman (2003, p. 1) does, that “most of us probably haven’t given much thought to common ownership one way or another: ‘the commons’ has simply fallen off our mental maps.” To this point, Bolliers (2002, pp.4-5) adds,

... the privatization of the commons has crept up slowly and quietly, in fits and starts. It has been an identifiable juggernaut with a single battlefield or defining moment. It has had scores of manifestations, some prominent, most of them obscure ... Because, I fear, we no longer see the commons, and thus no longer understand its meaning.

Others (notably Blomley, 2008, p. 322) suggest that the commons do in fact exist and our failure to identify their various manifestations is simply a consequence of our “failure to look” for them. Echoing this sentiment, Hardt and Negri (2009, p. viii) write, “With the blinders of today’s dominant ideologies ... it is difficult to see the common, even though it is all around us.” Geisler suggests (2000, p. 80) the commons are everywhere, “Though they rarely appear on maps, they occupy measurable space, have physical reference points, grow out of social relations, and represent value systems.” Even so, Quilligan proposes (Global Commons Trust, n.d.) that because common goods “are not part of our modern frame of reference or worldview” we have a difficult time identifying, understanding or conceptualising the commons.

Johnston (2003) poses this key question in the title of his article: ‘Who cares about the commons?’ Juxtaposing capitalist friendly sustainable development discourse with the idea of the commons which fundamentally challenges capitalist social relations, Johnston argues that many individuals and groups working under the umbrella of the global justice movement⁸ do care about

⁸ The global justice movement can also be referred to as the anti- or alter globalization movement. Broadly this movement challenges unfettered economic globalisation and with it capitalist accumulation and profit maximization processes.

the commons and effectively use commons discourse to not only challenge capitalist rationalisation discursively but also materially and institutionally. Indeed commons discourse has experienced a resurgence over the last three decades due to its social and political relevancy (Barlow, 2013; Blomley, 2008; Bolliers, 2014; Caffentzis, 2010; Gioielli, 2011; Holder and Flessas, 2008; Johnston, 2003; Maddison, 2010; Menzies, 2014; Nonini, 2006; Wall, 2014). This has made the discussion and assessment of the commons an essential scientific pursuit: What are the commons, how are they expressed relationally, and what are the institutional and administrative arrangements that govern their production, management and use? And as Nonini (2006, p. 164) suggests, “What is now at stake at this point in world history is control over the commons.”

What are the ‘modern’ commons?

Finding an operational, precise and unambiguous definition of the commons is a delicate task to be sure. Ricoveri concurs (2013, p. 29), suggesting,

It is not possible and besides it would be a mistake to define the commons precisely and definitively ... [f]or they vary in time and space to adapt to different situations. It is, however, possible to describe their distinctive characteristics and thus try to understand why they can be useful, if properly refashioned in the current context, as an antidote to the crisis of the dominant mode of development.

There is little agreement as to what constitutes a commons within the burgeoning body of critical literature on the commons, referred to by Holder and Flessas (2008) as ‘Emerging Commons.’ One of the defining characteristics of the relatively recent commons literature is the

expansion of the CPR definition, which primarily focuses on CPRs of open access, to include all manner of goods and services that are enjoyed collectively. As Bollier (2014, p. 11) suggests, “There is no master inventory of the commons. They can arise whenever a community decides it wishes to manage a resource in a collective manner, with a special regard for equitable access, use and sustainability.” This includes good and services governed under open access regimes but also things that are governed under various other property regimes (including private and state property) but, which, according to this commons literature, should be considered a commons and subject to governance structures based on social welfare and community due to moral and ethical considerations (Blomley, 2008).

Reid and Taylor (2010, p. 12) note a trend towards definitions of the commons in relation to their “substantive grounds of collective life.” Holder and Flessas (2008, p. 300) for example, suggest the commons reflect “radical expressions of communal indigeneity...” Others define the commons as resources in relation to community. Burger and Gochfeld (1998, p. 7) for example, define the commons in terms of “resources held in common by a group of people, all of whom have access and who derive benefit with increasing access.” Whereas Hardt and Negri (2009), suggest the commons are the shared substance of our social being, Nonini (2007, p. 1) defines the commons in relation to broad areas of social life in which the commons exist, namely, “the great variety of natural, physical, social, intellectual and cultural resources that make human survival possible.” He (2007, p. 164) stresses the shared inheritance of “those assemblages and ensembles of resources that human beings hold in common or in trust to use on behalf of themselves, other living human beings, and past and future generation of human beings, and which are essential to their biological, cultural and social reproduction.” This of course entails a maximalist definition of the commons, which, in principle, could include a vast array of things, from resources, through to technologies and

patents. Shiva (2002) also stresses this generational legacy defining the commons as the history of human development and consciousness. Some (Huron, 2015; Linebaugh, 2008; Menzies, 2014, Wall, 2014) also define the commons in relation to acts or production, or what is known as ‘commoning’. This takes shape in the actual production of goods and services but also in the appropriation of private or public spaces. In this sense, commoning is very much a social process (Huron, 2015). It follows, then, that the commons are ‘ubiquitous,’ as Bollier notes (2002, p. 15), “It is an underrated, much ignored reservoir of valuable resources, system of social governance, and crucible for democratic aspiration that is only now starting to be recognized for what it is.” Hardt and Negri (2008, p. viii) synthesise these various approaches to the commons:

By common we mean, first of all, the common wealth of the material world – the air, the water, the fruits of the soil and all nature’s bounty – which in classic European political texts is often claimed to be the inheritance of humanity as a whole to be shared together. We consider the common also and more significant those result of social production that are necessary for social interaction and further production, such as knowledges, languages, codes, information, affects, and so forth. This notion of the common does not position humanity separate from nature, as either its exploiter or its custodian, but focuses rather on the practices of interaction, care, and cohabitation in a common world, promoting the beneficial and limiting the detrimental forms of the common. In the era of globalization, issues of the maintenance, production and distribution of the common in both these senses and in both ecological and socio-economic frameworks become increasingly central.

It is indeed difficult to specifically pinpoint how recent redefinitions of the commons derived from ‘modern’ commons literature neatly fit within the aforementioned property relations (i.e. open access, common property, state property and private property). And indeed, as Linebaugh (2008, p.

20) suggests, from an economic standpoint these definitions of the commons may seem “pie-in-the-sky, but scholarly scrutiny shows that on the contrary it is down-to-earth.” In this regard there have been several attempts to categorise the commons according to areas or spheres of life to which they relate thereby providing empirical examples of an array of commons. Some commentators (Bolliers, 2014; Mattei, 2013; Barnes, 2006; Zizek, 2010; Nonini, 2006) and scholars categorise the commons according to areas of life and they generally fall under four categories. Broad categories are the most appropriate as a result of the ubiquitous nature of the commons in their manifestations as a regime, resource and relation. Zizek (2010) provides three very broad categories, the social commons, ‘external nature’ commons, and the ‘internal nature’ commons which can be used to provide a generalized typology that synthesizes contemporary commons claims.

First there is ‘external nature’ or the natural resource commons, sometimes referred to as the frontier or global commons. This includes a diversity of resources such as the high seas, forests, fisheries and the atmosphere, to name a few. Natural resource commons are ‘rival’ in the sense that they show depletion over time. Also, the quantity of a natural resource used by one individual – be it a tree or a litre of water etc. – is no longer available to others, or what is also known, in economic terms, as subtractability. Holder and Flessas (2008) highlight the attention the global commons has received in recent years in relation to the ‘environmental protection agenda.’ Climate change and continual ecological degradation due to the logic of capital has brought about a broad interest in the idea of the natural resource commons, not only as a resistance bloc but also an alternative frame of reference as it relates to mental conceptions of the humanity nature interchange and, broadly, human and non-human ecosystem interdependence.

Second there is the social commons. These include, quite simply, all resources produced by human labour (Nonini, 2006). The social commons can be referred to as the civil commons and may

be managed and administered by the state, but not in all circumstances as is the case with family, kin and community arrangements, institutions and relations. Social or civil commons may include larger public assets such as education, transportation, healthcare, road networks, and water and wastewater services (Bolliers, 2002; Hardt and Negri, 2012; Johnston, 2003; Ricoveri, 2013). These resources are depletable in the sense that like most creations, their use results in wear and tear. Their renewal, however, as Nonini suggests, is a political question inasmuch as their creation may have been part of a particular political project or public policy. In this sense, re-investment depends largely on the political will of its successors. The social commons also includes cultural and intellectual commons such as music or other artistic expressions, customary practices or traditions, scholarly work, including concepts and ideas as well as the internet and other such digital technologies, such as open source or the creative commons. The consumption of the cultural and intellectual commons does not diminish or deplete them and in this sense their use is non-rival.

The last of the commons according to Zizek (2009, p. 53) is the “commons of internal nature” or the “biogenetic inheritance of humanity.” Nonini (2006) refers to these as the species common or what Bollier (2012) suggests include genetic knowledge and biodiversity. The species commons consist of a multitude of human bio-physical aspects, including, as Johnston (2003, p. 25) notes, “the genetic building blocks of plants and animals”, human and non-human. Having considered the broad categorisations of the commons, relationships having to do with the protection and/or extension of the commons will now be considered in the context of social struggle.

Social struggle defines the ‘modern’ commons

Historically the concept of the commons has been utilised, largely, by those individuals as well as groups on the Left of the political spectrum. The idea of the commons has indeed received much currency recently, this in large part in light of resistance to the institutions and processes of economic globalisation (Bakker, 2007; Caffentzis, 2010; Harvey 2005; McCarthy, 2005; Shiva, 2001; Teeple, 2005; Zizek, 2010).

However, revived notions of the commons rarely fit neatly into the abovementioned typology of property arrangements. In this regard, Holder and Flessas (2008, pp. 299-300) suggest, “the subject-position of the ‘owner’, although remaining privileged in law and society, is being appropriated by flexible groupings of actors that would not formerly have been understood as being capable of supporting a claim to this position.” In fact, what distinguishes revivalists of the commons from CPR theorists is the analytical focus on ideological premises in which relations around CPRs are maintained and reproduced. Some of these calls span state property and common property with what McCarthy (2005, p. 10) refers to as a ‘town-scale commons.’ As he notes, those theorizing the revived commons often disregard the traditional attributes, such as non-excludability and non-rivalry normally associated with resources in academic literature. What’s more, this commons literature is often unclear in relation to the meaning of the public domain (i.e. some recent commons literature treats the commons as synonymous with the public (state) sector while others promote a form of deregulated community control which is more in line with a common property arrangement. As McCarthy (2005, p. 11) notes,

What unites most of these calls for new commons is not so much a coherent vision of common property regimes, as their assertion of collective ownership and rights against

relentless privatization and commodification. Thus, the looseness of their connection to the academic literature ought to be interpreted not as indicative of analytical ‘mistakes’ or incoherence, but as a welcome opening of myriad fronts in struggles over the neoliberalisation of nature.

As evasive as it may be at times, the idea of the commons is broadly anchored in struggles over rights to goods and services, such as WSS, and it is positioned as a mutual framework around which seemingly disparate struggles may be unified. The reinvigoration of the commons discourse in the early 1990s was a critical juncture in local, national, regional and global struggles against the processes of neoliberalism. Caffentzis (2010) characterizes many of the pro-global justice struggles this way, where single issue individuals and groups link struggles against market forces under the banner of the commons. Indeed as students, indigenous groups, woman’s rights organisations, environmental groups, anti-capitalist groups began to link their struggles via this commons discourse connections are established in terms of the similarities of struggles: that is, a struggle over rights. It is this discourse that provided the possibility for these resistance linkages however inchoate this discourse and the underlying political projects may be.

These individuals, groups and organisations defend the existence or provision of a commons, in the form of collective rights to socially necessary goods and services, including the non-human world, against expanding individual ownership rights in a market dominated society. Defenders of the commons suggest that subordination of the commons to the free market or even its guiding principles (as in the case of corporatisation and increased commercialisation of public goods and services) is perilous. It promotes a system where individual access to the commons is based on financial wherewithal, where budgets governing the commons are directed by the dictates of the market and where assumptions of cost/benefit analyses are incorrectly weighted against commons

solutions and values. Many authors of ‘modern’ commons literature refer to the increasing marketisation of forms of commons thought to be socially necessary goods and services as a broader modern day enclosure movement (Barlow, 2007; Barnes, 2006; Blomley, 2008; Bolliers 2014; Boyle, 2003; Brownhill; 2010; Caffentzis, 2010; Chazkel & Serlin, 2011; Gioielli, 2011; Goldman, 1997; Hardt & Negri, 2009; Harvey, 2010; Johnston, 2003; Ricoveri, 2013; Shiva, 2001, 2010). This is a dynamic Harvey (2003, p. 158) refers to as “accumulation by dispossession.” To this point and highlighting the socio-political relations characteristic of the commons, Shiva (2010, p. 86) argues, “The commons and democracy go hand-in-hand, as do enclosure of commons and the destruction of democracy.”

It is indeed difficult to bring to mind forms of social reproduction, not to mention economic reproduction, that exist wholly outside the capitalist free market and its attendant neoliberal state. As the commons come to play a central role in capitalist production (Hardt & Negri, 2009) we are witnessing the increasing and unprecedented encroachment of the private sector even in sectors once the preserve of universal provision including health care, education and water services. As public goods and services thought to be the commons are increasingly dismantled by state representatives and as the commons in all its forms are increasingly subjugated to the prevailing market logic of enclosure – the transformation of what is held in common (i.e. collective rights to shared resources) to private property – the idea of shared resources and/or common or collective rights are gradually becoming artefacts and institutions of the past. The commons may be viewed by free marketeers as archaic in the sense that they are economically unproductive and, therefore, needing market led reform.

Nonini (2006) makes the case that as ever more resources become exhausted the corporations responsible for their degradation search for and enclose new resources “leading to the worldwide

‘weardown’ of the commons arrangement on which capitalism itself depends.” He argues that this “spatio-temporal fix” (term coined by Harvey 2003, pp. 108-124) – the enclosing of new resources to replace those already degraded – represents a second crisis of capitalism (the first being the crisis of overaccumulation). He argues (2006, p. 171) that capital surpluses necessitate investment and therefore the commons are increasingly enclosed:

The goal is to ‘free up’ resources heretofore not accessible for commercialization in order to profitably invest excess capital combined with them in new streams of production. Since these incursions confront areas of life where collective resources are not capitalized – that is, not subjected to market logic – and where those who share them are not inclined on their own to capitalize them, the major means for doing so have been the political measure of nation-states, including violence. These incursions are ‘accumulation by dispossession’ – combinations of imposed market forces and state violence that dispossesses those to whom these resources belong.

Harvey (2010, p. 26) refers to this dynamic as the “capital surplus absorption problem” where capital in the pursuit of perpetual growth and therefore accumulation searches the globe for new markets for investment. In the context of the struggle over the commons this chapter will move to discuss the moral and ethical basis for the ‘modern’ commons.

The moral and ethical basis of the ‘modern’ commons

Much of the ‘modern’ commons literature is, in part, based on normative moral and ethical propositions that contribute to its broad currency amongst disparate groups. For example, assertions

that water is a commons because it “cannot be bound and has no boundaries ...” as Shiva (2002, p. 24) claims, or “because it is the ecological basis of all life and because its sustainability and equitable allocation depend on cooperation among community members.” Barlow (2008, p. 14) argues, “... water is a Commons that belongs to everyone and therefore, any harm to water is a harm to the whole – earth and humans alike.” These assertions and sentiments are quite typical in ‘modern’ commons literature. Bakker (2003) suggests that many resisting water privatisation do so on the basis that it would be unethical to transform water into a business opportunity. The logic of conventional CPR literature follows the behaviours of rational economic individuals and therefore discounts the power of moral and ethical claims and norms of the broader community, those based on social welfare, sustainable development and human rights. Nonini (2007, p. 10) establishes a disconnect here, or what he refers to as an “ontological gap between inside and outside: within a commons, participants reject the individualist and economic basis of capitalist evaluation, and deploy discourses of fairness and need, in contrast to outside, where market valuations usually prevail.” Just as prevailing property regimes allocate the right of exclusion to individuals, Blomley (2008, p. 319) makes the case that the poor also have a right not to be excluded. He makes the argument that a commons does not need to be an “instrumental commons, governed by rules; rather, it is a moral and political commons, justified and enacted through language of rights and justice ... The moral and political logic of the commons needs to be acknowledged.” Blomley makes this claim on the basis of what he refers to as a ‘constitutive outside’. The idea of the commons – the actual resource, relations or regime – would not exist unless of course there were members that constitute and/or form relations around the commons. Blomley (2008, p. 320) writes, “The commons ... is not so much found as produced.”

This production of the commons takes place in defined communities and by way of “participatory democratic communities” instead of “marketeering or top-down managerialism,” as Johnston (2003, p. 6) notes. This is what Flessas (2008, p. 391) refers to as the ‘hallmark of the commons debate’: “the ways in which communities constellate around questions of use, preservation and commons values, rather than more classic models of ‘ownership’ ...” In this sense, the commons are produced in relation to a group of people and not, as CPR literature often implies, in relation to the rational economic individual (i.e. homo economicus). Blomley uses his ongoing study of a community resisting gentrification in the downtown eastside of Vancouver as a case study into how the commons are operationalized (i.e. commoning). The commons, according to Blomley (2008, p. 320), is not only created by the community but it exists in relation to the community. In other words, community presupposes the commons and, therefore, “by virtue of being in place for a long time and using and relying upon the commons, residents both acquire and sustain a legitimate property interest.”

Blomley makes this claim on moral and political grounds arguing that if community members rely on a certain resource, be it a good, a service or location, then by virtue of having a recognisable interest in it, it should be considered a commons, irrespective of its formal (legal) status as private property or state property. In this sense, just as the state is often subsumed under ‘modern’ commons literature as a form of the commons, so too can versions of the commons challenge or stand in tension with state enclosure.

The 'modern commons' and the state

What is contentious within 'modern' commons literature is the relationship between the state and the commons. There is considerable ambiguity in this body of literature as to whether or not state property represents a form of enclosure of CPRs. Some (Barlow, 2008, Nonini, 2006, Ricoveri, 2013) suggest that state property is an integral component of the commons, particularly in the protection of the commons from market interests. The state may act as an arbiter between groups struggling over an already existing commons (Nonini, 2006) or, consistent with public trust doctrine, the state may act as public trustee over the commons (Blomley, 2008).

Bolliers (2002, p. 177) suggests that although the state “nominally owns and formally administers” the benefits that flow from the commons, that “state ownership is not absolute” and that people “in common are considered the true owners.” Holder and Flessas (2008, p. 302), for example, unequivocally point out, “public space is distinct from commons ...” Contextualising the commons in relation to a notion of public good ‘does not presuppose either a market society or private property...’ as Anton et al. (2004, p. 4) argue. They go on (2004, p. 4) to note,

It proposes instead the notion of public goods as commonstock and suggests that the concept of commonstock provides a basis for the critical evaluation of the privatization, commodification, and the increasingly exclusive control of nature, communicative space, the social order, the political order, and the economic order that is characteristic of our time.

The state often exposes the commons to market actors, or facilitates the marketisation of the commons through privatisations, public private partnerships and the like. Goldman (1997, p. 21) makes the case that “Third World state development agencies become the guardian of a relatively large influx of foreign capital intended specifically to restructure social-natural relations in

‘undeveloped’ areas so that projects, and the state itself, can set root and capitalist relations can grow.”

Others (Anton et al., 2000; Brownhill, 2010; Rowe, 2002; Hurl,) suggest that the commons exist outside not only the market but also the state. In fact the state may appropriate spaces enjoyed by many and transform them into something enjoyed by very few, as is the case with many roadways or shopping malls built in public spaces (Gioielli, 2011). What’s more, an argument can be made that the history of the enclosure of the commons is the history of the enclosure of indigenous peoples from across the planet. Some, (including Chazkel & Serlin, 2011; Maddison, 2011) point to the “colonial form of enclosure” where the state is responsible for the vicious and ongoing legacy of colonialism and genocide, that steals the traditional lands of and rips the culture from indigenous peoples. A nuanced reading of the commons arrives by way of Hardt and Negri’s seminal work (2009) on the issue. They suggest that the commons should not be conflated with the public – or those institutional arrangements, including state apparatuses that are charged with provision and regulation. They point out (2009, p. 282),

It is thus tempting to think of the relationships among the private, the public, and the common as triangular, but that too easily gives the impression that the three could constitute a closed system with the common between the other two. Instead the common exists on a different plane from the private and the public, and is fundamentally autonomous from both.

Menzies anchor’s her analysis (2014, p. 4) in such an understanding, noting, “the legacy of the commons offers ... a model of society that is centred in people’s relationship with each other and with the land, not in remote state authorities or an anonymous market.”

The considerable divergence is rooted in the legality of a framework, such as the state, that would formally recognize and protect the commons in the interests of its citizens. Some writers, such as Bond (2010, p. 12) who studies water privatization in South Africa, question the “legalistic reliance upon rights culture for popular access to water.” He suggests (2010, p. 18) that to counter the co-option of the commons language, there needs to be a:

... capture of the commons processes at the local level [which] should be contrasted with the changes required at the national scale, and potentially globally to fundamentally redirect our inherited patterns of extraction, production, distribution, financing, consumption and disposal.

Similarly, Blomley (2004) takes umbrage with the definition of property on the basis that it is ‘carefully policed’ and therefore prioritizes and legitimizes certain claims (namely private ownership) over others. He makes a strong case that by viewing property or rights through the lens of the commons one is able to view any private appropriation of a commons (state, market or otherwise) as an affront to collective rights that are *a priori* ‘burdened’ in the site of struggle. Viewed this way, Blomley (2008, pp. 325-26) argues, property “can provide a powerful, extant, political register for naming, blaming and claiming.”

Having considered the many categorizations of the commons as well as the specific property arrangements associated with the commons it would appear that the commons are still ambiguous? What defines a commons? Who gets to define a commons? Is there a single or clear definition of the commons within “modern’ commons literature? Such questions will be considered in the following section.

Critique of the 'modern' commons

The commons is not so much a consistent theoretical framework as it is a framework around which individuals, groups and organisations may express their resistance to increasing commodification and privatisation. This is not to suggest, however, that these individuals, groups and organisations have a consistent framework from which to challenge what they resist. It is only to suggest, rather, that the idea of the commons has brought, to some degree, a unifying moment and momentum to otherwise disparate movements.

There is much ambiguity in the 'modern' commons literature as to whether or not state property is considered as part of the commons. It would seem that much of the literature defaults to an analysis of state property as a version of the commons in the absence of an existing comprehensive commons model of social coordination. For example, Bolliers (2002) suggests that the interests of the commons are separate and distinct from that of the market and the state. Instead, the commons represents a defined community, such as 'we the people.' He goes on (2002, p. 20) to note, however, in a somewhat contradictory position, that the state may "intervene as a trustee on behalf of the commons..." in order to protect the interests of the commons and the people that depend on them. He later goes on to blame the state for its complicity in the privatisation of the commons and for not protecting the commons from corporate enclosure. As is the case with Bolliers and others (Barlow, 2008, Nonini, 2006, Ricoveri, 2013) on the one hand their position is that the commons belongs to no one yet on the other hand they are proponents of the commons as forms of public property, which, at least from a theoretical perspective, seems to be a contradiction. State property is, legally, private property of the group – which carries with it the powers of private property, namely and most significantly the right of exclusion. We witness this in non-citizens denied rights of citizenship of all sorts, such as healthcare, education or legal services.

This is the state's right of exclusion; which if one was to make an argument about the commons – that the rights, resources and institutions therein belong to everyone yet no one at once – then it would seem that there is a theoretical impasse with the idea of public goods. Even so, Bollier seemingly treats state ownership and control as a minor qualification in the fundamental make-up of the commons but this is a qualification that for some commons theorists defines the commons. For example, Cavanagh and Mander (2004, p. 155) specifically define the modern commons as “the role of governments in carrying out sacred public trust to perform certain key services that were once the province of communities and families but have been captured by and subsumed into the nation-state”.

Whether the ‘modern’ commons is compatible with state intervention is an important question indeed; however, what this literature emphasises in terms of claims and entitlements to good and services regarded as the commons, is that actual expressions and representations of the commons are both rooted in community and are a reflection of community and this is expressed in their inclusive nature (notwithstanding the contradictions noted above). That the commons are overwhelmingly defined by their inclusive nature, perhaps it is an ideal type, one rooted in the moral and ethical imperatives of its commoners. However, as Agrawal (2004, p. 244) points out, this literature demonstrates “that market or private property arrangements and public ownership or state management do not exhaust the range of plausible institutional mechanisms ...” Many commons theorists (notably Blomley, 2008 and Bakker, 2010 in particular) have done much to disavow the faulty logic and conventional analysis that circumscribes the question of the commons to the narrowly defined public-private binary and instead point to versions of the commons outside of market and state forces. Similarly Laval (2016, p. 48) makes the case that there isn't necessarily any essence of humankind or any inherent attribute to a good or service that would make something

“beyond the grip of the market or state ownership” and therefore make it a common. Rather what makes a thing, good or service a common, from Laval’s point of view, is the political activity (i.e. mutual activity, participation and obligation) attached to it through which rights may be explicitly formalized by way of action. To this point Dardot (2016, p. 97) argues that what makes a common is the link between a thing and action – “activity carried out by the community in charge of managing, maintaining and protecting it.”

The recent spate of commons literature overwhelmingly focuses on the notion of enclosure (as shown here) and as such often falls victim to the public-private binary it so often attempts to disavow. Harvey (2011, p. 101) suggests, “From a political perspective, the whole issue has been clouded over by a gut reaction either for or against enclosure, typically laced with hefty dose of nostalgia for a once-upon-a-time, supposedly moral economy of commons action.” Much of the CPR literature and some ‘modern’ commons literature has taken to documenting and theorizing the governance, management and allocation of the commons in deregulated environments and often advocates such a shift as it is purported that this deregulation shifts governance, management and allocation to more localized communities or networks. Such analyses seems to be strange bedfellows with its neoliberal counterpart, as Bakker (2012) points out.

What’s more, romanticized notions of the commons are not helpful in addressing the very real and unequal power relations that define so many communities – be it by way of discrimination based on gender, race, age, sexual orientation, class and so many other social factors. As Bakker (2010, p. 17) argues, communities are not necessarily “coherent relatively equitable social structures”; in fact, communities are often defined by “inequitable power relations and resource allocation.” Furthermore, though conceptually and theoretically the commons are based on inclusion, some versions exist on the basis of their right to exclude thereby more reflecting private property of a

defined group. For a viable commons framework to exist (i.e. not be considered an open-access regime vulnerable to tragedy of the commons) there needs to be clear membership, stringent and robust rules and measures of use and disposal of common goods and therefore formal or informal institutional arrangements overseeing collective action. Because of the unequal power relations and inequitable distribution of goods and services within communities, commons literature must keep a keen focus on the broader structures and institutional arrangements that govern a commons. This is where ‘modern’ commons literature falls short. Although this body of literature addresses the commons as resource and the relations to which the commons are constituted (community), what is lacking is clarity in defining the democratic institutional processes and mechanisms that protect, reproduce and extend the commons. Instructively, Bollier (2002, p. 20) points out,

Without the ‘social infrastructure’ that defines a commons – the cultural institutions, norms, and traditions – the only real social value in open-access regimes is private profit for the most aggressive appropriators. Hardin’s essay might more appropriately have been entitled, ‘tragedy of open access’.”

To this end Caffentzis suggests (2010, p. 25) an analytic distinction at the root of understanding the commons as a relation. That is, the distinction between two kinds of commons: (1) pro-capitalist commons that are compatible with and potentiate capitalist accumulation and (2) anti-capitalist commons that are antagonistic to and subversive of capitalist accumulation. A political economy analysis should further address these concerns and it is the intention within this thesis to apply such a framework. This thesis will explore the neoliberal policy prescriptions towards the commons and then reflect on this tension between ‘modern’ commons (hereafter termed socio-ecological) and neoliberalism.

Conclusion

This chapter addresses the common assumptions associated with the commons by way of a literature review. An important piece of this literature review is the discussion on the tragedy of the commons. A common misunderstanding and incorrect application of this metaphor serves as an oft-cited proposition for the neoliberalisation of the water commons. The subsequent analysis of the ‘modern commons’ counters CPR theory and addresses the tragedy of the commons metaphor in its discussion and connection to property relations. This discussion offers a broader analytical lens through which we may come to understand what makes up the commons.

The question that arises, and one this thesis hopes to shed light on in the development of a political economy of the water commons, is as follows: is the commons compatible with capitalist social relations and its political expression liberal democracy? Or, and at very least, is the commons antithetical to capital accumulation and profit maximisation? This reconceptualisation of the water commons looks to define the private access to the commons as an oxymoron. Private access implies exclusion to a host of rights that private property eclipses (i.e. common or collective use, enjoyment, and decision-making etc.).

Though ‘modern’ commons literature situates its analysis in a critique of neoliberalism, and, to an extent in some cases the capitalist relations of production, this literature focuses on what *ought* to be (idealized versions of the commons) instead of *what is* – the very real relations that continue to turn the *resource* into a commodity, transform the *relation* into alienation and estrangement and the render the *regime*, including institutions and arrangements, undemocratic. In this way there is grave danger that the prolific use of the language of the commons becomes an empty vessel. This thesis illustrates this point in two regards: (i) those on the Right have taken on the language of the commons to promote their political and economic project, (ii) the reformist Left uses the language

of the commons to simply quell the power of capital rather than to address the social relations directly and, ultimately, transform them.

Adhering to a critical realist philosophy this thesis leans towards more radical definitions of the commons that situate the commons as a social relation – that is, the commons are socially produced, maintained and reproduced materially and discursively. The commons are a product of struggle and therefore defined by ones access rights to them. For a commons to be truly a commons would be to embody ideals of the commons at every level of this social relation: resource, relation and regime.

Chapter 3: The Political Economy of the Water Commons: A Materialist

Ontological Framework for Studying Water

Political economy proceeds from the fact of private property, but it does not explain it to us. It expresses in general, abstract formulae the material process through which private property actually passes, and these formulae it then takes for laws. It does not comprehend these laws – i.e. it does not demonstrate how they arise from the very nature of private property.

Marx, 1978, p. 70

As this thesis seeks to explore questions over the ownership and control of WSS then a critical exploration must pay specific attention to the disconnect between serving the idea of the public interest as opposed to serving the need for increased capital accumulation and profit maximization, particularly in the context of over a billion people worldwide lacking access to either drinking water or sanitation. Such critique challenges a generally accepted normalisation of ever greater opportunities for capital surplus expansion, or what Harvey (2010) refers to as the capital surplus absorption problem, in areas traditionally governed by a broader ethos of public service. These processes in relation to socially necessary goods and services have attracted much scholarly attention over the last thirty years or so, through analysis and criticism of processes and structures associated with neoliberal economic globalisation – neoliberalism currently being the driving political and economic expression behind the global economy.

Yet these questions are intricately intertwined with legal connotations and definitions of rights – rights to goods and services broadly defined. As such this chapter takes up the discussion of property rights and begins, specifically, with a discussion on how property is synonymous with rights. This discussion will begin with an analysis of the common conception of property as a thing or object. The concept of rights as related to WSS have been complicated by this lay understanding of rights, a problem further perpetuated by both an unnuanced understanding of the idea of property (i.e. that property is an object instead of relation) as well as an uncritical view of human rights (i.e. inherent or God-given rights possessed by the atomized individual eclipsing understandings of rights as a product of struggle and common or collective in possession) (Anand, 2007; Baker 2007, 2010, 2012; Linton, 2012, Loftus, 2015; Sultana & Loftus, 2012; Mitchell, 2012, Perera, 2015; Schmidt & Mitchell, 2014, Sangameswaran, 2007). The legal definition of rights will be drawn out in relation to this orthodox understanding of the human right to water.

Following the discussion on the common misconception of property this chapter will provide a relational view of rights that proposes a broader understanding, informed by political economy, of how rights serve to satisfy the material needs of some whilst limiting the life chances of others. Viewed through this lens, property is a concept foundational to concerns not only associated with questions of access, ownership and control of WSS but broader questions of unequal power relations and inequality in general.

Because general awareness of the way in which production mediates how we understand ourselves and the non-human world is limited to capitalist social relations it is important to consider how capitalist economic relations affects all manner of forms of social reproduction and in particular the socio-ecological problematic that is the water commons. As Castree notes (2002, p. 123), “to scrutinise society-nature relations in abstraction from processes of capital accumulation is to miss a

vital aspect of their logic and consequences.” Until recently there appeared to be a waning of radical political economy approaches in the social sciences when seeking explanations of increasing social inequality and the looming fear of ecosystemic collapse. Perhaps this may have been a product of an academic era of theoretical fragmentation, particularly amongst progressive scholars as case in point with the rise of post-structuralist/post-modern approaches to social scientific inquiry. However, in seeking a coherent response to these twin crises, there is a revival of interest in approaches which consider specific social phenomena (in this case the water commons) within the context of the totality of all social relations as impacted by political and economic processes and structures. Hara et al. (2009, p. 529) write,

...the way winners and losers are created, the possibility of their agency in complex settings and the outcomes of these contests have to be analysed historically. ...approaches based on political economy and ecology all provide the tools to deal with such interactions. They help to identify which specific property rights configurations occur, who dominates them based on what bargaining power, and how institutions are justified.

By considering the foundations of liberal democracy and how it takes form in the current era of economic globalisation under its political expression neoliberalism, the next section of this chapter provides a political economy perspective, a theoretical springboard of sorts, from which we may set out to assess the empirical data in later chapters.

Questions of claims and entitlements, or of rights, beckon questions of decision making processes, structures and mechanisms of course; yet more broadly and perhaps more foundationally, they politically charge questions concerning systems of governance, including the policy principles that guide such systems. It follows that the prevailing form of governance under which the current

water problematic is confined or situated, liberal democracy, would be investigated. Though a great deal of water literature has addressed the uneasy relationship between liberal democratic principles and water equality specifically (Baker, 2010; Batterbury & Fernando, 2006; Castro, 2007; Castro and Heller, 2009; D'Souza, 2008; Schmidt & Mitchell, 2014; Mitchell, 2012; Swyngedouw et al., 2002; Walters, 2013) more is needed to understand structured water inequality. This chapter seeks to explore the character of provision concerning socially necessary goods and services within liberal democratic societies. Liberal democracy is the political expression of a class-based economic system constituted around private property and commodity production. Central to this economic system are social relations of production characterised by contradictory or competing relations and interests – this is symptomatic of a class based society where private property is foundational. A general discussion of these competing relations and interests will be applied later to those actors and interests involved in the framing of the water commons problematic – the competing conceptions of the water commons (neoliberal versus socio-ecological versions).

And so it is in the context of the competing relations and interests of liberal democracy that this thesis, and this chapter and some of the conclusions of this thesis below, probes this form of governance and critically explores associated forms of civil society that comprises it. This builds towards an argument made here, that within both popular and some academic literature, but perhaps most notably in the political sphere short shrift is given to the notion that civil society is a contested space. Much of the literature on civil society treats the concept as being synonymous with interests distinct from the state and the market (e.g. third sector) and therefore having interests' exclusive to those (i.e. society at large) (Riedel, 1975; Goulder, 1980; Habermas, 1992; Castiglione, 1994; Commission on Global Governance, 1995; Alexander 1997; Falk, 1998; Gramsci, 1999; Scholte, 2000; Anheier et al. 2001; Barlow & Clarke, 2001; Setianto, 2007; Calabrese, 2008; Somers, 2008;

Agawa 2009; Ramano, 2012; Baer, 2014). In addition, much literature categorizes anti-/alter-globalisation movements as civil society movements and in this way civil society can be seen as oppositional or antagonistic to the status quo. Much of this same work treats civil society as synonymous with the public interest, or broader common interests, or as possessing a collective conscience most often contrary to capital accumulation and profit maximisation. More recent literature on global civil society, and indeed the configurations of civil society in different countries, and at different scales and moments illustrates the complexity of this concept, and of the praxis of civil society mobilization and contestation (Guidry, Kennedy & Zald, 2000, Swyngedouw, 2003; Ayers, 2004; Otero, 2004; Beck, 2006; Castells 2008; Carroll, 2010, 2016; Mitchell, 2012; Efe, 2014; Khan, 2014; Leuven & Joye, 2014; Dardot & Laval 2014; Salgado, 2014). Yet, this thesis problematizes such conceptions and in doing so offers up a more holistic view of civil society, one that identifies the totality of all social relations in any given society (be it local, regional or global in scope) so as to include competing class interests within the overall conceptualisation of civil society. Civil society, in this view, is a sphere or space that is, ultimately, contested. The idea of the water commons itself is a contested terrain, and to consider this notion within the context of a recalibrated framing a civil society – as a contested terrain – adds complexity to the water commons problematic.

As an extension, the shifting meaning of public (i.e. what/who comprises the public?) will be considered broadly. Having considered the fundamental issues of property relations and the inherent antagonisms comprising capitalist relations of production this necessitates a closer examination of notions of publicness, i.e. what is public, and, particularly what remains public in neoliberalised economies? This will be considered in the conclusion of this thesis. Namely, as the public sector is increasingly commercialised and marketised – to greater of lesser degrees and in a myriad of ways and forms – what happens to the idea of property and the idea of public property more specifically?

Property and rights; a rationale for analysis

It may be that every society rests on illusory and contradictory beliefs. And it may be, as I have suggested, that there is something compelling about property and its links to liberty and security that cannot be revealed (or shaken) ... I do not reject the role of myth in a well-functioning society. But the myth of property is pernicious because it hides a structure of power and insulates it from democratic debate.

J. Nedelsky, 1990, p. 260

It is the law of property that controls the distribution of wealth in a society; consequently there must be the most intimate relation between that society's economic and social characteristics and the rules, practices, and institutions of its property law

J.H. Merryman 1974, p. 916

The concept of property is imbued with notions of rights, claims and entitlements (including traditional or indigenous) as well as non-rights, and therefore rights or non-rights are realised in the accessibility to, or exclusivity of, a good or service. In this way, a good or service may be deemed or defined as inclusive or exclusive – these concepts are contingent upon the character of property relations constituting a given good or service. The idea of property is not in itself oppressive; in fact to suggest this is to ignore the innumerable cooperative property regimes that define social relations within diverse and inclusive social formations – from tribal or band, to municipal, national or even transnational – all these, in particular, connote collective rights to goods and/or services. Just because rights may be held collectively, however – that is, common to all within a given society and

governed by formal rights (administrative and institutional arrangements and the corresponding legal claims and entitlements therein) or informal rules or regulations as it may be the case (i.e. norms, values, beliefs etc.) – does not disaffirm the fact that property governs social relations. Property, then, is a useful tool for assessing the way in which individuals interact with each other and their communities.

To examine peoples' relationship to WSS through the lens of property, for instance, is to peel back the layers of politics, culture, the even religion thus providing an opportunity to try to objectively assess progress towards achieving universal access to water. In a world of material abundance and unprecedented technological innovation, how is it that some populations have an abundance of water while others have little or none at all? We know that water scarcity, though a very real geo-regional issue, should not prevent people even in the most water scarce regions from receiving water or at least meeting their most basic water needs. There is, quite simply, enough water as well as the technical and organizational capacities to satisfy the most basic water needs of everyone on the planet. What, then, are the barriers? What is the origin of water inequality? Assessing outcomes by way of property relations enables a critical view of how water outcomes are presupposed by policy prescriptions that are manifest in rights frameworks. These in turn are foundational to the way in which we interact with each other as well as the non-human world. This again, critically returns the conversation to the hydrosocial cycle. However, because property is so often misconceived or taken out of context, then clearly defining property to fully comprehend the implications of various property regimes (those considered in Chapter 2) and the effect of these on material conditions is of utmost importance.

The common conception of property

The common conception of property is that to possess property is to possess a thing(s) or an object(s). Macpherson (1978, pp. 7-8) notes that this conception of property developed concomitantly with the advent of a market economy; people came to think of physical things or objects, or those things that have been transformed into commodities, as property. What's more, people have come to think of property as possessing exchange value, such as a commodity – a tangible thing that can be traded in the marketplace. MacPherson argues (1978) that this originates as a result of the social division of labour where productive tasks became much more specialized and labour began producing goods and services for exchange instead of for direct consumption. When it comes to applying a property analysis, these common conceptions may lend themselves to a misperception when attempting, as some analysts do, to slot fluid processes of the non-human world into resource units or fixed categories of measurement such as property. Such analyses reify a given good or service and anthropocentric processes (Linton, 2012). Such critique will be addressed here to argue otherwise paying critical attention to property in the relational context.

Yet another difficulty concerning the application of the concept property to all manner of social phenomenon and relations is that it is commonly treated as identical with private property – as either a physical good or service or as an exclusive individual right. This application of the concept encapsulates only one form of property relation, private property, one that can be seen as the product of a particular set of historical circumstances (Macpherson, 1978). Property is also often possessed collectively so that people may share in the use of a common resource. An ahistorical conception of property obscures what are often violent, disruptive and even unlawful enclosures of things, goods and services once administered under common property arrangements. Such a reading

of history obfuscates the enclosure of common resources, continuing to this day, as draconian and deceptive as these reforms often are.

Bradley (2000) advances this argument. By viewing property as an item of consumption rather than a whole host of relationships between a person and the rest of society and in relation to a given thing, good or service, so the argument goes, then, “moral obligations” or a “foundational sense of duty” embedded in the idea of property as part of that relationship is lost, largely due to the increasing transactional nature of all relations in market societies. “In this sense,” argues Bradley (2000, p. 14), “the social relationship and moral understandings that have previously undergirded property theory have since been rationalized and structured according to the demands of production ...” This distinction – between property as a relationship defined by rights and property as a physical possession – is essential in recasting property as a social relation. So it is that this distinction is taken up in the following section.

Property as a social relation

The common exchange relation conception of property misses a second definition of property that implies a legal relationship *between people in relation* to things. In this context, Bryan (2003, p. 3) notes, “Property is an expression of social relationships because it organizes people with respect to each other and their material environment.” Effectively, this distinction separates the physical thing from what is actually being possessed. Possession consists of the possession of rights, not things (Macpherson, 1978). Therefore, legally, to possess property is to possess a right. As Teeple (2005, p. 33) notes, “this meaning of property, then, becomes synonymous with the meaning of right.” Property is a right in the sense that a person holds a socially legitimated entitlement or

claim to something and in this way rights are the embodiment of power (Teepie, 2005). Rights typically entail a benefit stream that includes the right of use, disposal, and enjoyment. As the 2006 UN World Water Development Report (2006, p. 2) notes,

Water rights define who has access to water and in what ways the user can take part in local water decision-making. They also specify roles and responsibilities regarding operation, maintenance, monitoring and policing. In this sense, water rights manifest social relationships and local power structures of who is included or excluded from the benefits of water and what the various rights and responsibilities include.

The same UN report (2006, p. 61) notes that the importance of the question of rights “is not unique to small-scale agriculture or indigenous systems but is equally relevant to society at large.” Since rights are socially legitimated they are enforceable by way of formal or informal arrangements that maintain and reproduce the relations a given system intends to produce and uphold. Legal rights are formalised in law and reproduced, maintained and enforced by an institutional power such as the state through: governmental bodies and duties; legislation; the law and courts; security forces such as the police and military. The state plays a critical role in defining, allocating, and enforcing the prevailing property relations (Anderson & McChesney, 2003). Informal rights, on the other hand, are reproduced, maintained and enforced by customs, rules, expectations and norms (MacPherson, 1978; Anderson and Simmons, 1993). A right, however, and the benefit stream that flows from it, is only as strong as the protection allotted to it and the corresponding duty of others to respect the various arrangements that may protect that right (Bromley and Cernea, 1989, p. 5). In this sense, then, what is being possessed or in some cases owned are rights to goods and services broadly defined.

A key point here is that irrespective of the prevailing economic system or mode of production, rights determine actions individuals may or may not take in relation to socially necessary goods and services such as WSS (Heritier, 2002, p. 40). Therefore, the essence of property rights is the way in which individuals or groups relate to each other, that which is largely determined out of our relationship to things, or goods and services. The fact that there are differing property arrangements calls our attention to the fact that any given system of rights rests on the relational aspect of property in that any right is a measure of a relation with another individual, family or community. Ultimately this points to the social nature of economic systems and how material realities of individuals, families and communities ultimately reflect the property relations defined within a given society.

This discussion is important when considering our relationship with WSS, particularly at a time when neoliberal policy prescriptions influence governance matters. This discussion may challenge what is often a narrow property frame of reference. When considering rights, the narrow view of the exclusive individual right most often associated with liberalism, and hyper-expanded under neoliberalism, has the chance to be expanded, for example, so as to shift focus away from simply how much water a given individual needs to make it through the day. Considering property relations in an expanded way, as Linton (2012) suggests, more appropriately reflects not only our common dependence on water but also the processual qualities of water and therefore transforms the character and quality of our relationship to water and by extension each other. He (2012, p. 45) argues, “The fluidity of humanity and water are taken as a starting point, for considering how, when mediated by the idea of a ‘right’, a kind of relation is expressed that entails the co-production of both.”

Considered in this second sense, property is essential to the basic understanding of a broader political economy approach to WSS. The importance of this task is emphasized by the UN's 2006 World Water Development Report (2006, p.454) that calls for scholarship in this regard: "A new discussion is needed on the meaning and implications of property rights, especially in the public domain." Having discussed how property arrangements are reflected in rights frameworks associated with political expressions and systems, this chapter shifts to explore how rights are granted and exercised within liberal democracies specifically.

Liberal democracy and neoliberalism

Liberal democracy

A key part of the argument here is that liberal democracy creates and supports the normative and practical conditions for market relations. Therefore a discussion about the foundations of liberalism is key to understanding where the individual is positioned in a world that works according to liberal (and increasingly neoliberal) principles. A comprehensive historical analysis of the development of liberal democracy is not the task at hand here. Rather, the aim is to provide historical and theoretical context of key developments rooted in evolution of the property relations that have come to define contemporary liberal democracy and, furthermore, to discuss how this relates to the right to WSS.

The historical point of departure in Western political thought comes at a time when religious tradition, monarchical powers and feudal systems would begin to be challenged. The transformation of feudalism would span thousands of years and this would manifest in social, political, economic

and legal transformations but also and perhaps more importantly, at least in terms of a theoretical point of view, in conceptual transformations in terms of how we organize ourselves as communities and, more broadly, as a society (Naiman, 2012). This is a time, in the late seventeenth century, where individuals were no longer considered property themselves but rather ‘people’ endowed with a whole host of citizenry rights under state rule. Liberalism in this sense, as Held (2006, p. 59) notes, signifies “the attempt to uphold the values of freedom of choice, reason and toleration in the face of tyranny, the absolutist system and religious intolerance.” It is in this regard where, as a political movement, liberalism challenged absolute monarchies as well as organized religion so that individuals would be “free to pursue their own preferences in religious, economic and politico affairs” (Held, 2006, p. 59). In this regard, as a political doctrine, two of the principle and enduring tenets of liberalism are freedom and equality with corresponding assurances of individual autonomy and dignity (Brown, 2005). Yet, as Held (2006, p. 59) points out, “While different ‘variants’ of liberalism interpreted this objective in different ways, they were all united around the advocacy of a constitutional state, private property and the competitive market economy as the central mechanisms for coordinating individuals’ interests.” Bellamy attests to this historical account (2001, p. 8798), noting, “historically the most significant social influence of the formation of liberalism was the passage from feudalism to capitalism ... (where) ... an individual’s social position and success supposedly married his or her ability and effort – a way of life they felt was best realized in a free market economy.” This moment sees the advent of a meritocratic understanding of the satisfaction of wants and needs more broadly. Bonanno provides (1998) an account of the problems of classical liberalism in that it assumes a playing field of equal or lesser players of the same size, namely smaller operators whose individual actions or inactions would not have any kind of residual effect on the market itself and therefore a broader inability to manipulate the market for individual benefit. Thus, (1998, p. 227) “the growth of large corporations and concentration of economic power made the

classical liberal idea of self-regulating markets increasingly inadequate to represent mature capitalism.”

It is in this economic transformation where this thesis picks up the analysis of liberal democracy. Taking inspiration from Brown (2005) it is not necessarily liberalism as a political doctrine that is of concern here but rather the *economic variant of liberalism*. The evolution of liberal democracy to neoliberalism is the history of class based movement characterized by the ascendancy of the economic sphere and the gradual eclipsing of both the political (institutions and practices) and of the social spheres (expanded below). Yet, prior to the concerted shift to neoliberalism in the 1970s a revisionist liberalism appears in the late 19th century and gains prominence through the early 20th century and most notably takes root in the post-World War Two period. Revisionist liberalism is defined by the tempering of economic freedom through state regulation in efforts to quell the unintended consequences of unfettered economic freedom within the marketplace, namely increasing and consolidated economic power and entrenched social inequality.

Revisionist liberalism also comprises the social reform agenda that defines the Welfare State in the post war period. As Teeple notes (2000), the social reforms that characterise the Welfare State neither arrived as a comprehensive global set of reforms nor as a global system of governance; rather, these reforms took root in different parts of the world during different times and spaces of class struggle. These reforms can on the one hand represent the sharing of overall power (i.e. worker unrest was a real threat to capitalist development) but can equally be understood as satisfying the needs of capital (i.e. socialize the costs of production). As Smith (2010, p. 61) points out, “The New Deal was an instrument of class struggle insofar as it quite deliberately contained the growing revolt in the name of keeping a capitalist hegemony alive.” Teeple suggests (2000, p. 15) that the Welfare State is not a ‘coherent concept’, arguing,

Although sometimes used as a generic term for government intervention “on many fronts,” the welfare state can also be seen as a capitalist society in which the state has intervened in the form of social policies, programs, standards, and regulations in order to mitigate class conflict and to provide for, answer, or accommodate certain social needs for which the capitalist mode of production in itself has no solution or makes no provision.

Considering liberalism's enduring effect on governance, Bonanno (1998) suggests, liberal thought has ultimately come to define the relationship between community and government (i.e. “unity of community and government”) – viewed often as the ‘triumph of liberalism’. Yet, the evolution of neoliberalism, according to Bonanno (1998), is characterized by an increasing fracture between community and government/state. Thus, the state now inadequately represents broader citizen interests as a result of a loss of power to supranational governing bodies and multilateral agreements. This works under the assumption, however, that the state operates in the broader public interest to begin with. Brown (2005, p. 39) approaches the argument from a different starting point suggesting that the state exists to govern the liberal democratic political order and though this may entail “maximizing liberty (its politically ‘conservative’ tilt) or maximizing equality (its politically ‘liberal’ tilt) ...” either way, the state is governing relations within a liberal democratic framework within an overall capitalist socioeconomic order.

Neoliberal policies were in part a reaction to and critique of the Keynesian policies that dominated political economic programs post second world war through to the early 1970s – a period known as the golden age of capitalism (Teepel, 2000; Brown, 2005; Naiman, 2012). Due to a falling rate of profit in the 1970s and a subsequent recession in the First World that was characterised by a combination of high unemployment and high inflation (stagflation) economists began questioning the ethos of a robust welfare state and associated social policies that were meant to mitigate the

worst effects (on both the human and non-human world) of an unfettered free market system. A new vision for a post-Keynesian society (particularly of the economy and the state but also the environment) was born by way of new economic and policy instruments. This vision was instigated by two prominent economists – Milton Friedman (Chicago School), who addressed the idea of monetarism and Friedrich von Hayek (Austrian School). Their interest was in the state-economy nexus and in particular state transformation whereby the state had limited involvement in the economy but acted as the key guarantor of markets (Jonsson, 2012). Neoliberalism is an all-encompassing program with political and economic prescriptions with deep social, political, economic and bio-physical consequences.

Neoliberalism: Historical origin to everyday practice

Harvey suggests (2004) that neoliberalism is “a theory of political economic practices” but most importantly, as previously mentioned, he also argues that it is a class project (2010). Similarly, for some (Heynen et al, 2007) it is a political and economic philosophy and a mode of regulation; while for others (Miller, 2010; Scholte, 2005) neoliberalism is a political and economic doctrine, or a particular political and economic project that seeks to reorganize global capital, effectively consolidating global economic powers (Yates & Bakker, 2014). For Brown (2005, p. 52) neoliberalism represents a “governmentality” that “eviscerates nonmarket morality and thus erodes the root of democracy in principle at the same time that it raises the status of profit and expediency as the criteria for policy making.” Whereas, for Jonsson (2012) neoliberalism is an ideology (“new liberalism”) in the sense that it sustains a particular view of the world and a set of corresponding social relations therein. Likewise, Howard and King (2008) suggest it is an ideology that professes to

have a market fix for all political, economic and social ills and therefore it is prescriptive in its policies. Howard and King distinguish neoliberalism from classical liberalism of the 19th century in the sense that it is much more of a pragmatic program. For some it is a combination of all of the above, but it is also an ecological project (McCarthy and Prudham, 2004; Castree, 2005, 2010, 2011; Bakker, 2004, 2005, 2006, 2007, 2010, 2012). More than as set of broad-based macro-economic policies, neoliberalism, as Atasoy (2009, p. 7) points out, is “a complex political process involving the restructuring of capital and classes, the reorganization of state and political alliances, and the reconfiguration of society and human life.” This idea of neoliberalism as an ongoing process (Atasoy, 2009; Brown, 2005, Howard and King, 2008). This seemingly slight nuance – neoliberalism as a process – is consequential to our analysis in the sense that as ever more aspects of our lives, including WSS, are subsumed by market forces or at least market mentalities and sensibilities, by way of accumulation of dispossession. As a result of this ongoing process there is an ‘emergence’ of new social relations (see Chapter 4 on critical realism). In other words, neoliberalism occurs over time and space; it is neither spontaneous nor monolithic – it takes many different forms and levels of entrenchment in various geographic locations, scales, systems of governance and geometries of power. The main point is that social relations are incrementally albeit radically transformed thereby and in turn changing material relations. As Howard and King (2008, p. 4) explain,

The central point is that neoliberalism is a result not of an autonomous ‘change of heart’, or of an increased or decreased ‘enlightenment’ among those who wield political power, but of material development: the increasing sophistication of the productive forces and the economic requirements for their continued development. Furthermore, these social relations take a specific form, that is, the entrenchment of unequal class relations in ever more facets of daily life (including ecological systems) to which neoliberal principles are applied.

Despite the difference in approaches as to what neoliberalism actually constitutes (the variances presented here certainly are not exhaustive) there is much overlap. Whether it is a framework of thought (ideology) and framework for policy (governance and political doctrine) or a framework consisting of specific economic principles and strategies (monetary and fiscal programs and doctrines and therefore processes) what is clear is neoliberalism is not an abstraction but rather a relatively coherent vision with diverse albeit focused policy prescriptions that challenge the taken for granted assumptions and presuppositions relating to the property relations that characterise our relationship with each other and the non-human world. Neoliberalism in this sense includes a complete range of regulatory, governance and market reforms and attendant policy prescriptions that cohere around fundamental transformations in social relations of all kinds and in many different spheres of daily life – political, economic, social and ecological. Some (Bakker, 2010; Bresnihan, 2016; Castree, 2005, 2010, 2011; McCarthy & Prudham, 2004; Mirowski & Plehwe, 2009; Dardot and Laval, 2017) caution against the common practice of over-simplifying neoliberalism since neoliberalism takes many different forms (i.e. in time and space) and, in addition, there are many neoliberalisms or what Peck and Tickell (2002) refer to as “neoliberalisations”, which will be explored below. With this in mind, this thesis adopts a position with regards to neoliberalism, held by many (most notably Brown 2005; Harvey, 2004) that the economic variant of neoliberalism is the strongest and that all spheres of life under neoliberalism, be it the political, social or ecological, not only flow from and are influenced by this variant but take on its character. Perhaps the most important historical takeaway in capitalism’s evolution to neoliberalism was the power of liberal democracy, in Brown’s (2005, p.46) words, to “encode(s), reflect(s), and legitimate(s) capitalist social relations”. Indeed, neoliberalism is based on abstract and theoretical ideas leftover from classical liberalism, as Howard and King (2008, p. 2) note – i.e. “individualism, voluntary contracting, small government and the rule of law, with an emphasis on the importance of civil rights rather than

democratic of social rights.” But as Harvey (2011, p. 10) points out, neoliberalism is “masked by a lot of rhetoric about individual freedom, liberty, personal responsibility and the virtues of privatisation, the free market and free trade ...” all relics of liberal democracy. So although this thesis is careful not to present neoliberalism as a monolith, it is instructive to situate neoliberalism in the broader context of evolving property relations. As such we are able to empirically examine neoliberalism whilst also considering and arriving at an understanding of the locale specific and time-bound manifestations of an evolving set of social relations that take root in producing water inequality.

Neoliberal principles

Neoliberals tend to hold the view that the benefit streams of economic development flow from unfettered markets to all citizens. Within the neoliberal worldview there is a common belief that the most efficient way of protecting the biophysical world is through market incentives; in fact, neoliberalism holds the view that many political, social and ecological problems are a result of an absence of markets. Influenced by its classical economic liberalist roots, neoliberal policy reforms are based on the idea that the market is the proper guiding mechanism by which people should structure their economic lives (MacEwan, 1999). As such, neoliberal policy reforms increasingly commodify ever more aspects of social reproduction that lie outside the realm of private accumulation, as these relations, from the point of view of capital, can be viewed as unproductive, or not producing profit.

Since the 1980s, neoliberalism has become the dominant economic paradigm amongst liberal democratic states throughout the world. Strategic in this expansion, particularly in the First World was Thatcherism and Reagonomics (Castree, 2010; Jonsson, 2012; McCarthy, 2005; Mirowski &

Plehwe, 2009). Global dominance arrived, in large part, by way of the preeminence of the post-World War II global enabling framework – the UN, WTO, IMF, and the World Bank – or what Teeple (2001) refers to as the “international regime of accumulation”. Essentially, the modus operandi of these global governing bodies and international financial institutions (IFIs) is the aggressive promotion and entrenchment of neoliberal policy reforms. In this sense, this framework may be considered a regime in that as governing institutions, their key purpose is to establish the necessary conditions – political, economic and social – for capital to be able to pursue profit maximisation and capital accumulation (Bresnihan, 2016). There has been significant resistance to many of these policies over the last 30 years or so, such as the case with the Structural Adjustment Policies (SAPs) of the World Bank and IMF; however, in these cases specifically, these programs have been largely repacked and succeeded by Growth Facilitation and Poverty Reduction programs facilitated by the Heavily Indebted Poor Countries (HIPC) initiative and most recently the Extended Credit Facility (ECF) of the IMF. The resistance to marketization and privatisation is an important discussion in the challenges neoliberalism has faced throughout the world and this speaks to the discrepancy in scope and variegated application of its policy prescriptions across much of the world. In this sense, neoliberalism is neither a coherent theory, doctrine nor ideology, but instead coalesces around a number of key ideas. It follows that neoliberalism is diverse taking on many different forms relative to time and space and this demonstrates its persistence but also, and most importantly its adaptability (Bresnihan, 2016).

Neoliberalism pervades the political, economic and social spheres of life and transforms each into terrains of possibility for capital. Neoliberalism transforms the political sphere whereby the state’s activities are “restructured and redirected” (Howard and King, 2009, p. 3) so that the state performs the essential role of re-regulation. In this regard the state, provincial/state and local

governing bodies decentralise authority, thereby relying on a series of alternate actors (civil society/third sector/volunteerism) to fulfil the roles and activities traditionally associated with the public sector, including regulation (e.g. the growth of ‘third party’ or independent regulatory bodies). Decentralisation, as Scholte (2005) points out, has been a cornerstone of the SAPs of old and the more recent HIPC initiatives and Growth Facilitation and Poverty Reduction programs of the IMF and World Bank. This includes a retrenchment of social services and redistributive spending (Heynen et al., 2007) or what has also been referred to as the dismantling of the welfare state (Teepie, 2001). This involves a reconstitution of state services so they are either turned over to the private sector fully, as in the case of privatization, or the public sector undergoes a transformation so that it more closely reflects and operates like the private sector (corporatisation). This includes outsourcing portions of its ‘business’ to private contractors. It follows that re-regulation involves the development, maintenance and reproduction of an enabling environment, or what is also known as an institutional framework (Harvey, 2004), which facilitates market relations and encourages private sector growth and the state also introduces the market into ever more of its own duties and responsibilities (corporatisation). In a stronger version, Brown (2005) suggests the political sphere is subordinated to a neoliberal economic rationality whereby each individual and society at large is “cast in terms of market rationality.” Brown (2005, p. 40) expands,

While this entails submitting every action and policy to considerations of profitability, equally important is the production of all human and institutional action as rational entrepreneurial action, conducted according to a calculus of utility, benefit, or satisfaction against a macroeconomic grid of scarcity, supply and demand, and more value-neutrality. Neoliberalism does not simply assume that all aspects of social, cultural and political life can

be reduced to such a calculus; rather, it develops institutional practices and rewards for enacting this vision.

Neoliberalism transforms the economic sphere so that ever more facets of daily life are up for grabs in the market. At the most basic level there is a fundamental transformation of all forms of daily life outside of a private property framework. This transformation may not be direct, as in the case of full privatization or commodification, but may be partial, such as the case with public private partnerships (P3s), or incremental as in the case of corporatisation. In fact, full privatisation is rare in the water sector; instead a mixture of various models, including P3s and corporatisation is evidence of the neoliberal penetration of WSS. For those goods and services that remain as some form of social or collective good or service these are often measured up against economic rationality and/or the market's ability to deliver these more 'efficiently'. For Brown, neoliberalism does not promulgate the market or market relations as being natural, or the natural economic unravelling of human history; rather these conditions are constructed. In this regard, neoliberalism is much more of a movement, "it does not presume the ontological givenness or a thoroughgoing economic rationality" (2005, p. 40). Again, this is not to say that everything is transformed into private property; rather, private property becomes the prevailing form of property relations and therefore the effectiveness of all other property arrangements are weighed in relation to these prevailing relations (i.e. capitalist rationalisation) (Castro, 2013). What's more, society's institutions take on the character of the market so as to reflect market interests, including legal and political institutions (Brown, 2005; Castro, 2013). There is indeed, then, a normalisation of exclusive property rights.

The social dimension of neoliberalism and how it plays out is complex. While the political and economic spheres of neoliberalism have a social impact, namely increasing material inequality, for neoliberalism to take hold in these spheres, for it to be institutionalised, maintained and

reproduced, it requires social relations conducive to such radical transformation. This, indeed, speaks to the ideological aspect of neoliberalism where social relations absorb transformation and in doing so, reproduce and maintain the material conditions favourable for what may have initially seemed austere but which has since been normalised and now standardised. This is not to suggest that ideas or consciousness change material conditions but rather in the struggle over rights to things in general, as will be discussed in the Chapter 5 (i.e. agency structure nexus), there also exists an ideological struggle that conceptually foregrounds the struggle over rights in social relations and material conditions that are essential to supporting a particular vision of the economy and the state. In this way, neoliberalism places strong emphasis on individualism as a social norm: individual liberty, individual rights and freedoms and individual responsibility. Citizens are viewed as customers or consumers – homo-economicus – endowed with the alienable rights of private property so as to cultivate and nurture the ideal of the self-made man (Teepie, 2001, 2005; McCarthy and Prudham, 2004). In this way, the political (emphasis on civil rights) and the economic (private property) spheres transform social relations but are also maintained and reproduced by them.

The ecological dimension of neoliberalism is an interesting question because although the question of the non-human world does play a prominent role in specific neoliberal policy prescriptions (as these focus primarily on the state and the economy) much like the social dimension one can contextualise the bio-physical world in relation to neoliberalism in terms of the far-reaching impact neoliberalism has on it. In this sense the bio-physical world is seen in terms of a consequence (Proctor, 1998) while at the same time acknowledging that all aspects of the bio-physical world and its relations exist independent of mind and society. Put differently, any given society's social relations of production is limited by the bio-physical world but also affects it too and therefore, as Smith (1990, p.30) suggests, "Nature is nothing if it is not social." Neoliberalism transforms our

social relations with the bio-physical world (Baker, 2010; Büscher et al. 2014; Castree 2010, 2010b, 2011; Loftus, 2010; Linton and Budds, 2014; McCarthy and Prudham, 2004; Roa-García et al., 2015; Swyngedouw et al., 2002). This neoliberalisation of nature has evolved over the last 40 years (as is evident in the analysis of our data in Chapters 5-8 as it relates to UN water policy) to the point where the bio-physical world is indelibly wrapped up in issues of economic and social development. It has become plain to see that the non-human world has become a battle ground for control. To be sure, neoliberal policies of ecological governance and green environmentalism etc. arose out of the economic impact on nature and the intensification of this impact under neoliberalism. Neyen et al. (2007, p.10) explain the neoliberal necessity,

... to expand opportunities for capital investment and accumulation by reworking state–market – civil society relations to allow for the stretching and deepening of commodity production, circulation and exchange. When this is combined with a stress on individual rights and freedoms, especially private property rights, there is a necessary re-working of the way human society and non-human systems and beings relate.

More than this, however, as Harvey suggests (2005, 2010), as a result of innumerable unstable and sagging commodity markets (e.g. property, oil, housing etc.) transnational capital scours the globe in search of new markets of capital accumulation. As such, evermore aspects of the non-human world, including water, represents one of these possibilities. In other words, neoliberal policies were never predicated on the basis of improving our relations with the non-human world; in fact, quite the contrary, neoliberalism seeks to extend those institutional arrangements that further entrench those relations that have the unintended consequences of further contributing to our alienation to the non-human world. Caffentzis argues (n.d., p.10),

The increasing interest some capitalist theorists are showing to the notion of the commons in this period is thus due to corresponding crisis of neoliberalism. Again, this should not be surprising. It is always in a crisis that the strategists of the dominant class begin to look to the revolutionary opposition and attempt to integrate aspects of its programs and theories that are compatible to their paradigm and that offer a 'way out' both politically (by posing a mediating possibility) and logically (by expanding the set of 'possible worlds' available for thought and action).

Neoliberalism as a contested space

Many argue that neoliberalism is far from hegemonic; rather, it is contested, protested and widely criticized and this is the case as it relates to water, from both a scholarly perspective (Bakker, 2004, 2005, 2007, 2008, 2010; Bond 2004, 2008; Castro 2006, 2007, 2008, 2008b, 2013; Castro and Heller, 2009; Goldman, 2005, 2007; Loftus, 2001, Sultana and Loftus 2012, Swyngedouw, 2004, 2005, 2013) and activist perspective (Barlow and Clarke, 2003; Barlow, 2007; Petrella, 2001; Shiva, 2000). This is a position adopted by this thesis, hence the very idea of competing conceptions of the water commons. The very basis upon which the competing conceptions of the water commons exists is the incremental albeit increasing transformation of property relations that define communal forms of ownership. This process is facilitated by the various principles in the neoliberal arsenal. In other words, neoliberalism may theoretically and practically inform one side of the struggle over the right to water but it is met by a vociferous opposition, and movement based on socio-ecological sensibilities on the other side of the water commons debate. Because this thesis takes the position that neoliberalism is contested it is important to address the theoretical foundations of such a

position. The next section accounts for such a position in the adoption of a materialist theoretical perspective.

A materialist account of liberal democracy

This thesis adopts a materialist account of classic liberalism that suggests that market relations are both inherently oppressive and unequal. Oppressive in the sense that the means by which the working population may reproduce itself (both in terms of the means and forces of production) have been expropriated by the capitalist class. Similarly, the means by which the non-human world reproduces itself is increasingly polluted, extracted and gradually degraded by the neoliberal propensity towards the growth imperative. Workers have no option but to enter into the market as both wage-earners and consumers so as to satisfy their most basic of material needs. What's more, these relations are oppressive in the sense that workers unwittingly reproduce these conditions by assuming these roles as *fait accompli*. Furthermore, to revisit MacPherson's argument that liberal democratic theory postulates the maximisation of individual utility and power, qua aggregate utilities and cohesion, by way of individual gains in a competitive marketplace. These ideals are based on an assumption that views these courses of action as the universally accepted and most desirable means to achieve aggregate utility and cohesion. And this without any consideration of equality of condition (i.e. equal rights/equal playing field).

On the other hand, these relations are unequal because, despite what Article 1 of the UDHR may say, individuals are not all born equal – not in a social, cultural and economic sense; in other words, not all individuals have the means to realize their social, cultural and economic capacities under free market conditions. One of the fallacies of liberal democratic ideas under neoliberalism is

the maximisation of individual utility as the best means to achieve maximum and aggregate utility. This assumes that individuals are equal in property holdings not to mention training and skill set and access to education that comes before these (MacPherson, 1973). The adage, 'equality of opportunity' is used ad nauseam without much or any regard of equality of condition. In other words, only if one has the means to exercise the right can one seek to maximise their utility.

Conclusion

By defining property as being synonymous with rights, this chapter presents a critique of the common conception of property (i.e. property being a thing/object) and instead argues for a understanding of property that emphasizes the relational aspects of rights. This analysis positions the thesis in such a way where the interpretation of data may reflect on how property relations determine and facilitate access to WSS. Further to this case, the neoliberalisation of our daily life, including WSS, takes place within liberal democracies that situate the individual at the centre of social reproduction, this at the expense of collective or common forms of social reproduction, including collective, common or community rights to socially necessary goods and services, such as WSS.

The abovementioned understandings of neoliberalism translates to the neoliberalisation of WSS as evidenced in the UN water policy trajectory that will be assessed in Chapters 5-8. Each of the four causal explanations develops an analysis that illustrates this neoliberal penetration in WSS. Before the presentation of these causal explanations, however, the next chapter presents a methodological framework for the thesis that supports an effort to excavate the neoliberal orientation of the water commons. While significant attention is given to ideology by way of the

discursive orientations and constructions of neoliberal water policy, this next chapter anchors our analytical lens in a materialist conception of history consistent with this chapter. This is supported by Bresnihan's argument (2016, p. 168) where he suggests,

The reality we inhabit is not an 'illusion' or façade; it consists of real social, economic, and bio-physical forces that shape our lives, now more than ever. We are all entangled within institutional and economic practices that shape not only the way we think but also the way we act, the way we work on ourselves and the people, things, and places around us.

The next chapter will orient a critical realist approach in a materialist conception of history so as to direct a critical discourse analysis (CDA) towards broader political economy concerns.

Chapter 4: A Methodological Framework for Studying the Water Commons

The world cannot be rationally changed unless it is adequately interpreted.

Bhaskar, 2011, p. 5

This chapter discusses the research design of this project and the key methodological issues associated with conceptualising and critiquing the contestation of the water commons, including engaging with both ontological and epistemological concerns with the ideal of the water commons and the biophysical nature of water itself (i.e. water's objective social relations). A core methodological undertaking of this thesis is establishing a means of investigating water commons discourses and examining competing uses and appropriations of the commons by various stakeholders (termed within this thesis as neoliberal versus socio-ecological). This is not confined to the excavation of empirical examples, such as the appearance of text (i.e. the "water commons") in policy documents, but also the analysis of the political economy of the struggle over water itself: *that is understanding the contestation over access to water in the context of real unequal material relations that condition this struggle over discourse.*

The primary empirical data of this thesis is derived from publically available official documents. For practical considerations this chapter will first take up the method of documentary analysis, specifically detailing what it is and how it suits the research aims of this thesis. This will be followed by a detailed exposition of how the method is operationalised using a critical realist approach to understanding and making meaning from the data. This section will address how the

analysis of discourse fits within a broader political economy framework detailing how the empirical evidence can be related to policy contestation (i.e. knowledge production in terms of the policy orientations of various stakeholders or competing interests). Indeed questions of objectivity and positionality are relevant here and will be addressed in relation to epistemological considerations of the critical realist philosophy *for* social science. In particular, this thesis argues for a form of critical realism that elaborates the political economy approach.

In relation to methodology specifically, this thesis confronts two competing ideologies. The first is on the level of methodology where the critical realist account of reality challenges post-structuralist social scientific research that is limited to the level of appearance or the empirical. This first competing ideology will be explored by considering the structure-agency debate from a critical realist perspective. To this end the structure-agency debate raises fundamental methodological questions pertaining to the empirical content of this thesis (i.e. the water commons dilemma) and the mediating forces and factors that play out to make these contending conceptions of the water commons possible in the first place. As a philosophy for social science, critical realism lodges a critique of empiricism, positivism and idealism on the basis that these ontological positions neglect the underlying social structures and processes to social phenomenon. And so it is the case with WSS, considered to be part of the water commons. In other words, this thesis questions that the water commons are simply the water commons because they satisfy basic human and non-human needs and ecosystem processes – all living human and non-human beings and ecosystems depend on water for well-being and survival and by virtue of this shared reliance and dependency, water is to be considered to be part of the commons, so the argument goes. We are further compelled to ask if the constituent make-up of the water commons (and any commons for that matter) changes as a result of the property relations that may be attached to the thing in question, in this case water. As such,

this chapter elaborates on critical discourse analysis (CDA) with an understanding that this methodological approach seeks to locate the analysis of text, language, documents, etc. within broader societal contexts in which they are embedded – consistent with the abovementioned critique of post-structuralist research design. Though stressing the importance of language in mediating reality, and being the very means through which we construct our conceptions of the world and indeed social theory too, discourse analysis, and even CDA for that matter, does not necessarily compel the researcher to engage with underlying historical structures of social relations (e.g. capitalist mode of production). A noted tension between the theoretical framework for this thesis (materialist and critical realist political economy account) and the methodological approach (documentary critical discourse analysis) should be considered from the outset here. From a materialist perspective it is the intention of this research project to provide an account of how the struggle over the right to water is materially fortified – in other words, how this struggle plays out in terms of real material outcomes as it relates to water inequality. Herein lies the tension between the theoretical and methodological frameworks. That this thesis relies on documentary empirical research (methodological approach) it would seem that its potential findings would not go far enough, or at least remain at the level of discursive manifestations and discursive struggle. Though this may be the case, the methods employed here (notably the critical realist perspective) provide explanatory models as to how ideological positions with respect to access to water rationalise and even justify already existing material outcomes as it relates to water inequality in general. The following research, then, serves to seek clarity as to how discursively fortified struggles may seek to rationalize and justify water inequality. Further work in this area may choose a methodological approach that focuses entirely on material conditions and outcomes; however, considering the scope of this thesis, the chosen theoretical and methodological frameworks here provide a bridge for such future research objectives.

This proposition – that CDA does not take us far enough passed discursive representations – is addressed within this thesis by the adoption of a critical realist approach. This is not to suggest that these structures and their adherent societal forces and factors are all determining. Critical realism posits that the research field within which the struggle over water is situated is an open one (to be further developed below). In the analysis of underlying social structures and processes the adoption of the critical realist method enables a broader political economy approach to the water commons dilemma.

The second competing ideology relates specifically to competing conceptions of the water commons. This competing ideology (i.e. neoliberal version of the water commons versus socio-ecological) is observed in the gap between the phenomenon in question, that being the water commons, and the actual thing itself, water, this gap being reinforced not only by discursive representations but also material relations. In critical realist terms, this gap represents what is known as an epistemic fallacy, or where ontology is collapsed into epistemology. Bhaskar (1997, p. 10) employs the Lockean expression ‘under-labouring’ so as to express a philosophical approach *for* science which aims to address this ontological problematic. Herein lies a further rationale for a critical realist approach to this thesis. Critical realism is treated here as a philosophy to propel this thesis beyond simple empirical phenomenon in order to examine as a topic in itself how it can be possible that these two discourses can be in struggle with each other in the first place: i.e. in critical realist terms, to bridge the gap between the Actual (i.e. water commons) and the Real (water itself) – the latter including meeting all of the human and non-human water needs, or not as it may be the case. This ontological endeavor is tasked to and located within an alternative transcendentalism (a second-order knowledge) that challenges the idea that explanations can be found in analyzing the Kantian subject (the self-interested rational individual). In doing so, this philosophical undertaking

extends the scope of explanation to the real material relations that have as a consequence of contingent forces and factors either access to or exclusion from water. Because of the emancipatory nature of critical realism (Bhaskar, 1989) this thesis deconstructs the assumption that market principles are the inevitable or missing feature in the management of the WSS. Critical realism builds from a critique of positivism – a philosophy of science that explores events as constant conjunctions of the laws of nature. Critical realism, instead, is premised on exploring events based on social choices or interventions and decisions that produce reality based on social relations – in other words, purposeful intentionality.

Mixed methodology

At the initial stage of conceptualising the topic of inquiry established for this thesis, i.e. the water commons dilemma, it was determined that documentary research focused on documents authored by actors from within the epistemic community who were shaping the global debate around access to water would be an appropriate data corpus. Employing a critical discourse analysis to the interpretation of discursive representations of the water commons, it would seem, would follow suit. The problem of what to do with this data and how to explain the competing conceptions of the water commons occasioned the adoption of critical realism to bridge the gap between discursive representations and material reality.

Documentary analysis

Blaikie (2003, p. 15) notes that data is “simply regarded as something we collect and analyze in order to arrive at research conclusions.” Though documentary analysis is widely used as a qualitative research method, surprisingly little literature exists that comprehensively details the methods behind its successful application (Abbott et al., 2004). Reviewing the research on the documentary method in relation to more common methods (i.e. interviews, surveys etc.), Atkinson and Coffey (1997, p. 47) argue that “documentary materials should be considered data in their own right.” Or, as Prior (2003, p. x) suggests, a document “can be considered as a site or field of research in itself.” The strength of qualitative research, is its preoccupation with social processes and relations and therefore its propensity to look past the “causal relationship between variables” (Denzin and Lincoln, 2003, p. 13) (i.e. surpassing a positivist analysis to make sense of the empirical). Atkinson and Coffey (1997, p. 47) articulate this aim of qualitative research in relation to documentary materials, noting,

They [documentary materials] often enshrine a distinctly documentary version of social reality. They have their own conventions that inform their production and circulation. They are associated with distinct social occasions and organized activities. This does not mean that there is a documentary level of reality that is divorced from other levels such as the interactional order. Documents are used and exchanged as part of social interaction ...

Viewed through this lens, the documentary method fits neatly with a materialist understanding that there is a real world out there that is independent of our perceptions of it. In other words, regardless of our perceptions about what does or does not constitute the water commons, individuals, families and communities either meet their water needs or they do not, for

water is real as is our need for it and so are the consequences of access or exclusion (this point to be elaborated further in the discussion of critical realism to follow). For now, documentary analysis is compatible with the aim to uncover broader social processes, structures, forces and factors manifested in the real unequal material conditions that define water injustice.

The data corpus for this research is made up of UN water policy documents. The UN was chosen on the basis of their recognised status as the leading authoritative global governing institution working in the field of human development. Because of their work in the political, economic, social and environmental spheres of human development, for the purposes of this thesis, UN water policy represents an arena where neoliberal and socio-ecological representations of the water commons are in contest. All documents were obtained from the official UN website. The internet has revolutionized communication between organisations and the general public and, in particular, made it easier for organizations to disseminate organizational information (e.g. policy documents, financial reports etc.) to a broader public. This, in turn, has opened up new avenues for social research and, as such, research techniques have evolved as a result. This is the case for documentary analysis, as its use as a research technique has significantly increased over the last few decades (McCulloch, 2006), in part because of the arrival of the internet. Public access to organizational material via the World Wide Web has become the norm for governments, state agencies, corporations, and non-governmental organizations alike.

As one of the aims of this thesis is to record and interpret conceptions of the water commons contained in the UN's water policy, and how this has contributed to wider policy debate and struggle over the water commons, the main source of data, then, is publicly available documents. Though some sources include more informal material consisting of organisational information found on website pages, including internal briefings, news items and speeches, the bulk

of documents selected for investigation were those that represent significant water policy moments spanning forty years of UN water policy, dating back to UN's first major contribution on global water policy (widely agreed to be 1977 Mar Del Plata Conference Report). Such documents constitute more formal organizational publications such as journals, annual reports, policy statements, mandates, constitutions, agreements, declarations, conventions and treaties. In order to retrieve relevant documents preliminary research was conducted to identify the historically significant UN water policy landmarks. Of and with these, key word searches of entire relevant documents (4,683 pages across 31 documents) that represented these policy landmarks were conducted that considered specific text (e.g. commons/water commons) but also patterns of expression, metaphors and/or propositions gleaned as the main re-occurring themes across all documents considered (e.g. tragedy of the commons/water scarcity etc.). As will be shown, these patterns of expression, metaphors and/or propositions were the main thematic generating categories utilized in the interpretation of water commons discourse. The policy implications of these largely ideological positions represent the divergent material interests wrapped up in the struggle over the right to water (as discussed in Chapter 3). These searches were conducted in two kinds of search engines on the World Wide Web: first, organizations' search engines, and second, the Google search engine. These searches largely returned similar results.

Interpretive thematic concepts and categories were established after an extensive literature review on the water commons (Chapter 2). Specific phrases and rhetorical devices that commonly characterise the commons were selected at this stage. These would be used to assess how each policy document would come to characterise the water commons specifically in relation to policy on WSS. These were further developed following an initial thorough reading and review of each selected UN water policy document. Recurrent patterns in the organization of text and key rhetorical devices

were considered during the initial reading a review of these policy documents. These same search categories (text and expression) were utilized for in-document searches by way of an evaluation sheet, referred to as a data extraction sheet. This data extraction sheet was developed over the course of the initial review of each document (extracted from main themes, headings, conclusions) and followed main policy developments across the 40 year timeframe. Several questions were considered when developing the data extraction sheet. What kind of rhetoric did the document use with respect to WSS? Was the rhetorical language with respect to the water commons contradictory to the specific policy prescriptions for WSS? What are the ideological underpinnings of the stated policy objectives? It took several iterations before a comprehensive data extraction sheet would be finalized as some text and expression proved irrelevant across documents while other documents revealed text and expressions pertinent to future policy development (e.g. deregulation, community ownership etc.). The data extraction sheet guided the investigation of each document. This sheet provided “a clear means of capturing [data] in a systematic way...” (Abbott et al., 2004, p. 261) in terms of what information may or may not be derived from any given document or set of documents. These concepts and categories contained on the data extraction sheet act as triggers for data analysis and also serve to order the research in a systematic fashion.

Two questions were coupled together and taken into consideration in data evaluation. First, what are the means by which these categories are established, as just mentioned, and what can be derived from selected documents? These are questions not only driven by research objectives but also epistemological and ontological beliefs and considerations (Abbott et al., 2004).

Abbott et al. (2004) suggest seven reasons why documentary analyses are useful for comparative policy study, and these are tailored to the key concerns of this thesis. First, in a situation where the policy or proposed policy is relatively new or untested, documents may be the only source

for said policy and therefore a documentary analysis may be the only means by which a researcher may locate information. Second, policy documents are widely published, thus readily available and typically free. Third, comparing policy by way of documents is often an efficient way of studying policy trajectory, which is the case here in the investigation of UN water policy. Fourth, ethical issues are not as pressing as they are when research involves human subjects. This is not to say that they are non-existent, but rather, as Abbott et al. (2004, p.260) note, “there are few, if any, issues of privacy, anonymity and confidentiality to be negotiated, since these documents themselves identify the organisations responsible for them, and in any case are often in the public domain.”

Furthermore, the risk of researchers ‘speaking for subjects’ is mitigated because data collected consists of that which has been published or at least physically documented in written form. As such, though interpretation is foremost concern in adequately and fairly representing the document, the availability of the data published by the institutions and organisations in question should ensure a fair and comprehensive reporting of what is taken from any given document. If there are any misgivings, a published document allows for return visits to the source text and therefore further review by the researcher may clear up any confusion. Fifth, because documents are produced most often without knowledge of any research projects that may subsequently use them, the content is not influenced by researcher effects. This is a common problem for interviews or surveys where line of questioning or even the presence of a researcher can influence research participant responses, which, effectively, is the data upon which the research project rests. Sixth, “documents may provide supplementary data that can be used to contextualise or clarify other methods of data collection...” (2004, p. 260). Though this is not the case in this thesis in terms of empirical data, some documents analyzed did provide meaningful ways in which to conceptually categorize data across the entire data set. Finally, documentary analysis may instigate and influence subsequent research and indeed this is the case for this thesis. What to do with the data, in other words, the question of how to

contextualise the data largely influenced the theoretical endeavours of this thesis (i.e. adopting a critical realist philosophy to develop the interpretation of data as much as possible).

There are, of course, valid concerns pertaining to research accuracy that any researcher using this methodology must heed. Namely, there may be a significant difference between an organisation's stated objectives and its practice. What's more, these stated objectives may consist of limited information in terms of how organizational policy initiatives are implemented or operationalized and therefore these texts may even be "partial or superficial" or indeed "aspirational" (2004, p. 260). This concern is taken into consideration in this thesis as there are many apparent inconsistencies and contradictions between policy and practice revealed in the discussion surrounding the antagonisms of the commons and liberal notions of property. These perceived inconsistencies between policy and practice do, however, afford a rich seam for analysis and inform research findings that shed light on the tensions between the commons and the relations of production, as will be made evident in subsequent chapters. Even so, as Abbott et al. (2004, p. 261) suggest, these aspirational statements can be of great value to researchers and the public as they represent "deliberate and conscious statements of policies and strategies at particular points in time, and can at the very least be regarded as public avowals of commitment to certain objectives and even values." Likewise, rhetorical features of language and text offer potentially rich evaluative substance in terms of the ways in which they seek to capture the socio-cultural sensitivities of a particular issue and speak to the imaginations and gain attention of defined audiences (Atkinson and Coffey, 1997). Rhetoric, then, can represent an important subject matter for scientific inquiry. Rhetoric can, after all, create a "truth regime", which, as Dittmer (2009, n.p.) points out, may have the effect of rendering alternative perspectives "unnatural and flawed from the beginning." Indeed a text has meaning or shared understanding only insofar as it is grounded in social context. To instill

‘textuality’ or meaning is to unearth the socio-cultural (Rhiney, 2010) and indeed the political economy concerns which may be latent or explicit in text. Atkinson and Coffey (1997, p. 61) suggest, “Rhetoric is, fundamentally, about the how texts (spoken and written) *persuade* their readers and hearers.” It follows, then, even if deemed as aspirational or rhetorical, that discourse can have effects on audiences (in terms of understanding, belief and disbelief, political imagination, likelihood to act, etc.) and particularly so when articulated in official policy documents of intergovernmental organizations such as the UN (see also Abbott et al., 2004, p. 261).

The aim of collecting such data via the documentary method is threefold. First, to provide empirical evidence to the overall problematic – that is, the competing conceptions of the water commons. Second, to introduce the broader political economic, social and ecological policy implications of the discursive constructions of the commons. And third, to problematise the idea of the commons so as to provide insight to more useful ways of conceptualizing our relationship with water supply services. This data represents the discursive production of the water commons and it is operationalized by the material interests that struggle over the meaning of this idea. This is characterized by a struggle over rights to water and by adopting a political economy approach this thesis brings to bear an analysis of how property relations facilitate and determine access to WSS. To further unpack the data collected by way of documents this thesis uses a critical discourse analysis to explore the struggle in the construction of meaning with respect to the water commons.

Critical discourse analysis unpacked

As Kincheloe and McLaren (2003) point out, critical theory has led to an understanding that language is not a fixed thing or artefact but rather an “unstable social practice” whose meaning

fluctuates across socio-historical contexts, including struggles over domination and regulation.

Discourse analysis focuses on the content of texts and how social groups construct, understand and utilise language (Sarantakos, 2005). At the very beginnings of this thesis it was originally thought that such an approach would bring this project closer to a comprehensive understanding of the competing versions of the water commons that play out in policy deliberation and development.

In many instances, however, discourse analysis has proven insufficient in the examination of the political and economic dimensions of social and material reality. Though some point to discourse as evidence of wider political, economic and social programmes (Sarantakos, 2005), this methodological approach leaves outcomes of experiences, or simply the content of texts, open-ended so that much of what is experienced by individuals is not shared but relative to the individual social subject (i.e. interpretivism). In this regard, discourse analysis is usually limited to the appearance of social phenomena (texts) and how these come to affect how social subjects understand and utilise language. This, however, leads to claims of epistemological relativism assigned to individual social subjects and played out in their relation with other persons and the objects/things/goods and services with which they interact. In this way, without due attention, discourse analysis can be inattentive to the totality of the complex relations that make up various ideologies that promote the material interests involved in competing relations. Silverman (1997, p. 146) notes that discourse analysis:

Emphasizes the way versions of the world, of society, events and inner psychological worlds are produced in discourse. On the one hand, this leads to a concern with participants' constructions and how they are accomplished and undermined; and on the other, it leads to a recognition of the constructed and contingent nature of researchers' own versions of the world.

Discourse analysis may, therefore, have the unintended effect of taking us further away from a comprehensive and cohesive understanding of the complex power relations that play out in the struggle over the water commons. Following this consideration CDA is adopted here as a method to address any potential for epistemological relativism. Van Dijk defines the method (2001, p. 352) as follows,

Critical discourse analysis (CDA) is a type of discourse analytical research that primarily studies the way social power abuse, dominance, and inequality are enacted, reproduced, and resisted by text and talk in the social and political context. With such dissident research, critical discourse analysts take explicit position, and thus want to understand, expose, and ultimately resist social inequality.

This approach to CDA meshes nicely with critical realism. Both have, as a point of departure, an emancipatory quality rooted in social inequality (more to follow below on this in regards to critical realism). In an earlier piece Van Dijk (cited in Wodak & Meyer, 2001, p. 1) notes of CDA,

Instead of focusing on purely academic or theoretical problems, it starts from prevailing social problems, and thereby chooses the perspective of those who suffer most, and critically analyses those in power, those who are responsible, and those who have the means and the opportunity to solve such problems.

On this reading CDA's analytical focus is squarely on how some discursive representations are more dominant than others and how some frames of reference or worldviews are privileged over others (Philips and Hardy, 2002, p. 25). Indeed, critical discourse analysis can provide a lens by which we may assess how domination occurs in the construction of meaning, and it may even help to situate these socio-cultural constructions in wider societal structures of power; but this recognition is a

mere snap-shot in time and space embodied in the appearance of texts (symbolic expressions of these structures) but not the essence of unequal material relations. In this regard, our epistemological understanding of the water commons may be such that it is fair or even progressive; yet the ontological reality of real water inequality is unaddressed.

There are, to be sure, many differing schools and approaches under the CDA umbrella and each of these have specific aims in terms of an overall approach to the study of language. In her cautioning against treating CDA as a “unitary, homogeneous entity” Breeze (2011, p. 495) suggests a general consensus amongst CDA practitioners, that there exists two poles to the approach: “A more or less political concern with the workings of ideology and power in society; and a specific interest in the way language contributes to, perpetuates and reveals these workings.” On the one hand, what distinguishes CDA, then, from DA is its explicit interest in power, namely unequal power relations, hence its application here. On the other hand, what distinguishes the differing schools of CDA is the depths to which various CDA approaches move beyond the discursive constructions to uproot and explain sources of power. These can be further delineated by philosophical traditions. On the one hand, CDA approaches may be influenced by structuralism influenced mainly by Marxist and Neo-Marxist analyses and, most recently Gramscian analyses, where power and the ability to affect social change are anchored in systems of oppression that are deeply rooted in class relations but also many other forms of oppression (e.g. gender, race, age, sexual orientation etc.) and maintained and reproduced by persuasion and coercion by way of many systems, processes and institutions (e.g. hegemony). On the other hand CDA may be rooted in the post-structuralism of Foucault where power is contingent upon consciousness – relative to the intentions and reflections of individuals – which is in turn central to the production of discourses (Jonsson, 2012). Here we find the likes of constructivist or symbolic interactionist approaches to discursive matters. In other words, power is

fluid and adheres to the ultimate goal of relationality in social phenomenon whilst abstracted from broader political and economic processes and structures (Carroll, 2004). This thesis adheres to a structuralist approach to CDA and this is further reinforced by the critical realist approach and overall political economy perspective.

Ideology comprises frameworks of thought and reference that represent the interests of social groups in relation to their material conditions and contexts. In this way, though ideology may conceal power relations, many scholars insist ideology is an expression of real material relations or interests (Birchfield, 1999; Castree, 2005; Dinan & Miller, 2007; Goldman, 2007; Jonsson 2012; O'Boyle & McDonough, 2011; Perry, 2000; Sklair 2010; Tandon, 2009). In this manner there is an inextricable link between symbolic and material relations. This thesis will attempt to illustrate this point by excavating the connections between symbolic representations of the water commons and the real material conditions and consequences that underpin them. Accordingly, though the starting point of this thesis is discourse, namely the water commons, analysis is consistent with a critical realist philosophy that searches for an *essence* behind the *appearance* of a thing or social phenomenon. Within this thesis, *appearance* is represented by discourse (that being the competing conceptions of the water commons) but the *essence* is located in the a priori structures and processes that support a particular version of the water commons and thus supporting specific material interests at the expense of others, therefore making the competing conceptions possible in the first place. Having defined CDA and outlined how it is used and to what end within this thesis specifically, this chapter now turns to define critical realism and explain how it is used to complement CDA in an effort to reach an analysis of the previously mentioned a priori structures and processes.

Critical realism defined

As the International Encyclopedia of the Behavioural and Social Sciences defines it, “Critical realism is a philosophy of and for the social sciences ...” It has also been described as a metatheory⁹ (Frauley and Pearce, 2007). Though there are many different approaches to critical realism, in general, as a philosophy, it rejects positivism, empiricism and hermeneutics. Critical realism challenges the idea that we come to know the world only through our sensory powers and, also, that the world exists as according to the way we experience it through those senses and therefore our perceptions. It challenges these positivist, empiricist and hermeneutic approaches on the basis that all knowledge and understanding is mediated or the idea that human thought is guided by one or a combination of conceptual frameworks – patterns of thought, structure and action that are a prescriptive to historical practice. In terms of knowledge production and theory construction, positivism as a theoretical framework seeks to explain social reality in terms of the institutions which they justify. The closed nature of the positivist or empiricist research field – i.e. positivist-/empiricist based research focuses analysis on constant conjunctions of events (cause and effect) – there is a neglect or even denial of underlying structures (a broader social account of things perhaps in terms of inequality or class, or power etc.). This results in a reification of social phenomenon and encourages obscured rationalizing of the status quo. Furthermore, most critical realists argue that positivism cannot create secondary knowledge (i.e. exploration of root causes) – the creation of secondary knowledge being a pillar of critical realism – because of the closed nature of the research site. Clark and Lissel (2008) observe that many accounts that seek to address this concern fall victim to hermeneutic analysis where an understanding of reality is interpretative (i.e. interpretivism), based

⁹ Frauley and Pearce (2007, p.21) distinguishes critical realism, a metatheory, from substantive theory in that “Metatheory is speculative and not determined by empirical data. As metatheory, critical realism offers transcendental arguments that must be ‘translated’ into workable social science frameworks with specific regard to the object of investigation.”

on individual experience or interpretation – or in their own words (2008, p.67), “knowledge itself was relative to the perspective of the individual.” Critical realism’s contribution here is to foreground and problematise this condition. Applicable to our empirical observation – the water commons dilemma – Clark and Lissel (2008, p.67-68) insist, “As a consequence, arguments based on reason could not resolve competing claims to knowledge. It was not clear who or what could determine what was true and, indeed, whether the very notion of truth itself was legitimate.”

As a philosophy for social science, therefore, one applied to the analysis of the water commons dilemma, critical realism recognises that varied interpretations and knowledge of the world are mediated by conceptual frameworks. As Frauley and Pearce (2007, p.6) point out, “conceptual systems that we deploy have serious consequences for our styles of thought, ethical choices, political orientations, forms of social analyses and modes of generating and evaluating empirical evidence.” Goldman (2008, p. 8) addresses this epistemological question, stating,

We make our own environmental conditions, and our environments make us. The common myth that nature and culture are somehow distinct is false; our definitions, perceptions, and senses of the natural are so deeply mediated by our historically specific experiences that it is not meaningful to talk about nature in abstraction from social forces. All knowledge is contextual, and all knowledge producers are situated in ecological social experience.

However, that reality is mediated by conceptual frameworks does not necessarily mean that it is entirely ‘theory-laden’, or ‘determined by theories ...’ as Sayer (2001) notes. As a result of its understanding that reality is structured yet stratified, one of the strengths of critical realism is that it recognizes that discourses become dominant only insofar as they come into institutional alignment with the generative mechanisms and enduring structures that define unequal power relations. This

understanding helps to unpack the conceptual and ideological assumptions embedded within discourse. This uncovering of inconsistencies, contradictions and tensions enables the researcher to avoid relativist claims to knowledge and reality. As Sayer (2001) points out, it is also an implicit critique of some understandings of discourse which have a tendency to reduce ontological and epistemological differences to relativism. Critical realism does not, however, offer absolute truths by way of affiliating with particular discourses, at least in terms of cultural constructions, but rather serves as the philosophical ‘under-labourer’ to problematize those discourses that may assert or assume absolute or certain social truths.

Most critical realists offer an explanation of discourse that is dependent on conditions of contingency instead of an absolute truth that discourse may bring to an object or relation. In other words, and with respect to water as a commons, the idea that water is a commons is not an absolute truth, for either of the competing discourses analysed in this thesis. Rather it is the causal mechanisms and structures that may be activated that produce a specific set of social relations with water that enable and allow for one of the competing water commons discourses to play out and become actualized and therefore dominant (i.e. have social effects and consequences). Sayer (2001, p. 2982) argues, “Critical realism acknowledges that the methodology of social science must diverge from that of the natural sciences because human, social phenomena are intrinsically meaningful.”

In this way, the idea of the water commons can be understood and indeed unfold in different ways depending on the relations that support the contending uses in question. A fundamental point in a broader understanding of the struggle over the water commons is that the idea of the water commons does not preclude any social, institutional or administrative arrangement (a point addressed in the earlier discussion of the multivocal concept of the commons). Just as these

relations may or may not support our contending understandings of the water commons they may equally exclude or support alternative understandings.

Reflecting on the definition of critical realism and how this approach can be utilized as a philosophy *for* science, the following section outlines the main impetus for such a philosophy. This philosophical motivation, to address the epistemic fallacy (as outlined below) is very much consistent with the overall materialist perspective adopted for the thesis.

Epistemic fallacy

These ontological and epistemological problematics are located in what critical realism refers to as the epistemic fallacy. What is epistemic fallacy in critical realist terms? To simplify, epistemology is the realm of thinking whereas ontology is the realm of being (Alderson, 2013). These two concepts are categorically different and, as such, critical realism suggests that an epistemic fallacy occurs when these two concepts are collapsed into each other, as is often the case with many positivist, empiricist and hermeneutic research programs. This distortion, particularly as it relates to the proposed water commons dilemma is the main impetus or starting point for critical realism as a philosophy *for* science as it compels the researcher to peel back these two irreducible categories in order to properly set up not only a research question but also a hypotheses pertaining to a thing/object/phenomenon, such as the water commons dilemma here.

Bhaskar (1998) is adamant that epistemology is irreducible to ontology. Put another way, as Clark and Lissel (2008, p.68) point out, “human perceptions of the world (epistemology) could not be synonymous with the world’s objective state (ontology).” The idea of the water commons is not synonymous with the biophysical qualities and quantities of water nor the social and indeed material

relations that impact water's physical properties, as will be discussed below. As a variant of philosophical realism, critical realism is grounded in the idea that the 'world out there' happens independent of our thoughts, feelings or even knowledge of it. Critical realism compels us to separate our thoughts, feelings and perspectives (epistemology) from the actual material properties or the objective being of a physical thing or social structure (ontology). In this way critical realism resists the epistemic fallacy of collapsing things and structures into perceptions or individual interpretations. To commit to critical realism, in this regard, is to acknowledge that indeed our social world is concept dependent (discursive structures) but not concept exhaustive, as Bhaskar stresses (1998). Rather, discursive representations interact and are interdependent with and also contingent (not dependent) upon non-discursive social structures that are very real, albeit non-visible. Clark and Lissel (2008, p. 68-69) neatly summarize:

Although social structures and phenomena as a product of the existence of human beings (e.g. class, culture, or discrimination), these entities are seen to be as independent of individual human beings as physical entities. Structures also exist and exercise power irrespective of whether this is known or recognized by individual humans.

Clark and Lissel (2008) go on to make the argument that though human meaning and experience are important and can have an effect on both human behaviour and to a degree social structures, just as with social processes human meaning is ultimately fallible – these after all are derived from perspective. In this context, and particularly when examining competing claims to something, such as the water commons, "Judgements regarding the accuracy of these accounts should be made with recourse to other arguments or available data" (Clark and Lissel, 2008, p.69). Critical realism, like any other philosophy, is a perspective and just like other perspectives there are disagreements within the philosophy itself over the relative importance of structures, limits of

agency etc. This truth cannot be separated from social inquiry. The intention of this section, rather, is to set out the terms of inquiry and a rationale for adopting the critical realist perspective. As Benton (2001, p. 136) argues, “The linguistic devices and metaphors of the scientific discourse are often open to a multitude of readings and subsequent appropriations, but they are not *indifferently* open.” He points out (2001, p. 136) that it would be perilous to reduce scientific inquiry to the social-cultural context alone (i.e. nature is not a passive force); even so, it is this context that provides the “conditions and resources ... for the conduct of scientific work.” The objective of critical realism as Forsyth (2001) points out is two-fold. First to highlight the limited explanatory power of the natural sciences when analyzing biophysical processes; and second, to buttress these “partial insights” with an understanding of knowledge that reflects upon the material interests of actors that created it.

This chapter has explained how critical realism pushes CDA towards a structuralist approach where the analysis of data accounts for a priori structures and processes that factor into material outcomes. As such, this chapter shifts to discuss human agency in relation to such processes and structures.

The question of human agency and social structures: A critical realist perspective

What capacity do social actors have to actively engage with and affect change within the complex milieu of water’s relations? It is well established that within a market society analysis often focuses on the individual; therefore, research analyses and outcomes, adopting variants of liberal pluralism and rational choice theory, tend to focus on the experience of the atomized individual within society, neglecting the influence of structures upon human agency.

Such is the case for much of the techno-managerial based literature on water where propositions concerning sufficient levels of water are conceived and indeed contextualised in terms of granting and securing fixed amounts of water for individuals (Schmidt, 2012). For example, in July 2010 the UN General Assembly recognized the right of every individual to between 50 and 100 litres of water per day. Though in its appearance, this may not be at odds with appeals to a version of a human right to water that bear on an understanding of positive rights – i.e. individuals have an obligation to act in such a way as to facilitate relations whereby others are guaranteed their fixed limit of water; but also, this abstraction is politically and practically problematic and theoretically antagonistic to the prevailing property relations in capitalist societies that favour the use of negative rights for allocating resources (i.e. property relations as administrative arrangements constitute structures under critical realist theory). In other words, the abstraction of human rights and its appeals to equality for all belies the practice and celebration of the individual in society (a detailed discussion about the liberal origins of human rights in general and the human right to WSS specifically is developed below).

Furthermore, conceiving and contextualising amounts of water in relation to the atomized individual limits the investigation to an individual's empirical experience and subjective perceptions. It ignores the broader institutional and administrative arrangements (structures) that have an indelible impact on the way in which people interact with water thus meeting their water needs (access) or not as it may be the case (exclusion). Vlachou (2002, p. 197) distinguishes this uneasy relationship as, on the one hand, “transhistorical concepts of human nature and society, thus embracing idealism” and, on the other hand, “conceiving human beings, their needs and their actions as being constituted by the influences of the many natural and social processes that combine to create reality in historical time ...”. Indeed, in strong versions, actor-centric understandings tend

to ignore or downplay broader structures and if and when considered, they are often treated as isolated from individual rational choice, liberty and freedoms thus ignoring the impact structures do in fact have on action.

Actor-centric conceptions of water's relations also ignore the sociality or relationally constitutive quality of water itself (Linton, 2012; Linton and Budds, 2014). Critical realism rejects Kantian idealism where experiences observed from the constant conjunction of events, as Pearce points out (2007, p.7), "is always mediated through features characteristic of all individual minds and/or through concepts collectively produced by, and informing the perceptions and practices of, human groups." However important and varied an individual's experience with water may be (e.g. some walk several miles to fetch water from a community well whilst others walk mere feet to their kitchen sink) and however these experiences may shape perceptions and understandings of water (both in terms of biophysical processes but also water justice) such propositions fall short in addressing the ontological and intransitive realm of water's relations – i.e. all humans and living systems rely on water for survival. Equally, such propositions miss the theoretical variances that exist at the core of the ways in which the individual is understood and indeed practically and materially reproduced within the complex interplay of contextual societal forces and factors that make up and facilitate water's relations. Focusing on UN water policy within the proposed causal explanations that follow has this in mind.

Apeldoorn (2004, p. 145) explains, "the problem with talking about actors without referring to any structures is that the actors themselves – their emergence, their identities and interests – are left unexplained." In other words, on one level, actor-centric versions of the agency structure problematic obscure a researcher's ability to explore the ways in which an individual comes to know of him- or herself and the world around them, including water, that is, beyond sense perceptions

(empirical manifestations). On another level, actor-centric approaches to water that understate or ignore structures and obscure the relations of power that underscore those structures – i.e. the power that maintains and reproduces the status quo but also the possibility for individuals to understand their exploitation and oppression (i.e. gaining and retaining social consciousness and therefore being engaged and empowered within the political process) and collectively struggle over power in attempts to change existing structures and in turn unequal material conditions. As Apeldoorn (2007, p. 152) stresses, “There is ... no such thing as a pre-social actor; human agency is always embedded in pre-existing social relations that constitute that agent’s identity and interests.” Frauley and Pearce (2007, p. 5) explain, “Social structure is not simply the sum of human interaction, although the former is reproduced and transformed through human interactions but also through non-human interactions as well as interactions between human and non-human entities.” This is particularly pertinent to the question of water’s relations and the society-nature nexus as related to discursive constructions of the water commons. In other words, structures presuppose individuals as do structures presuppose our knowledge and/or discursive productions of knowledge.

This does not imply that structures are impenetrable or immutable, particularly from a critical realist point of view. Apeldoorn (2004, p.145) elaborates, “The notion that the existence of social structures is dependent upon their instantiation in human agency also implies the possibility of emancipatory practice.” This potential of critical realism – what is also referred to by critical realists as the transformational model of social change – partly explains the interest in this approach among critical scholars. Indeed the bedrock of the entire critical realist philosophical framework is based on questions of justice and emancipation.

This thesis holds the philosophical view that though the role of the individual in society is indeed consequential and individual experience dynamic and differentiated, social structures

presuppose individual experience and action. Positioning critical realism somewhere between atomistic individualism on the one hand and undifferentiated collectivism on the other, Bhaskar (2011, p. 3) claims, “the existence of society is a transcendently necessary condition for any intentional act at all.” He goes on to argue that individuals do not create society (which he refers to as “the error of voluntarism”) yet nor does society exist independently of individuals (the “error of reification”). Acting amongst a complex array of social forces and factors individuals are not empty vessels or passive agents but rather active agents in the reproduction and transformation of society. Bhaskar (2011, p.5) explains,

The relations into which people enter pre-exist the individuals who enter into them, and whose activity reproduces or transforms them; so they are themselves structures. And it is to these structures of social relations that realism directs our attention – both as the explanatory key to understanding social events and trends and as the focus of social activity aimed at the self-emancipation of the exploited and oppressed.

Thus, competing conceptions of the water commons need to be situated in the totality of social relations that comprise water’s relations (both biophysical and social processes), including the political economy of water. The critical realist transformational model acknowledges that individuals are active agents entering into relations that presuppose them; yet there are four possibilities that arise within this interaction that are the basis of the maintenance, reproduction and/or, contrarily, the change and/or transformation of society, as outlined by Bhaskar (2011, p. 4): “(a) unacknowledged conditions, (b) unintended consequences, (c) the exercise of tacit skills, and/or (d) unconscious motivation.” In one of these possibilities or potentialities, or in any combination of them, individuals collectively maintain and reproduce or challenge and transform structures in accordance with their material interests or cognitive worldview, be that intentional or not. This is

what is known in critical realist terms as emergence. What lurks behind these potentialities, however, is a complex set of generative mechanisms and causal structures that are at the root of our investigation. These social processes relate to water's relations and are rooted in highly unequal capitalist social relations and are defined by asymmetries of power.

One of the tasks of critical realism, then, according to Lopez and Potter (2005) is to make the connection between these discursive and non-discursive structures. In doing so, "the political implications are clear, one should not only attempt to change the existing narratives (discursive structures), but also the non-discursive structures with which these narratives co-exist" (Lopez and Potter, 2005, p.20). Within the ontological realm critical realism postulates that reality is a non-visible process that is highly complex and stratified (i.e. varying levels of reality) with varying degrees and/or possibilities of emergence (i.e. the potentiality for action of some sort), which is historically contingent (Castree et al., 2013). Critical realism, then, as a philosophy for science, seeks to excavate transfactual causality – where observable effects are products of unobservable entities. Bhaskar (2005, p. 30) reflects on the central importance of the idea of emergence, pointing out,

People are organisms, but they are organisms with emergent powers. In the same way, societies can be understood relationally as emergent products of human behaviour. This is subject to ... [a] condition ...: they always pre-exist human behaviour.

Unlike empiricist, positivist or hermeneutic research, critical realism emphasises the social context of research phenomenon. Because the social scientific research field is an open one, according to a critical realist philosophy, there is always the potential for action of some kind (i.e. emergence) – there is always a potential for a certain outcome, in one way or another, so long as the contingent forces and factors are present and activated (or acted upon). Equally, there is also the

possibility for inaction, even if all of the contingent forces are in place. This speaks to critical realism's efforts to address a reductionist ontology and to offer up an ontology of emergence and stratification in an open research field. Critical realism addresses underlying structures that produce certain events (i.e. things, phenomenon), and in doing so seeks to explain knowledge or theoretical production in terms of the institutions which they seek to justify. In the context of the water commons, critical realism compels the researcher to delve into a broader political economy of water in order to parse the competing claims to the water commons as well as to account for the institutions and administration arrangements with which these accounts seek to justify.

As humans we are social beings and have intentionality and because of this there are choices to be made in terms of action or inaction. This also means that we have agency. However, it is also because of this sociality that we are fallible, but also constrained by broader processes and structures. We are fallible because objective truths are always being contested. The search for truth makes up much of what we do at universities the world over – in research projects that seek explanations to empirically observed phenomenon. We are constricted and constrained on two levels. First, we are physically limited. For example, we cannot survive without water. Second, we are also constricted and constrained by broader structures, be they historical, political, economic, and cultural. For example, what we know about WSS today (both in terms of engineering aspects but also in terms of health impacts) is vastly different than what was known in the 1920s for instance. Knowledge in this sense is time-bound. We are also influenced by political frameworks and institutions and by economic systems; and, within these, priorities, systems and programs. We are also constricted and constrained culturally in the sense that cultural frameworks have a grip on the way in which we see the world and our place within it (i.e. worldview). For example, water plays much more of a

spiritual role to some cultures than others; whereas for some water is a mere input within larger production and reproduction processes.

These questions of intentionality and agency play out for the researcher as well. Critical realism accounts for these queries and situates the researcher as an influential actor. As such, clearly stating positionality is of critical importance and this chapter turns to address this issue.

Positionality

The purpose of the research is to provide radical, comprehensive and robust analysis of the water commons dilemma – that being competing conceptions of the water commons. Carroll (2004) defines radical etymology as grasping the essence of systemic challenges. To imbue a political economy approach focused on class with a critical realist philosophy of scientific inquiry is to seek to uncover a deeper understanding of the reasons that diametrically opposed material interests stake claim to the so-called water commons and how this can be possible in the first place.

Carroll (2004, p. 2) discusses the impetus for radical research projects pertaining to multiple forms of domination in modern society, addressing the concurrent positionality of the researcher. Of these forms of domination two in particular relate to this thesis' consideration of the water commons dilemma, namely, “the declining quality of social services and the shrinking space for democratic discussion as corporate agendas come to displace (or impersonate) the public good ...” and “ecological degradation that stems from the priority given to short-term private profits over the health of the earth.” It is these two concerns articulated by Carroll that are, indeed, a motivating force for this research. Sánchez (2010, pp. 2258-59) notes, “value-free research, if not impossible, is at least nearly impossible to obtain.” Critical realism necessarily infuses moral questions into its

analysis (we must, we have to). It doesn't necessarily impose morality but rather recognizes that questions of morality are at the foundation of all social relationships. Similarly, critical realism starts from a critical evaluation of capitalism and its attendant social relations. It is a philosophy that is primarily concerned with ontology and therefore, as Frauley and Pearce note (2007, pp. 17-18), "it begins from questions about what exists (e.g., the conditions under which social objects such as 'security' or 'racism' emerge). It then moves to questions of epistemology, concerned with the production of knowledge about what exists ...". Collier focuses on the emancipatory qualities of the critical realist approach. He argues that in excavating the essence of social phenomenon by uncovering the underlying structures and the inconsistencies and contradictions and ideologies these produce, there is the potentiality of challenging the very institutions that produce and in turn are propped up by such worldviews. Critical realism affirms that capitalism is fraught with crisis, class conflict and contradictions; yet capitalism continually regenerates itself, albeit entrenching inequality along the way. By way of a critical realist approach this thesis provides a series of causal explanations within the framework of the political economy of water to explore these contradictions and inconsistencies in an effort to contest the institutions and structures which they seek to rationalize and legitimize.

Yet how do we get from the empirical or social phenomena – competing conceptions of the water commons – to the essence of the struggle over the right to water? Critical realism provides a guide and the following two tables below illustrate this ontological pursuit. The first table represents Bhaskar's (1978) three domains of reality and documents the stratified nature of knowledge. The second table defines these domains in relation to the political economy of the water commons.

Stratified domains of reality

Critical realism contends that reality is stratified (Bhaskar, 2008) and in this context research and theoretical production should take this stratification into consideration, utilizing three domains of reality: the Empirical, Actual and Real. Our methodological premise connects the *intransitive* realm of knowledge with respect to water – that which is more independent of mind and society – to the *transitive* realm where knowledge is forever changing and always in transition within these three domains – the idea of the water commons. Transitive reality, for purposes here, is based on the struggle over material conditions associated with water's relations which are activated or actualized by broader mechanisms and structures located in the Domain of the Real. Therefore, epistemological inquiry, located at the domain of the Empirical and Actual, where inquiry explores claims of relativity to the water commons congruent with subjective interpretations expressed through experience and in the production of knowledge, is subordinated to ontological inquiry. In a realist stratified ontology structures and causal mechanisms and the power relations therein interact to produce divergent water realities for individuals, groups and ecosystems throughout the world and therefore the possibility of competing conceptions of the water commons (Fleetwood, 2002).

In critical realist terms, the *domain of the empirical* is what is experienced by way of the so-called water commons. This includes various interpretations of the commons by way of texts of an aspirational character of one kind or another (e.g. NGO or international governing organization) or on films and print that depict the commons being degraded or honoured and extended (Alderson, 2012). For critical realists, the empirical is also the realm of the transitive nature of the knowledge concerning water: knowledge is contentious, it is always changing or in transition and in this regard, there is a relativity to knowledge. An important tenet of critical realism, however, is that knowledge is fallible. Knowledge is relative to one's own belief systems, perspective and values, however, these

are often derivative of or contingent on corresponding material interests, an issue that will be revisited below (addressed by taking up a political economy approach here). As Clark and Lissel (2008, p. 70) point out, “Dimensions of the empirical domain should never be taken to be synonymous with those in the actual or the real domain” (see table below). So critical realism compels this research project to delve beyond the appearance of the water commons dilemma to ask further questions and seek deeper meaning. Addressing the proper subject of scientific research Bhaskar (1998, p. xii) argues,

The Western philosophical tradition has mistakenly and anthropocentrically reduced the question of what is to the question of what we can know. This is the 'epistemic fallacy' ... epitomized by concepts like the 'empirical world'. Science is a social product, but the mechanisms it identifies operate prior to and independently of their discovery (existential intransitivity).

Critical realists, then, are compelled to look behind the empirical or the constant conjunctions of events that take place within closed or controlled systems.

All of the events and actions that happen in society with respect to water, those that are likely to be observed happen in the *domain of the actual*. Events in critical realist terms refers to actual outcomes, including experiences in the domain of the empirical (a subset of the actual). Some of these include, but are not limited to: actual water scarcity (separate from ideological claims of a water crisis described below), or decreasing absolute quantity of freshwater on the planet; poor or inadequate WSS, including lack of clean and safe drinking water and sanitation; the daily water routines of billions of people across the world (in poor countries, most notably of course, the burden of responsibility for fulfilling water needs typically falling on women); poor hygiene, disease

and other such water related physical and mental health issues; water pollution; water abuse (conscious or not); water need, or use of water for mere survival purposes; and water greed (which too can be unconscious or not and entails using water in what could be deemed unproductive or increasingly private ways in a water scarce world, such as watering gardens and golf courses, washing cars and filling private swimming pools, or water that supplies water parks, etc.). These are some of the issues that draw people to the issue of water inequality. In critical realist terms, these issues comprise the *Domain of the Actual* – these are all of the ‘surprise events’ that happen as a result of how society produces, maintains and reproduces its water wants and water needs. These issues lead to wider discussions and debates in society surrounding issues of water governance, ownership and rights (i.e. both the human right to water and property rights pertaining to water) and these entail a struggle over water between divergent and often competing interests.

Pearce (2007. p. 32) points out, “what has been produced as the actual also fails to exhaust the totality of phenomena because it does not account for the structure of things, including their structures and mechanisms, which have the power to generate events.” Thus it is necessary to explore the *domain of the real*. Critical realism compels the researcher to move past positivism, empiricism and hermeneutics to ground research in this domain (or back to the source or root causes as it may alternatively be articulated).

Domains of the Reality (from Bhaskar's A Realist Theory of Science)

	Domain of the Real	Domain of the Actual	Domain of the Empirical
Structures/Mechanisms	●		
Events	●	●	
Experiences	●	●	●

Domain of the Reality as it relates to the Political Economy of the Water Commons

	Domain of the Real (subset of Actual)	Domain of the Actual (subset of Empirical)	Domain of the Empirical
<i>Definition of each category</i>	Independent of mind and society and therefore “intransitive”. These are the “enduring structures” and “generative mechanisms” that produce events and experiences. Not dependent on the actions or even existence of humans.	Events that are produced as a result of the enduring structures and generative mechanisms of the Real (these are the effects of the Real). This is where the effects of power are experienced and realised. We may or may not be able to observe the Actual but it exists independently of mind or society.	What is observed or experienced.
Enduring Structures and Generative Mechanisms (existing in a relational field)	Broader societal institutions, forces and factors – social, political, economic and historical but also water's objective relations (this includes all the biophysical processes in which water gives life or takes it away)		
Events	Water inequality; poor and inadequate water supply systems; water scarcity; water abuse and overuse; water pollution; poor hygiene; water related illnesses	Water inequality; poor and inadequate water supply systems; water scarcity; water abuse and overuse; water pollution; poor hygiene; water related illnesses	
Experiences	The competing conceptions of the water commons	The competing conceptions of the water commons	The competing conceptions of the water commons

Note: The various Domains of Reality should be read as various levels of ontological stratification concerning the way in which we come to experience and know things (Real being fullest level).

In order to understand how events unfold or not and in order to arrive at a comprehensive understanding of social phenomena, critical realism requires us to take into account the *domain of the real* where a plurality of enduring structures and generative mechanisms exist. These structures and generative mechanisms comprise both biophysical processes and social structures (institutions, arrangements, societal forces and factors) that have an indelible impact on water relations. As Pearce (2007, p. 32) notes, “the real here includes intransitive things and their potentiality ...” In terms of biophysical processes water’s relations are intransitive in the sense that water gives life to all living things that have access to water; those things that have different water relations, such as not having access to water cannot sustain life. Water’s relations will play out as they may, but these are impacted by social structures (institutions) and processes (forces and factors). For example, it is increasingly common that transferable property rights are applied to water in many different forms. In this case the market represents the generative mechanism that produces outcomes and experiences (those found within the domains of the actual and empirical). This is but one example and there are a whole host of structures which will make up our causal explanations used later in this thesis. The question becomes, how the researcher to moves beyond the domain of the Empirical and Actual. Critical realism relies on second ordered argument, an alternate transcendentalism to steer this effort.

Transcendental reasoning: A second ordered argument

This research appeals to a second order position, that being the historical materialist approach to human development which foregrounds the struggle over water in the struggle over the right to water. Historical materialism surpasses empirical representations of and subjective

sensibilities to water in the sense that, as Marx noted (1978, p. 4), “It is not the consciousness of men that determines their existence, but their social existence that determines their consciousness.” Discussing the complementary philosophical approaches in terms of addressing power, Adeldoorn (2007, pp. 154-155) notes,

... seen from a critical realist perspective, a historical materialist focus on social relations in capitalism sheds light on the important question of how and why it is that some groups in society have more power to reproduce or transform social structures to their perceived advantage than others. Capitalist social relations are relations of domination bound up with an unequal distribution of material capabilities resulting from an unequal control over the means of production.

Classical historical materialism posits that all social relations revolve around and flow from the economic sphere of life (Ayers, 2011). In this sense, critical realism encourages the researcher to address social phenomena with this understanding and historical materialism provides an alternate transcendentalism, a second ordered argument, to delve into what Britton (2007), following an extensive analysis through a critical realist lens, refers to as capital’s unique ontology (Britton, 2007). Just as Adeldoorn (2004) applies the complementary dynamic between critical realism and historical materialism to reassert class agency in the context of transnational economic structures, similarly here, using Bhaskar’s domains of reality, the Empirical, Actual and Real (to be discussed below), this dissertation bridges the gaps between these three.

Abductive Logic

Using transcendental reasoning, critical realism asks questions as to how causal mechanisms, though not observable but “causally efficacious”, as Willmott (2002, p.8) points out, can be contributing structural drivers of a particular social reality. Thus, in the case of this thesis, taking into consideration its materialist ontological roots, critical realism assists in making “claims as to the necessary conditions that make (the social world) a possible object of knowledge” (Willmott as cited in Vorster, 2010). In this way, and borrowing from Vorster (2010), this thesis asks the transcendental question, “How must things be for X to be possible?” X being the competing conceptions of the water commons. As Willmott (2010, p. 17) explains, “critical realist research aims to explain why things are the way they are through an explication of the generative causal mechanisms of events in the world.” According to critical realist logic it follows that we are able to construct certain inferences towards the observed social phenomenon that help in conceptually organising and critically assessing the competing conceptions of the water commons and then checking them against the domain of the Real, the intransitive dimension of water (i.e. the reality of being, or in this case the reality of water’s relations that are wrapped up in and impacted by society’s enduring structures and generative mechanisms).

This thesis presents a series of causal explanations to organize the various causal forces and enduring structures at the root of the competing conceptions of the water commons. The purpose is to address how these serve as generative mechanisms in producing, maintaining and reproducing a particular water reality and how this outcome ultimately has an effect on water’s (Real) relations. In the context of developing a series of causal explanations this next section asks how must the political and economic climate be for X to be possible? That is to say, how can the competing conceptions of the water commons be possible? Y here represents plausible hypotheses as to how X can be a matter

of course. Y is represented by a series of causal explanations that seek to develop an inference to the best possible explanation of the X or the competing conceptions of the water commons.

The rationale for the critical realist model as operationalised by the proposed causal explanations is this: critical realism is not meant to offer a general law of the water commons. In fact, in terms of our causal explanations and the neoliberal example of UN water policy specifically, the documented and proposed neoliberal reforms may not necessarily result in the whole-sale transfer of control and ownership of water services over to the private sector, they may not even result in any private sector involvement in any form whatsoever. What it does, instead, is offer up an analysis of the enduring structures and generative mechanisms that make a particular version of the water commons possible at all. By identifying enduring structures and generative mechanisms, what these causal explanations do is develop an inference to the best possible explanation as to how the neoliberal version of the water commons is increasingly being realised and how the neoliberalisation of the water commons may continue, albeit continually contested. It follows that critical realism has (indeed begins with) a critique of these oppressive structures as they are both operationalised by unequal property relations and produce, maintain and reproduce water inequality, as argued in the political economy chapter. In this way, critical realism allows if not insists the researcher makes normative claims about these structures. This will be revisited in the conclusion of the thesis.

Conclusion

This chapter outlines the main methodological considerations for studying the water commons. Explaining the mixed methodology approach (i.e. documentary and critical discourse analysis) this chapter also discusses the critical realist perspective as it relates to questions of human

agency and social structures. In doing so, a materialist-critical realist approach is adopted so as to push the analysis past that of language games and to anchor the examination of the data presented in future chapters in a political economy perspective that explores how property relations determine and facilitate access to WSS.

Albritton (2007, p.180) argues, “all science depends on the existence of objective structures and their accompanying causal power and that the aim of science is to gain as much reliable knowledge of these structures as possible.” It is by way of the set of causal explanations developed over the following chapters that this aim is pursued. Through these devices the contextual forces, those contingent upon enduring structures and causal mechanisms, are considered, but in relation to the transitive dimension of knowledge that give rise to and create the conditions for competing conceptions in the first place.

Chapter 5: Causal Explanation One – Neoliberal Appeals to global water scarcity

This chapter presents the first of four causal explanations that set out to frame the data collected within a specific ‘institutional alignment’ (Lobina, 2016) that broadly supports the neoliberal frame of reference that characterizes UN water policy. The causal explanation will be presented in relation to an “inference to the best possible explanation” as to how water scarcity is used by the UN as a rhetorical device to rationalise neoliberal political and economic policy prescriptions in the water sector. This chapter will specifically track the historically sustained tragedy of the commons metaphor in UN water policy and argue that this metaphor does much more to rationalise the subjugation of water to market forces than it does to address the highly variegated property relations that govern social relations with water. Commercialisation and privatisation are policies seen as ameliorating mechanisms to the so called tragedy of the commons dilemma yet, as has been evidenced the world over, these policies often fail (Lobina, 2016; Swyngedouw, 2013). Though this causal explanation represents the discursive foundation, or the Empirical in the critical realist approach, such institutional alignment leads to far reaching policy changes that shape water’s relations, located in the domain of the Real.

Inference to the best possible explanation

Whereas socio-ecological versions of the water commons appeal to unequal power relations in the social, political and economic realm, when considering water scarcity, and connect these spheres to a more encompassing hydro-social cycle (Swyngedouw, 2013, Linton, 2010), neoliberal versions appeal to global water scarcity so as to rationalize a specific set of technical, economic, managerial and governance policies and practices that favour a retail-oriented approach to allocating water amongst competing claims.

How must the political and economic climate be for scarcity to be the main proposition upon which policy formation is based? In critical realist terms, there is an intransitive realm to water scarcity: water scarcity is indeed a real phenomenon, most recently and often related to climate change but also overuse and pollution. It is real in the sense that the absolute volume of freshwater on earth is decreasing as a result of a number of different factors. But there is also a transitive realm, which is that scarcity is used to justify and rationalise particular political responses on the basis that something needs done about water scarcity now and for the betterment as well as reproduction of humanity as a whole. What is to be done is what is at stake in the intransitive realm. How must the political and economic climate be for market mechanisms to dominate policy formation in terms of the allocation of water for water scarcity to be a possibility?

The 1977 UN Conference on Water in Mar del Plata was a most significant meeting in the UN's water governance trajectory. Though the main issues addressed during conference were the assessment of water resources, water use and efficiency, the conference was a landmark meeting for UN water governance in three respects. First, it had been "the only major and substantial water meeting at a high political level ever held in human history ..." (Biswas, 2004, p. 82). Over 116

governments participated as well as 21 UN organizations and inter-agencies and over 80 inter- and non-governmental organisations. Beyond the scale and participation of the conference, water scholar Asit K. Biswas (1998, p. 148) notes, it was the “first ever of its kind” to call attention to the global issue of water resources management. Second, Mar del Plata represented a fundamental shift in thinking regarding water policy, presupposed by the basic principle agreed at the conference (p. 66): “All peoples, whatever their stage of development and their social and economic conditions, have the right to have access to drinking water in quantities and of a quality equal to their basic needs.” This shift then is defined by the adoption of a rights-based approach to water, even though at this stage, there were no legally binding mechanisms to hold state parties to account for the water rights of their respective citizens. The third significant aspect has much to do with the mandate of the conference in terms of assessing the state of the world’s water resources. Indeed, as Schmidt notes (2012) there was a marked shift in thinking regarding water resources and allocation and this was guided by the idea that in order to meet basic needs of every individual on the planet there needed to be a fundamental reframing of governance issues based around growing water scarcity; that water is not an unlimited resource and that water management should reflect this premise. This proposition would come to dominate UN policy on water and its proposed governance frameworks. Then Secretary General, Yahia Abdel Mageed (as cited in Biswas, 2004, p. 82) stated:

It is hoped that the Water Conference would mark the beginning of a new era in the history of water development in the world and that it would engender a new spirit of dedication to the betterment of all peoples; a new sense of awareness of the urgency and importance of water problems; a new climate for better appreciation of these problems; higher levels of flow of funds through the channels of international assistance to the course of development;

and, in general, a firmer commitment on the parts of all concerned to establish a real breakthrough so that our planet will be a better place to live in.

This shift in policy materialized in the Mar del Plata Action Plan (MPAP). One of the main contributions of this plan was to declare the period between 1981 and 1990 the International Water Supply and Sanitation Decade (the first of two water decades to come). The goal was to “Provide every person with access to water of safe quality and adequate quantity, along with basic sanitary facilities, by 1990” (World Water Council, n.d., para. 2). But the greatest significance of this plan was the embrace of the economics of scarcity.

Scarcity in this context is an essential proposition to the application of free market economics to the governance of water. To be sure, scarcity is a relative concept. The economics of scarcity measures not the absolute physical quantity of a resource but rather its use and demand (i.e. human impact). The economics of scarcity, then, does not necessarily take into consideration the human impacts on water scarcity including the unsustainable uses of a resource. The economics of scarcity is explained in WWDR3 (UNESCO, 2009, p. 167), “Accessibility is also affected by political preferences and unequal distribution of wealth and technological resources, which can prevent the delivery of water even when its physical presence is confirmed (the concept of economic water scarcity).” In this sense, as Villiers (2001, p. 58) points out, “the human need for water depends on definitions. The crisis, real though it is, is to some degree a management problem, a matter of allocation and distribution, and not just a pure problem of supply.” Similarly, Bouguerra (2006, p. 51) cautions against alarmist appeals on the basis that such claims can lead to changes in social relations and material conditions. He notes,

We must keep a cool head, for scarcity is a social relation to things, not one of their intrinsic qualities, but we should also note that capitalism can function only on the basis of scarcity. We therefore need to be very cautious when speaking of a water crisis, and always try to discover who stands to gain from crisis.

Theoretical assessments aside, the economics of scarcity underpinned governance measures adopted in and after the MPAP by the UN. This messaging on scarcity, however, reached even beyond neoliberal global governing institutions to progressive organisations, political parties and individuals resisting the commercialisation of water. In fact, as a rhetorical device, scarcity has subsequently dictated much the communication strategies of these resistance campaigns (e.g. Blue Gold, Planet in Peril, Global Water Crisis etc.). The danger of this inculcation and the subsequent institutionalization of scarcity is not the issue of whether or not water scarcity is real, as we know that it is in real terms, but rather that the economics of scarcity create an unstable policy environment whereby socially produced crises (i.e. not considering the root of the problem of scarcity in terms of changing behavioural patterns as it relates to human use of water and water supply services) create conditions that legitimize what could otherwise be understood as the rationale for coercive neoliberal shotgun policy solutions based in fear rather than the practical re-allocating of abundant, or misused and abused water.

In the succeeding years, however, the MPAP began to run out of steam and water policy at the UN was characterised by conflicting disparate inter-agency groups dealing with the issue. Following little progress over the course of the (first) Decade for Water, water governance and management would not return to the forefront of the UN agenda until 1990 at the Global Consultation on Safe Water and Sanitation for the 1990s, in New Delhi. It was here where the global water crisis was framed as an emerging crisis by drivers such as population growth, aging

infrastructure, gender inequality, employment and education but with an emphasis on water scarcity. In fact, the New Delhi Statement emphatically declared (UNGA, 1990, p. 2) in relation to water scarcity: “SOME FOR ALL RATHER THAN MORE FOR SOME” (original emphasis). The significance of the New Delhi Statement, however, is that it represents one of the more comprehensive attempts at water policy for its time, calling (UNGA, 1990, p. 2) for “new approaches” based on water scarcity, that would entail “profound institutional, economic and social changes ...” In this regard these recommendations (some to be drawn out in later causal explanations, including IWRM, institutional reform, decentralisation etc.) were some of the most far-reaching to date and had tremendous institutional impact on water policy development at the UN. Though the IWRM framework would be further solidified in the infamous Dublin Principles (below) it was emerging before that, and the New Delhi Statement is evidence of that cross-sectoral approach to water was deemed essential and so too was the consideration that water is not only an environmental and social good but also and economic good.

The idea of water scarcity would come to be the guiding presupposition that would frame UN water policy for the two decades to follow. In fact, for one of the most influential UN water policy documents to date, the Dublin Statement, the very first word of the preface of the document is instructive (UNEP, 1990, p. 3),

Scarcity and misuse of fresh water pose a serious and growing threat to sustainable development and protection of the environment. Human and welfare, food security, industrial development and the ecosystems on which they depend, are all at risk, unless water and land resources are managed more effectively in the present decade and beyond than they have been in the past.

As per the Dublin principles, scarcity would shift the logic of meeting the water needs of people to broader and competing development agendas. In fact, one of the most controversial propositions of the Dublin Statement, article 5 suggests (UNEP, 1990, p. 28), “water should be considered an economic good ...” (UNEP, 1990, p. 29) and that “as scarcity increases, water resources have a greater impact on the development planning.” Indeed the Statement moves to recommend (UNEP, 1990, p. 34) that “the scarcity value” of water be realized and that incentives should be introduced such as “demand management in the form of charging systems ...” Similarly to both the New Delhi Statement and Dublin Statement the 1992 United Nations Conference on Environment and Development, of which Agenda 21 was a result would call for IWRM (UNEP, 1992, p. 276) on the basis of incorporating global water scarcity concerns within a broader economic development agenda albeit under the umbrella of sustainable development. Article 18.3 of Agenda 21 (UNSD, 1992, n.p.) appeals to scarcity claims directly, noting,

The widespread scarcity, gradual destruction and aggravated pollution of freshwater resources in many world regions, along with the progressive encroachment of incompatible activities, demand integrated water resources planning and management.

Furthermore, Agenda 21 stresses the need for “water security” in this time of water scarcity and this would require capacity building measures which would include the “the enhancement of involvement of the private sector, where appropriate, in human resource development and provision of infrastructure” (more on Agenda 21 and the promotion of PSP in later causal explanations).

The voluminous World Water Development Reports are anchored in claims of water scarcity with frequent references in each report, namely: 44 mentions of water scarcity in the WWDR1, 72 in WWDR2, 73 in WWDR3 and 322 in the three volume WWDR4. The successive

WWDRs take up such logic and in doing so shift the trade-offs of development away from water resources alone to broader economic, environmental and social objectives. Accordingly, WWDR3 (UNESCO, 2009, p. 52) notes, “Although water allocation systems can be difficult to establish, managing competing water uses requires clear, widely accepted allocation rules, especially where water is scarce. Water allocation systems should balance equity and economic efficiency.

Environmental concerns also require equal attention, though they are often neglected in the process.” WWDR3 emphasises the potential impacts of water scarcity, especially in the context of the growing demands on water for increased energy consumption and agricultural products. In this context the UN argues that investment is necessary, yet, to date insufficient; however, they present this argument in such a way so as to make the regulatory, financing and even, in some cases management and governance shift to the private sector inevitable. Like many other global governing bodies or financial institutions the UN uses the global financial crisis as the backdrop for increased budgetary pressures on governments and therefore an implied or explicit reliance on private funds for investment in infrastructure services as well as a reliance on multilateral aid (UNESCO, 2009, p.17) – “an important source of financing for the next few years.”

The 2012 WWDR4 utilizes the idea of the global water scarcity crisis as the principal reason to radically reform water services. The report notes, (UNESCO, 2012, p. 282), “The economic value of water is particularly apparent in situations of water scarcity.” Not only is it the case that there is absolute water scarcity in the world (i.e. regions of the world that do not have a sufficient amount of freshwater to satisfy basic water needs), the report argues, but also there is a growing demand on scarce water resources due to both population growth and increased infrastructure development. WWDR4 contextualises many causal aspects of water scarcity, noting the bio-physical dimensions (absolute quantity and its deterioration due to pollution or overuse) but unlike earlier reports

emphasises the socio-cultural dimensions of scarcity too – noting “economic water scarcity” or the lack of access due to competition for scarce resources.

Competition for scarce resources undergirds the impetus for the economic imperatives the UN suggests should be considered in relation to water and wastewater services. WWDR4 notes, (UNESCO, 2012, p. 522),

Global change, socio-economic development, new demographics and climate change all increase competition for water. Societies face hard choices when allocating water between competing uses. Because water is a vital resource used in multiple sectors (including the environment), its allocation is inherently a political and social process – which opens it to the scrutiny of many and varied interested parties.

Although WWDR4 rationalises market means by way of the water scarcity proposition the report also recognises that scarcity may also be socially created or defined (UNESCO, p. 126, p. 753), a product of “social constructs” such as class, ethnicity, gender and/or culture. Furthermore, the report notes that economic scarcity disproportionately affects women, the young, the poor and marginalised families (e.g. caste system in India). Indeed, for WWDR4, water scarcity is the basis for radical reform; yet although WWDR4 recognizes the connection between scarcity and poor management it also suggests that poor management is a consequence or symptom of not adopting institutional reforms that promote market mechanisms including pricing.

In a discussion on the economy and security in the context of demand for water in developing countries WWDR4 notes that over 40% of countries could suffer from freshwater scarcity by 2020 (UNESCO, 2012). Indeed, as noted above, UN water policy increasingly

incorporates water with many broader development concerns. WWDR4 (UNESCO, 2012, p. 127) suggests,

Economic, social and political crises have been emerging at an accelerated rate. Although often described individually – the ‘food’ crisis, the ‘energy’ crisis, the ‘financial’ crisis, the ‘human health’ crisis, or the ‘climate change’ crisis, to name but a few – these crises are all inter-related through their causes and consequences.

Standing in marked contrast to most other UN water policy reports, the 2006 Human Development Report, *Beyond Scarcity: Power, Poverty and the Global Water Crisis* is perhaps the most progressive report to date in terms of defining water scarcity and contextualising water inequality not in terms of an absolute measure of specified amount of water (as is so often the case in UN water reports) but rather as a result of unequal relations. Within the report (UNDP, 2006, p. v) UNDP Administrator Keal Dervis comments,

The word crisis is sometimes overused in development. But when it comes to water, there is a growing recognition that the world faces a crisis that, left unchecked, will derail progress towards the Millennium Development Goals and hold back human development. For some, the global water crisis is about absolute shortages of physical supply. This Report rejects this view. It argues that the roots of the crisis in water can be traced to poverty, inequality and unequal power relationships, as well as flawed water management policies that exacerbate scarcity.

Dervis goes as far to acknowledge the political economy of rights and their unequal distribution (UNDP, 2006, p. vi), noting, “[A]s national competition for water intensifies, people with the weakest rights – small farmers and women among them – will see their entitlements to

water eroded by more powerful constituencies”. The report itself also suggests (UNDP, 2006, p. 2) that claims of water scarcity with a view to suggesting “a ‘gloomy arithmetic’ of shortage” are misguided, stating, “We reject this starting point. The availability of water is a concern for some countries. But the scarcity at the heart of the global water crisis is rooted in power, poverty and inequality, not in physical availability.” The report explains (UNDP, 2006, p. 3),

There is more than enough water in the world for domestic purposes, for agriculture and for industry. The problem is that some people— notably the poor—are systematically excluded from access by their poverty, by their limited legal rights or by public policies that limit access to the infrastructures that provide water for life and for livelihoods. In short, scarcity is manufactured through political processes and institutions that disadvantage the poor.

When it comes to clean water, the pattern in many countries is that the poor get less, pay more and bear the brunt of the human development costs associated with scarcity.

Yet, subsequent UN water reports are bereft of this nuanced political economy perspective and they conflate water scarcity with economic water scarcity so as to rationalise a particular development agenda. In other words, the problem of water scarcity it is argued here, is lack of water, not as is often suggested, a lack of financing. The logic that flows from the economic water scarcity argument is that an individual does not have access to water because they are poor; not, rather, that one does not have access to water because they don’t have access to water. The orthodox economic rationale then stands that more marketization, not less, is the ameliorating mechanism; when, in fact, this promotes a specific institutional alignment irrespective of the success of commercialisation and privatisation.

Scarcity claims and the spectre of tragedy of the commons

Many years before popularizing the tragedy of the commons metaphor with respect to water, the Mar Del Plata report (UN, 1977, p. 97) argued, “Because it had been considered to be abundant and renewable, and available free or at low cost, water had long been wasted ...” Similarly the 1987 Brundtland Commission report certainly expressed its sentiments raising the concern of free goods such as air and water and the need to capture or enclose such goods (WCED, 1987, n.p.). The report notes,

“... without agreed, equitable, and enforceable rules governing the rights and duties of states in respect of the global commons, the pressure of demands on finite resources will destroy their ecological integrity over time. Future generations will be impoverished, and the people who suffer most will be those who live in poor countries that can least assert their own claims in a free-for-all.”

In rationalizing “charging mechanisms”, the New Delhi statement similarly invoked (UNGA, 1990, p. 6) sentiments of the tragedy of the commons when it encouraged “widespread promotion of the fact that safe water is not a free good.” Invoking the tragedy of the commons metaphor would be common place with respect to UN water policy over the years. The 1992 UN Conference on the Environment and Development was also instrumental in asserting claims of scarcity and the potential tragedy of the commons metaphor to propose a neoliberal model of environmental governance and management. In a section, entitled, “Making effective use of economic instruments and market and other incentives” (UN, 1993, p. 104), the conference report states:

The challenge is to achieve significant progress in the years ahead in meeting fundamental objectives:

- (a) To incorporate environmental costs in the decisions of producers and consumers, to reverse the tendency to treat the environment as a ‘free good’ and to pass these costs on to other parts of society, other countries, or to future generations;
- (b) To move more fully towards integration of social and environmental costs into economic activities, so that prices will appropriately reflect the relative scarcity and total value of resources and contribute towards the prevention of environmental degradation;
- (c) To include, wherever appropriate, the use of market principles in the framing of economic instruments and policies to pursue sustainable development.

Claims, such that “the environment is treated as a ‘free good’” express the tragedy of the commons metaphor, addressed in Chapter 2, where a good or service may lack an allocative mechanism needed to govern its use and in these cases said good or service is prone to abuse and overuse. These claims are analytically disingenuous on the basis that a good may be free but managed by a common property arrangement designed to govern against abuse and overuse. When the bulk of analytical efforts, however, are couched in terms of increased marketization and are *a priori* geared towards a specific set of economic policies and outcomes that promote a specific institutional alignment then it is no surprise that these claims often frame the discussion. This jargon, however, serves as a framing device that does more to obfuscate than it does promote genuine discussions of how scarcity, in many cases, as Swyngedouw (2013, p. 828) notes, is “socially and politically constructed and expressive of unequal political economic power relations that are embedded in and expressed by the dynamics of the hydro-social cycle.”

Recognizing the recommendations of Agenda 21 (UNSD, 1992) and the Programme for the Further Implementation of Agenda 21 (UNSD, 1997) and considering various other provisions on water by various UN inter-agencies, UNGA proclaimed the year 2003 as the International Year of Freshwater (UNGA 2000). This proclamation was an effort to promote the policies of sustainable development and reaffirm these in the commitments to the Millennium Development Goals (MDGs).

Many press releases, posters and brochures were produced in the lead up to the year. One such press release was a 'backgrounder' on the debate heating up over the policies adopted throughout the 1990s on pricing water. In this press release the UN notes (UN, 2004: para. 4),

Popular belief generally holds that water is a common good and basic need that can best be provided by the public sector at a very low cost. As a result, the full cost of supplying water is seldom charged to consumers. Even where tariffs are charged to industrial users, they are usually based upon average costs and ignore the real costs of externalities such as wastewater disposal, as well as the 'opportunity costs' such as the benefits lost by not pursuing alternative uses of water. One result is that much water is undervalued and wasted, even as the world faces greater and greater water shortages.

Here the UN implies the tragedy of the common metaphor on the basis of water scarcity and the non-application of an economic value to water. Though this backgrounder covers many of the concerns over privatisation it concludes that there is a place for the private sector, (UN, 2004, para. 10), "Governments could transform their role from the exclusive financiers and providers of infrastructure services to facilitators and regulators of services provided by private firms." Another UN brochure (UN, 2003) advertising the International Year of Freshwater 2003 makes an

uninhibited and striking claim that supports this view: “Water is a precious commodity”. Indeed many the media releases reaffirmed the market oriented approach the UN was explicitly adopting and their increasing ties with business was no longer a point of contention but rather one that was beginning to be celebrated.

WWDR1 cautions about the free-rider aspect of public goods (UNESCO, 2003, p. 284) when considering the management of risk and rationalizes the potential for cost-recovery measures. The report goes on (2003, pp. 327-328) to note,

It is widely recognized that water has traditionally been regarded as a free resources of unlimited supply with zero cost at supply point and at best, water users have been charged only a proportion of the costs of extraction, transfer, treatment and disposal. All associated externality costs of water have been ignored and users are offered very little incentive to use water efficiently and not waste it. Major arguments for assigning price for the use of water have mostly originated from these concerns. Because costs of water supply delivery have escalated, it has become clear that economic measures such as pricing in general and demand management instruments have a distinct role to play in ensuring more efficient use of water.

In a revealing clarification of policy WWDR2 (UNESCO, 2006, p. 64) dispels any lingering confusion with regards to the stated human right to water in General Comment NO.15 (CESCR, 2002) and pricing, noting the human right to water was never meant as a right to free water. Rather pricing mechanisms are in place to supposedly prevent the free-rider phenomenon, so long as these prices are deemed ‘affordable’. In fact the WWDR2 goes on to suggest (UNESCO, 2006, p. 73) that the “commercial management” of water has a significant role in the “control of free-riders.”

Similarly, WWDR3 addresses (UNESCO, 2009, p. 263) environmental or goods and services and how these are thought to be “‘free’ by nature” and therefore these “lack a functioning market for pricing them.” WWDR3 addresses the purported lack of incentive to care for such goods and services and suggests (UNESCO, 2009, p. 263), “the payment for environmental services concept attempts to address this problem by creating markets for environmental services, collecting money from water users and paying those providing the resources thereby encouraging efficient and sustainable delivery of watershed services.”

WWDR4 invokes the tragedy of the commons metaphor in relation to the so-called water crises throughout the report (without explicitly using Hardin’s metaphor), this in the purported context of acute and ever-increasing water scarcity. These commons innuendos are lodged in relation not only to the actual amount of freshwater in the world but also in terms of the institutional and administrative arrangements that govern its use. For example, the report notes of community-based water supply projects, (UNESCO, 2012, pp. 300-301),

Free-riding occurs when legitimate water users take more than their allocated share of water, which can trigger disputes over allocation. Water resources may also be extracted by illegitimate users without legal rights, permits or entitlements to that specific resource, which is especially common and difficult to control in the case of groundwater. For that reason, community-based water supply projects in rural areas have frequently proved untenable, with many communities unable to raise sufficient funds to meet operation and maintenance costs associated with common water resources.

Surprisingly, even the glossary of Volume 1 gets it wrong when it defines free-riding. WWDR4 (UNESO, 2012, p. 374) offers the following flawed account,

In economics, collective bargaining, psychology and political science, free-riding refers to the behaviour of consuming a resource without paying for it, or paying less than the full cost. It is usually considered to be an economic problem only when it leads to the non-production or underproduction of a public good or when it leads to the excessive use of a common property resource.

This has been long-refuted as mentioned in Chapter 2. Even the world's most prominent common property theorist, Elinor Ostrom, who won the Nobel Prize in Economics for her work on economic governance, refuted the claim that common property arrangements result in free-riding. Gareth Hardin, the author of the tragedy of the commons metaphor too refuted this claim after much controversy when he clarified that his theory was targeted to open access arrangements. Yet the UN analytical focus is on rationalizing a specific institutional alignment and therefore many of their claims veil the neoliberal prescriptions that undergird their water policy.

Conclusion

Beginning with an inference to the best possible explanation as to how propositions of a global water crisis set up the conditions for the neoliberalisation of water commons this chapter assesses UN's water policy as it relates to water scarcity and the spectre of so-called tragedy of the commons. The idea of water scarcity was introduced at the Mar del Plata Conference in 1977 and has been the fundamental proposition from which neoliberal UN water policy prescriptions arise. What we know about the misuse and abuse of water is that there are certain social behaviours which lead to and continue to perpetuate water scarcity. What we also know, however, is that widespread systemic consumption patterns throughout much of the industrial and developing world contribute

to this misuse and abuse. The proposition of water scarcity, as set forth by the UN, does little to address water scarcity from a global perspective in terms of national or regional water programs but instead promulgates neoliberal retail oriented solutions at the individual level. It follows from a critical realist perspective, then, that the individual success of the competing discourses is contingent upon the contextual forces which may or may not support their understanding. It is here where we may gain an understanding of how the UN uses water scarcity to fit within a particular institutional alignment, namely neoliberalism. In this way a critical realist perspective takes us beyond simple objects of discourse (texts) in order to excavate fuller understandings of not only how discourse affects meaning but also where and how that meaning is produced and reproduced. From a materialist perspective, the structures behind water scarcity (i.e. unequal power relations wrapped up in a consumerist culture) encourages by way of collective socialization the misuse and abuse of socially necessary goods and services. What if we were to re-conceive the way in which we consume water (e.g. banning golf courses from deserts not to mention the development of entire desert communities in such places as Nevada or Dubai). The key here and its implications to the next causal explanation where liberal individualism is considered a discursive/causal mechanism in the overall institutional alignment of UN water policy, is that structures are not irreducible to individuals or the psychology of individuals. We cannot explain away water inequality or water scarcity for that matter or the general struggle over water as reducible to “the effects of other actors”, as Archer (1995, p. 84) describes structural properties – the “prime injunction” from a liberal individualist standpoint. To explain social phenomenon we have to look deeper into structures that align individual behaviours with a certain way of responding to social phenomena. These structures are those that make up the remaining causal explanation.

Chapter 6: Causal Explanation Two – Neoliberal appeals to liberal individualism

This chapter presents the second of four causal explanations that set out to frame the data collected within a specific ‘institutional alignment’ that broadly supports the neoliberal frame of reference. This causal explanations will be presented in relation to an “inference to the best possible explanation” as to how UN water policy is informed by and appeals to liberal individualism, a key tenet of neoliberalism. The chapter will then outline liberal individualism and present key data to illustrate how liberal individualist principles formulate a fundamental causal mechanism (in critical realist terms) that develops a specific alignment towards neoliberalism in UN water policy. This section will pay specific attention to the framing of the individual in a capitalist society in terms of individuals’ as possessors of human rights to WSS.

Inference to the best possible explanation

Socio-ecological versions of the water commons often appeal to a generalised public/universal interest argument in order to explain, produce, maintain and reproduce various types of social-ecological relations, therein promoting cooperation and solidarity with a view to universal access to WSS. Neoliberal policy prescriptions appeal to liberal individualism and this is borne out of the data on UN water policy.

Liberal individualism is a defining characteristic of the free market environmentalist approach. From a theoretical point of view, if neoliberalism is the political doctrine that currently prevails, which it is, and since neoliberalism is a project which has as a fundamental tenet, private property, that which increasingly pervades all social relations, then, consideration of the liberal individualist tenet of this doctrine which supports private property, and the personification of it – the atomised individual – goes a long way to explaining the causal mechanism shaping competing conceptions of the water commons. On the one hand the neoliberal camp celebrates rugged individualism and views individual rationale, including individual decisions, choices and empowerment (i.e. celebrating liberty and self-reliance within the context of competition for scarce resources) by way of market franchising as the best development path. Research, here, bears out this finding as UN water policy increasingly advocates private sector involvement in all manner of WSS, this includes corporations but also increased NGO or civil society involvement.

Liberal individualism is an “individualist social ontology” and “explanatory program” (Archer, 1998, p. 191). As such, liberal individualism is a theoretical frame for neoclassical economics which has as its foundation the study of the individual and their utility functions (Ehrbar, 2007; O’Boyle and McDonough, 2011). One of the fathers of neoliberalism, Hayek writes (as cited in Lukes, 1994, p. 452), “There is no other way towards an understanding of social phenomena but through our understanding of individual actions directed toward other people and guided by their expected behaviour.” If social phenomena are to be explained only by way of known facts or the empirical events that are a consequence of individual behaviour and action, then it is these behaviours and actions that are the appropriate level of analysis. And it is this focus on and presumption towards specific individual behaviour guided by rational choice (i.e. homo economicus)

that has come to define UN water policy. An erudite synthesis of liberal individualism comes from Watkins (in Lukes, 1994, p. 452) when he argues:

According to this principle, the ultimate constituents of the social world are individual people who act more or less appropriately in the light of their dispositions and understanding of their situation. Every complex social situation or event is the result of a particular configuration of individuals, their dispositions, situations, beliefs, and physical resources and environment.

This account is deceptively appealing: the world, our families, communities, groups and organizations are nothing more than an aggregation of individual actions and preferences. Yet this ontological rigidity, in its appeals to idealism where thoughts, beliefs and perceptions are the driving force of individual behaviour, does not take into account how the forces and processes of collective socialization cultivate and indeed nurture a particular frame of reference. This tends to sway in favour of a particular “institutional alignment” appealing to conceptions of an individual’s relationship with WSS made natural in the way in which individual behaviour is ultimately explained. O’Boyle and McDonough (2011, p. 15) explain by linking liberal individualism with utilitarianism (referring to these as handmaidens to positivism),

...under the combined forces of reducing society to its individual constituents (reductionism) and further reducing these to automata (atomism) with simplistic motivations (utilitarianism), neoclassical economics is afforded the opportunity to sidestep such essential social scientific categories as history, geography, class and gender in favour of the representative agent that can be said to be maximising, whether they be scavenging for metal

on a dump, or short selling on the stock exchange (subject to very real constraints, of course).

The 1972 Report of the United Nations Conference on Human Environment addresses (UN, 1972, p. 3) the individual-collective question as follows: “Individuals in all walks of life as well as organizations in many fields, by their values and the sum of their actions, will shape the world environment of the future.” This does indeed illustrate a specific understanding of how the sum of individual actions affect social and environmental realities. What it misses, however, is an analysis, beyond the assertion of “individual values”, of what drives individual behaviour and so-called individual values in the first instance (i.e. social and environmental forces and factors such as history, geography, class, gender and race as well as broader economic and social systems, processes and structures that constitute and/or influence individual values) and therefore, what many would argue, at least from a more systemic point of view, the root causes of social and environmental ills affecting whole groups of individuals.

The same 1972 report further perpetuates this individualist perspective (UN, 1972, p. 2) in conceiving that, “Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.” Even if it were the case that everyone is endowed with these so-called fundamental rights such understandings are ahistorical and bereft of explanations as to how social policy reflect wider political and ideological programs. These programs have a very real effect on the material conditions whereby persons may in fact realize the benefits of holding such rights as it relates to their water needs.

Many UN water policy documents throughout the data set display this uneasy understanding of the relationship between social policy and individual agency. This is further displayed in the Mar del Plata conference report (UN, 1977, p. 34) that states, “Legislation should allow for the easy implementation of policy decisions which should be made in the public interest, while protecting the reasonable interests of individuals ...” This is illustrative of O’Boyle and McDonough’s claim above that social policy can be speculative or based on a snapshot of what is perceived to be best for individuals. What is best for an individual constituent from this viewpoint, taken in aggregate, shapes what is understood as the public interest, irrespective of potential negative outcomes social policy perpetuates when disregarding a whole host of forces and processes that have an indelible impact on entire groups of people when it comes to meeting their water needs.

Taking O’Boyle and McDonough’s explanation into consideration, this thesis positions liberal individualism at the beginning of the exposition of the proposed causal explanations – it is a foundational principle. Liberal individualism, as a theoretical framework and social ontology, positions the individual in front of community and, therefore, as Archer (2007) suggests, social institutions become mere “abstract models” of social experience. A liberal or utilitarian understanding of social reality, then, privileges individual experience (i.e. the rational economic individual looking to optimize in their economic transactions) over collective experience and social institutions. In this way, we may explain human behaviour and social phenomena more generally in terms of individual psychology.

In the context of the water commons dilemma, instead of addressing how contingent social forces and processes interact to produce our reality in relation to water, including political economy considerations, liberal individualism’s focus is an agent-centric analysis thereby limiting explanation to the relationships between individuals and individual relations to institutions. This understanding

disregards another, where access to water may otherwise be conceived: as a relationship between classes and/or groups and institutions in relation to wider political economy concerns with water.

This version of reality “reifies abstract ideals as the basis for defining and protecting rights” (Schmidt and Mitchell 2014, p. 56). However, this reification is a commonplace orthodoxy in UN water policy development conceiving water consumers as individuals within free market societies labouring away in order to satisfy their material needs, including access to water. Such orthodoxy finds that individuals and families often satisfy their sustenance needs by gaining access rights (property rights) via money exchange in a free market relationship; this is seen as normal, fair and sensible, even if ahistorical. It is an explanation of how individuals act within defined parameters and these actions and indeed reactions as their explanations are limited to the scope of these social conditions. Such explanations miss the socio-historical conditions that serve as a pretext to the conditions surrounding water facing humanity today, including so-called water scarcity. It is to take water scarcity as a given therein limiting an understanding of water inequality to geographic location and necessitates discussions of water security on the basis of these empirical outcomes.

Pro-poor approach

And so it is with the UN’s adoption of a pro-poor water policy approach. Explanations in this regard take water inequality as a condition of an individual’s financial wherewithal and not, instead, structural inequality. Such an approach narrows the scope of analysis of poverty to an individual rather than structural issue. The idea here is that the “pro-poor” strategy adopted by the UN and other such global governing institutions such as the World Bank reify water’s relations. That is to say, the neoliberal position is that people don’t have water because they are poor (not because

people simply don't have water). In order for people to have water they are required to enter into contractual relations with either a corporatised public water entity or a private water corporation (if we follow the neoliberal logic for service delivery) in order to gain access to water. For this to happen, people need incomes and jobs. So the lack of jobs and need for economic growth become the problem, instead of water inequality or the most basic line of reasoning: people don't have water because they are denied access to water. When this cannot be explained an implied idleness becomes the problem, not, still, access to water.

Supporting human rights: Rhetorically united, conceptually divided

The first objective of this analysis is to explore the notion of human rights as set forth by the UDHR as a set of inherently inconsistent and contradictory principles that are historically particular to the capitalist mode of production. The promotion and defense of such rights can be seen as perpetuating a system of private rights and individual entitlements, those forming the basis for unequal class relations in the capitalist social formation. This research objective remains theoretically consistent with the broader framework of the water commons proposed here. That is, private rights and individual entitlements, even in the form of human rights, are a contradiction to the inclusive nature of the idea of the water commons.

The second objective of this section is to explore the problematic nature of the human rights-based advocacy approach to water supply services. Many NGOs have taken to lobbying global governing institutions to promote a human rights agenda with respect to water issues. The problem of such an approach is two-fold. First, the promotion of private rights in the UDHR trumps the possibility of realizing common rights to common property resources such as water thus

jeopardizing the existence of an inclusive commons. Second, many of the global governing institutions adopting this human rights approach are historically the same institutions responsible for or have acquiesced, to the gross violation of human rights.

Data collected for this thesis shows that even as early as the UN conference on the Human Environment in Stockholm (the oldest document considered within the parameters of the 40 year trajectory of UN water policy selected for this research), a strong anthropocentric version of the humanity nature nexus is evident. Article 1 of the Stockholm Declaration (UNEP, 1972, p. 1) notes:

Man is both creature and moulder of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth. In the long and tortuous evolution of the human race on this planet a stage has been reached when, through the rapid acceleration of science and technology, man has acquired the power to transform his environment in countless ways and on an unprecedented scale. Both aspects of man's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights – even the right to life itself.

The significance of the 1972 Stockholm declaration is that it was the first global recognition and indeed statement to suggest a connection between the environment and human rights. Speaking again to the uneasy distinction between equality of opportunity (UN institutional position) and equality of condition, none of the references on rights in the 1972 declaration, however, address the connection between rights and the actual realisation of access to resources. Instead, those statements that address the notion of rights, barring one that asserts the sovereign right of nation states to exploit resources (another example of the declarations anthropocentric undertones), all frame the issue of rights in an aspirational sense as an individual freedom in the context and on the

precondition of a healthy environment. This indirect framing of human rights in the context of the environment would come to inform ideas with respect to the human right to water and sanitation for years to come: that is, although the human right to water would not be made explicit until General Comment No.15 in 2002 (as noted below) it was thought that the right to water was implicit in the sense of a precondition to all other rights set forth in the UDHR.

Though not legally binding, access to water was articulated in the Mar del Plata Action Plan as a right, albeit not a human right. In fact the Action Plan does not refer to the idea of human rights specifically but instead refers to the satisfaction of “human needs” in regards to water, a point regarded by critics (namely Barlow, 2002) as a window for the marketization of water supply services as a human need in theory, can be satisfied in the marketplace, whereas the satisfaction of human rights are typically met outside market relations. The conference statement (UNW-DPAC, n.d., para. 1) notes, “... all peoples, whatever their stage of development and social and economic conditions, have the right to have access to drinking water in quantities and or a quality equal to their basic needs.” Similar to rights-based statements in the Stockholm declaration, these claims from the Mar del Plata conference carry no legal significance whatsoever and therefore more appropriately represent aspirational ideals in relation to water equality than any enforceable legally binding agreement between States.

Though General Comment No.15 (CESCR, 2002) was a significant moment in the struggle over the human right to water, two earlier UN documents had already included the human right to water, namely the UN Convention of the Elimination of All Forms of Discrimination Against Women (1979) and the Convention on the Rights of the Child (1989). In 2002, then, the human right to water was, officially for the first time, declared a human right by the UN in the form of General Comment No. 15. This was a significant shift in water policy at the UN since policy

development over the 1990s weighed heavily in favour of interpreting water as an economic good and incorporating it into development policy as such. The General Comment diverges slightly from this stance emphasising the social and cultural importance of water; yet the comment does not challenge the marketization of water.

General Comment 15 (CESCR, 2002, p. 2) states:

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

Though General Comment 15 (CESCR, 2002, p. 5) states, “Water should be treated as a social and cultural good, and not primarily as an economic good” it should be noted that it does not repudiate private sector participation. Rather the comment frames the issue of rights in the context of State parties’ obligations to create an environment where the human right to water may be realised. This does not necessitate the state provision of water and sanitation and it certainly does not preclude private sector involvement. The comment “requires State parties to adopt the necessary measures directed towards the full realization of the right to water”. And though it may encourage State parties to develop a national water strategy and to concretize it legally in national legislation, the comment does not preclude the commercialisation of water supply services. In fact, on the contrary, the report recognises the increasing prevalence of commercialisation in the water sector and therefore contextualises the right to water as (CESCR, 2003, p. 10) “ensuring that water is affordable for everyone.”

In 2005 the UN Economic and Social Council produced a report by the Special Rapporteur on the realization of the right to drinking water and sanitation. The report, authored by El Hadji Guissé provides draft guidelines for the realisation of the preceding documents addressing the right to water and sanitation, particularly General Comment No. 15 (2002). The report notes, (ECOSOC, 2005, p. 5) “the right to drinking water and sanitation is unquestionably a human right...” Furthermore, in one of the most unequivocal UN statements on water and sanitation to date concerning the water commons, Guissé points out (ECOSOC, 2005, p. 5), “water resources constitute a common heritage and must be used in an equitable manner and managed in cooperation with the users in a spirit of solidarity ...”

Clearly, as the report recommends the establishment of regulatory frameworks for private and public provision the right to water does not predetermine the model of provision: either public or private. The only caveat is that water and sanitation services be (ECOSOC, 2005, p. 6) “supplied at a price that everyone can afford without compromising their ability to acquire other basic goods and services.” In fact, the report goes as far as to endorse the market-oriented Integrated Water Resources Management (IWRM) framework as well as recognise the Johannesburg Summit (2002), both of which endorse the pricing of water services. Though Guissé notes that cross-subsidies from high-income users should support low income users and that a person’s ability to pay should be taken into account, he is unequivocal that (ECOSOC, 2005, p. 8) “states should ensure that they have appropriate water and sanitation pricing policies...” In terms of governance, the special rapporteur argues (ECOSOC, 2005, p. 9), “everyone has the right to participate in decision-making processes that affect their right to water and sanitation ...” and, in particular, that “communities have the right to determine what type of water and sanitation services they require and how these services should be managed and, where possible, to choose and manage their own services with

assistance from the State.” Like many UN documents on water pricing and cost recovery, Guissé fails to consider the political economy aspects that arise in the commercialisation of social services.

Perhaps the most significant move to date on the part of the UN with respect to the human right to water took place on July 28 2010 when the Sixty-fourth General Assembly adopted the ‘Resolution Recognizing Access to Clean Water, Sanitation As Human Right’ (UNGA, 2010). Inarguably this represents a shift on water policy at the United Nations (UN) and a significant triumph for those who had been campaigning for UN General Assembly recognition for over a decade. On July 28, 2010, 122 of the 192 member countries making up UN’s General Assembly voted in favour of a draft resolution recognizing the human right to clean water and basic sanitation. As the “chief deliberative, policymaking and representative organ of the United Nations” the General Assembly’s vote, to be sure, is a significant development.

It is surprising to many that the Universal Declaration of Human Rights (UDHR) did not include the right to water at inception in 1948. Because water is so fundamental to life and therefore a necessary precondition to realising all other rights set out in the UDHR, it was thought that the human right to clean water and basic sanitation was implicit – foundational to all other human rights. This was not enough for many critics (most notably Barlow and Clarke, 2001), however, and so the debate ensued, the public education and lobbying campaigns began and a hard fought battle that spanned over a decade was won.

Even still, several important questions remain: (i) why did so many countries abstain from voting in the affirmative (ii) what does this mean for governments and corporations responsible for the delivery of water and sanitation services, (iii) is the human right-based approach the most equitable and universally recognised mechanism for achieving the normative ends of access to water

and sanitation for all; and (iv) does the human right to water guarantee unmediated or direct, non-discriminatory access to water and waste water service for all, or will the vast inequalities so entrenched and indeed characteristic of the contemporary global economy persist? Explanations to these questions must look beyond methodological individualist propensities to focus analysis at the level of the individual.

The vote on the 28th July 2010 was preceded by the introduction of the text resolution in a rousing speech by the Bolivian Ambassador to the UN, Pablo Solon. The Bolivian delegation's introduction of the text was not only symbolic but also pragmatic. The month of May 2010 represented the 10 year anniversary of the Cochabamba Bolivian uprising. The Cochabamba case is, perhaps, the most infamous and well-cited example of the failures of water privatisation, but also perhaps the most well-known example of resistance to the commercialisation of water services. In 1999, due to the conditions of a World Bank loan, the Bolivian government turned the operation of Cochabamba's water services over to the private sector, namely Aguas del Tunari – a subsidiary of Bechtel, one of the world's largest construction and project management corporations. After a year of poor service and as water rates increased by as much as \$20 a month in a city where the minimum wage was \$65 a month, people hit the streets in protest – peasant organisations, farmers, students, union workers, professionals (including engineers and academics) and, simply, disenfranchised local residents, mobilised in an effort of not only resistance but reclamation: to take back their water. After eight days of protest the Bolivian government declared martial law. There were hundreds of injuries and, sadly, one death; only then did the Bolivian government rescind its contract with Aguas del Tunari and began restoring public ownership and control over water services. In the years that followed Bolivia elected its first indigenous president, Evo Morales, who made the right to water a priority for his government. Ten years on, speaking in front of the UN General Assembly on July

28, Ambassador Solon seized the opportunity to declare the injustice of approximately 1 billion people living without access to safe drinking water and more than 2.6 billion without adequate sanitation. He proclaimed the severity of the situation noting that lack of water and sanitation kills more children every year than AIDS, malaria and measles combined – 1 child dies every three seconds. Raising his fist and gesturing with his fingers, Solon counted aloud, “Uno, Dos, Tres”, signifying the fact that a child dies every three seconds. “The time is now!” he declared.

Solon’s description of the gravity of the global water crisis was not enough for the 41 member states who abstained. These members included many First World countries, including the United States, the United Kingdom, Canada, Australia, New Zealand, Sweden, and the Netherlands amongst others. Though these countries did not vote against this resolution (such a political stance would be incontestably problematic) their abstention is consistent with the macro-economic policies instituted by these member states and many other First World governments. For the last thirty or so years, these member states have ushered in a flurry of sweeping neoliberal political and economic processes and measures that have reached every corner of the globe increasingly deregulating, liberalising and privatising local, regional and national economies (Bognetti and Faziolo, 1997; Castree 2005, 2010; Castro, 2007; Cypher & Wise, 2010; Gill, 1995; Goldman, 2005; Harvey, 2003, 2005, 2007; Oddsson , 2016; Peck & Tickell, 2002; Price, 2014; Ruys, 1997; Shiva, 2002; Swyngedouw, 2005, 2013; Tatak, 2010; Teeple 2001). In effect, these measures fundamentally transform the way in which we reproduce ourselves as individuals, families and as a society, effectively transforming the very fabric of society on every level, including the local community level. To be sure, these tendencies have been bolstered by the processes of economic globalisation in the First World via member states’ obligations in regional and global trade agreements and also in the Third World not only by trade related obligations but also SAPs or what the World Bank and

IMF, after much political fall-out, have re-constituted as Poverty Reduction and Growth Facilitation Programs. With respect to water, this is a world-view that is informed by market-oriented approaches such as ‘ecological modernisation’ and its variant and more radical approach ‘market environmentalism’. Both theories view the well-being of people and environment as compatible with capitalism. In fact, market environmentalists suggest that poverty and environmental degradation is not a result of markets but rather an absence of them. As such these theories advocate an increase in the use of market mechanisms such as price controls, private property rights, and competition in order to ‘economise’ incentives attached to goods and services (including nature), whilst achieving new revenue generating streams for profit and capital accumulation. This is the backdrop that informs the abstention of many of these First World governments. Their view on water, and more broadly, the way in which we reproduce ourselves as a society, is, quite simply, not compatible with universal access to water, if that is what the human right to water implies.

However, many African member states abstained too, including, Botswana, Ethiopia, Kenya, Lesotho, Zambia, and Guyana. A primary reason for so many abstentions, particularly from First World delegations, was the language of the resolution. The draft resolution read “human right to safe water and basic sanitation” and not, for example, “access to safe water and basic sanitation.” This distinction is important because if the resolution were to read “right to”, as it does, instead of “access to” then governments and corporations would be under some pressure to guarantee that water is flowing through pipes to peoples’ home irrespective of their ability to pay for water. In other words, if it is “access to” then governments and corporations would only have to provide the means (connected pipes) to access water and not necessarily the water itself. In a privatised world, a person’s inability or refusal to pay for water services means the end of those services. This is why many critics of commodification and privatisation are against metering: though it may be progressive

from a conservational point of view, the installation and functioning of water meters could provide water suppliers (government or corporate) the ability to institute a pay as you go program or, rather, a don't pay-don't receive approach to access to water. Either way, metering represents a slippery slope to yet another project of social exclusion (yet the outcomes of this project will be very apparent simply because of our day to day dependence on water).

Either way the human right to water is a rather ambiguous proposition in the first place. Of course, the basic notion is progressive in the normative sense. That is, all humans on this planet should have safe water and basic sanitation for the simple reasons that water gives and reproduces life, and, sanitation, of which water is an integral part, stops communicable disease and therefore provides health and well-being. In terms of the practical and legal ramifications of such a UN resolution, this is a very different story: sadly, there are none. UN's General Assembly is, as they themselves note, "empowered to make only non-binding recommendations ...". Similarly, the UDHR, the world's preeminent human rights document, carries absolutely no legal status whatsoever. In fact the only legally binding mechanism in UN's arsenal is the Security Council. The UN itself, in defining the term declaration states, "the term is often deliberately chosen to indicate that the parties do not intend to create binding obligations but merely want to declare certain aspirations" (UNICEF, n.d.) . In other words, the UDHR is a non-binding document of aspirations to which signatory states merely aspire but to which they are not held to legal account. This declaration may compel or inspire governments or corporations to act or carry out their operations in certain ways; however, the aspirations outlined in the UDHR should be seen in aggregation as more of a statement of intent rather than a set of legal obligations. The gross violation of a variety of human rights since the UDHR's inception is symptomatic of a system that cannot, quite simply,

uphold such rights (Teepie, 2005). Making human rights legal would expose the hypocrisy of the idea that all humans in a capitalist society are equal.

Critiquing the human right to water approach from a materialist perspective requires consideration of the complex institutional structures and processes that any given social formation establishes in order to govern and manage the allocation of water – relations that directly affect the way we view and relate to one other. This is to consider the institutional structures and processes that engender estranged relations, those that necessitated a human rights declaration in the first place (human rights being historically specific to capitalism), but also those that continually undermine forms of cooperation (including state forms i.e. the withdrawal of the state from social provision). Roithmayr (as cited in Bond, 2010, p. 1) elaborates on this point, arguing,

The liberal perspective is that when human rights aspirations are not being fulfilled, it is because a sound idea suffers flawed implementation. In contrast, the radical critique of human rights suggested that the whole project is flawed from the ground up in its design. This is because as framed, human rights discourse serves not to resist but to legitimize neoliberalism.

This is also to consider the broader political economy considerations and to suggest that social rights to water (encapsulated by the idea of the commons), even when taking the form of a declared human right, are increasingly subordinated to exclusive individual rights including the preeminent corporate right. The success of human rights are largely limited to their impact or interference with the accumulation of capital and profit maximization (hence the constant violation of human rights in the developing world where labour and environmental laws are such that they are skewed in favour of an individual or corporate right and not a human or environmental right)

(Teeple, 2007). As Bond argues citing the South African case where the human right to water is a constitutional guarantee, human rights do very little to challenge the class structure that is embedded in capitalist societies (Bond, 2010). It is in this context that human rights of all kinds, particularly those associated with social rights – of which few are constitutionally guaranteed or protected – are rendered largely inconsequential in terms of genuinely achieving access to water and waste water services. Pieterse (2007, p. 797) argues,

the transformative potential of rights is significantly thwarted by the fact that they are typically formulated, interpreted, and enforced by institutions that are embedded in the political, social, and economic status quo ... the social construction of phenomena such as ‘rights’ and ‘the state’ legitimize a collective experience of alienation (or suppression of a desire for connectedness) while simultaneously denying the fact of the experience.

The status of the human right to water

On 4 July 2011 the Eighteenth session of the UN Human Rights Council accepted the Report of the Special Rapporteur on the human right to safe drinking water and sanitation. Catarina de Albuquerque, the special rapporteur, provided a clarification on private sector involvement in the provision of water and sanitation, namely whether or not human rights to water and sanitation preclude the private sector’s ability to deliver these services. Her conclusion was that the human right to WSS does not prescribe or necessitate a particular type of delivery model (i.e. public or private) but instead that it is incumbent upon State parties to implement policies that would ensure the realization of the human right to water. She states (UNHRC, 2010, p. 7) clearly, “Human rights are neutral as to economic models in general, and models of service provision more specifically. In

other words, the human right to water and sanitation does not determine whether a private or public entity delivers services related to water and sanitation; rather it is an obligation of State parties to create an enabling environment for the realization of human rights aspirations related to water and sanitation. Interpreting the Special Rapporteurs conclusion Bakker (2012, p. 28) adds, “In short, rooted in a liberal tradition that prioritizes private ownership and individual rights, the current international human rights regime is flexible enough to be fully compatible with private property rights, whether for water or other basic needs.” Furthermore, Albuquerque cites a 2007 report of the United Nations High Commissioner for Human Rights on the human right to water (A/HRC/6/3, para. 52) that points out that “the approach of the United Nations treaty bodies and special procedures has been to stress that the human rights framework does not dictate a particular form of service delivery and leaves it to States to determine the best ways to implement their human rights obligations.” What’s more, she suggests (UNHRC, 2010, p. 7), “human rights are concerned with the relationship between the State and the individual. They impose obligations on States and endow individuals with rights.” How, then, does the human right to water apply to the increasing instances where water is delivered by a private entity to individuals? Albuquerque (2012, p. 35) explains that “human rights law stresses the perspective of the individual ...” On the whole, then, regardless of the service provider (State or third party), the Special Rapporteur advises that meeting human rights objectives does not come without a monetary cost and that if this cost is not borne by States then individuals are ultimately responsible for associated payments, which is consistent with the private delivery of water and wastewater services.

In 2012 report to the UN General Assembly the Special Rapporteurs addresses a “Post-2015 Development Agenda for Water, Sanitation and Hygiene,” and in a revealing admission Albuquerque notes the idea of equality between individuals within a human rights framework and

argues (UNGA, 2012, p. 9) that “equal does not mean then same” but rather equality refers to “leveling up’ or progressively working to improve the quality and levels of service for groups that lag behind.” Yet, again, and as disparaging as this may be, this has to be considered in the context where third party actors in the water nexus equation (water corporations) are not legally obliged to meet human rights requirements.

Bakker (2012, p. 28) critiques the human rights-based approach to water making three key points. First, proponents of the right have a tendency to conflate human rights with property rights. Property rights (be they state and private in particular) are held up by the full force of the rule of law and therefore are socially and legally legitimated. Yet even where human rights receive legal endowment, Bond (2010, p. 10) states,

The discourse of human rights pulls a sleight of hand by giving moral claims a legal form that dilutes them, waters them down, and robs them of any real power. The legalization of human rights does this in two ways. First, human rights discourse offers only very limited recognition of moral claims in certain circumstances. Second, even these limited moral claims by design are then converted into bureaucratic, technical legal problems that cannot be solved because legal rights are indeterminate.

Bakker’s second critique suggests that the human rights-based movement to water fails “to distinguish between different types of property rights and service delivery models ...” In other words certain property rights are more conducive to specific models of service delivery. If the aim of the human right to water is to increase water equality, there must be a clear idea of property rights matched to a model of service delivery that promises such equality. Finally, as the Special Rapporteur has made clear in her judgement, human rights do not preclude private sector

involvement in the water sector and therefore, as Bakker (2012, p. 28) argues, the movement fails to “foreclose the possibility of increasing private sector involvement in water supply”.

Conclusion

This chapter begins by introducing an inference to the best possible explanation as to how social relations take shape under the neoliberalisation of WSS. This chapter examines UN water policy as it relates to liberal individualist tendencies particularly as it relates to pro-poor and human rights approaches, which, as noted here, do not preclude market relations. For the purposes of this particular causal explanation, the liberal individualist roots of the human rights framework guided by international law frames individual’s relationship to water as an exclusive one mediated by private rights that do not preclude the possibility of having to enter into a contractual relationship with a corporation in order to meet one’s personal water needs. This framing of the individual disregards the structural inequalities of market relations and in doing so serves as a causal mechanism where the emergent properties of market relations will become realised as WSS are transformed so as to align with the neoliberal reforms discussed over the next causal explanations.

Chapter 7: Causal Explanation Three – Neoliberal appeals to sources of sovereignty backed by the capitalist state

This causal explanation turns to the neoliberal understanding of the state and the pursuant role of the private sector. This chapter will set out the broader parameters for the role of the state, not, however, in the context of a lack of regulation but rather a re-regulatory role in its policy prescriptions that create an enabling environment for private sector participation.

Importantly, this position is indeed consistent with the free market environmentalist approach. This causal explanation sets out to collate the component policy pieces of the UN's overall political economy of the state framework as it relates specifically to WSS. This chapter will pay specific attention to the UN's view of the state's role throughout the UN water policy trajectory, charting the evolution of policy thinking that previously supported efforts towards nation-building centered on a robust public sector, including WSS, towards a new paradigm in public services in an era of economic globalization. The re-framing of water governance issues in a global economy, including the purported need for increased community involvement – will form the basis of an assessment of UN (rhetorical) support for community-led water initiatives and their broader economic reform policies which encourage the development of a rights framework more closely aligned with powerful economic interests.

Inference to the best possible explanation

Over the last forty years the political economy of most industrial and developing states has been radically transformed on a global level and according to neoliberal edicts. This change has been reflected in WSS, and concretised in UN water policy over this period. In fact, the earliest documents analyzed for this thesis, which were the beginnings of a UN effort to consolidate a coherent institutional position on water, reflect the changing nature of the political economy of the state: namely a global economy dominated by transnational corporate rights. Indeed the UN has played a central role in not only transforming national economies to fit within this new global reality but also creating the global conditions for this new reality to flourish in the first place. This takes the form most broadly of overarching advocacy role in terms of promulgating institutional reform that reconfigures the role of the state according to market imperatives. With a redefined role of the state (i.e. market led re-regulation replacing public service welfare provision) this begs the question of a new ethic of water governance including, most importantly, the question of whose responsibility it is to govern and manage water supply services and what interests should be represented and addressed within the water governance nexus?

UN water policy trajectory: State centrism to decentralisation

The post war era up until the period when the earlier water policy documents collected for this thesis (1977) were produced, was defined in industrialized countries by the Keynesian welfare state. A core feature of this settlement was a consensus that the public sector bore responsibility for socially necessary goods and services, including WSS. This of course, can also be understood (particularly by indigenous peoples across the world) as the continuation and extension of a broader

enclosure movement on the part of First World governments, transforming rights frameworks outside the state into forms of state property.

The Mar del Plata report reflected on this conundrum when it acknowledged (UN, 1977, p. 33) considerable “incompatibility between legal provisions of a national character and regulations emanating from regional or local authorities, or between traditional rights and the state’s role in controlling water resources.” As such, much of the UN’s earlier water policy is state-centric in the way in which it conceives jurisdictional ownership and obligations in relation to water services as well as transboundary water resources. Moreover, at this time the UN saw the role of the state as a mediator in assigning rights to communities, peoples, tribes or groups within its borders. This of course has implications in terms of the identity of water consumers: i.e. individuals defined in relation to state citizenship or the extent to which the state recognizes an individual as a full citizen (many indigenous peoples’ across the world did not have full citizenship rights until the mid-20th century and the case can be made that many still do not enjoy full rights irrespective of formal citizenship).

The idea of participation in earlier UN reports more resembles state consultation with a variety of stakeholders and not, as would later be the case, increased ownership and control of water supply services by community stakeholders, including an increased role of the private sector (corporations and NGOs) and greater consultation with and coordination between members of so-called civil society in general. Although the Mar del Plata report points to the value of local knowledge and “indigenous abilities” and encourages “self-reliance” in these regards, this is decisively conceived in relation to an overall state-centric approach. The report suggests (UN, 1977, p. 36) that countries,

Review the extent of public participation in the planning, construction, operation and maintenance of water projects and take steps to ensure a greater level of participation, through consultations and the transfer of knowledge starting at the village level.

This, however, should be conducted in a manner congruent with a centralised water authority for water was now seen as having a “strategic nature” and, in this regard, water was increasingly considered (UN, 1977, p.104) to be a “political tool for encouraging development and political progress.”

Likewise, the New Delhi Statement encouraged increased community participation by institutionalising it within broader national policy that deserve “higher priority ... national planning processes.” The report explained (UNGA, 1990, p.5),

Linkages must be established to ensure that national plans and programmes are responsive to community needs and desires. Methods for evaluating community management have been developed for rural areas. They should now be adopted at the national level and implemented through participatory monitoring and evaluation techniques.

On 10 November 1980, the UN General Assembly adopted (UNGA, 1980, p.101), the Proclamation of the International Drinking Water Supply and Sanitation Decade that encouraged all Member States to commit to “bring[ing] about a substantial improvement in the standards and levels of services in drinking water supply and sanitation by the year 1990.” The resolution made clear that the onus for the improvement of service delivery was on governments alone; the promotion of and support for the private sector in water and wastewater would come at a later date.

The Convention of the Elimination of All Forms of Discrimination Against Women (1979), as well as the Convention on the Rights of the Child (CRC, 1990), two of the earliest conventions that address the right to water, are equally state centric in their proposed remedies. In 1979 the UN General Assembly adopted the Convention on the Elimination of All Forms of Discrimination against Women (UNGA, 1979). The convention received full legally binding status in 1981. The document was founded on the basis of a reaction to the continued discrimination against women despite the fact that various preceding UN human rights instruments sought to address many forms of discrimination, including gender. Relevant to water and to the question of the state's role and responsibilities, Article 14 2(h) addresses women's right to water in the context of state party responsibilities. The article, in part, compels state parties to ensure a women's right "to enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply, transport and communications." Rights included within this convention were to be overseen and protected by public authorities and institutions. Similarly, The Convention on the Rights of the Child (CRC), adopted by the UN General Assembly in 1989 and enacted as a legally binding instrument in 1990, was the first instrument of its kind to legally recognize the right to water, albeit only in the context of children's rights and not necessarily human rights (children defined as all persons below the age of eighteen unless law applicable to a child states the age of majority as otherwise). It is argued here that state parties should take appropriate measures to provide adequate levels of clean-drinking water (article 24[c]). The CRC is emblematic of the UN's state centric approach to a rights-based framework at this historical juncture. Virtually all 54 articles included in the CRC deal with state parties roles and responsibilities. On the whole the convention encourages all state parties to respect and ensure the rights set forth within the convention and to take appropriate measures to mitigate any forms of discrimination against children. Though the right to WSS are not included in this convention some commentators consider this implicit in article 24(e)

which stipulates that children should be educated on the “advantages of ... hygiene and environmental sanitation ...” The rights-based approach within the CRC does not specifically hold state parties responsible for the provision of water supply services but instead requires states parties to take appropriate measures to meet the aspiration that all children will have access to WSS.

A shift in state responsibilities with the Brundtland Report: The state redesigned

Though not necessarily affiliated with the declared water decade in the 1980s the influential 1987 Brundtland Commission report would transform national development programs recasting them in terms of sustainable development. The Brundtland report had a significant impact on the framing of environmental concerns in relation to state imperatives, namely the growth imperative of economic development within a growing capitalist global economy. Indeed it was the Brundtland report (WCED, 1987, n.p.) that was one of the first global declarations to make the connection between state foreign policy, security concerns and the ecological commons.

Governments who have not done so should consider developing a ‘foreign policy for the environment’. A nation’s foreign policy needs to reflect the fact that its policies have a growing impact on the environmental resources base of other nations and the commons, just as the policies of other nations have an impact on its own.

The Brundtland report, however, acknowledges the challenges of addressing environmental objectives in a changing geo-political climate, suggesting (WCED, 1987, n.p.), "The traditional forms of national sovereignty are increasingly challenged by the realities of ecological and economic interdependence." The Brundtland report goes on to note (WCED, 1987, n.p.),

... the idea of national sovereignty, has been fundamentally modified by the fact of interdependence in the realm of economics, environment, and security. The global commons cannot be managed from any national centre: The nation state is insufficient to deal with threats to shared ecosystems. Threats to environmental security can only be dealt with by joint management and multilateral procedures and mechanisms.

This did indeed represent a watershed moment in environmental policy development in that it linked such development with processes of globalization in terms of connecting (WCED, 1987, n.p.) a “community of nations” to “shared perceptions of long-term environmental issues ...” (UN, 1987, n.p.).

The Brundtland Commission provides a rich discussion about the increasing enclosure of both collective resources and rights; yet it does so giving an ahistorical account of the nature and origin of the process of capitalist enclosure and, as a result, de-politicizes the nature of these struggles. For example, the Commission (WCED, 1987, n.p.) reports,

Traditional social systems recognized some aspects of this interdependence and enforced community control over agricultural practices and traditional rights relating to water, forests, and land. This enforcement of the 'common interest' did not necessarily impede growth and expansion though it may have limited the acceptance and diffusion of technical innovations.

The report goes on to note (WCED, 1987, n.p.),

Yet with this surge of technical progress, the growing 'enclosure' of common lands, the erosion of common rights in forests and other resources, and the spread of commerce and

production for the market, the responsibilities for decision-making are being taken away from both groups and individuals. This shift is still under way in many developing countries.

More forthrightly in relation to linking national environmental objectives to the global economy the Brundtland report (WCED, 1987, n.p.) not only condones but encourages the incorporation of the commons into global circuits of capital accumulation explaining,

Given the limitations on increasing present flows of international aid, proposals for securing additional revenue from the use of international commons and natural resources should now be seriously considered by governments.

Though the Commission report recognizes power imbalance on the global stage its response is to further support this by way of standardizing its policy prescriptions within an identifiable ideological frame of reference that promotes the compatibility of economic growth and ecological sustainability. The Commission concludes (WCED, 1987, n.p.), “If economic power and the benefits of trade were more equally distributed, common interests would be generally recognized.”

As arguments about global sustainability developed a new understanding of the role of the state began to take hold: that is, the state not necessarily as custodian and provider of socially necessary goods and services as it traditionally and historically had been, but rather as regulator. This vision of course bears the hallmarks of the neoliberal model for the state as creating and overseeing the conditions for markets to flourish. In the Commissions own words (WCED, 1987, n.p.), re-regulation would “control the impacts of industrial activity across national boundaries and on the international commons ...” For this to happen, however, a comprehensive institutional reordering would have to take shape but also a shift in world views whereby governments would begin

rethinking their place in the water governance nexus. Unsurprisingly perhaps the UN played a significant role in this ideological shift.

This could best be accomplished, according to the Commission (WCED, 1987, n.p.) “by decentralizing the management of resources ...” and seeking out greater involvement of NGOs and community organisations which provide (1987, n.p.) an “efficient and effective alternative to public agencies.” The report encouraged greater public participation on the basis that (WCED, 1987, n.p.) the “law alone cannot enforce the common interest.” This would involve greater public participation in actual decision making, which one might anticipate ushering in more deliberative and participatory models of liberal democracy. Yet the report suggests that bilateral global governing institutions, those often associated with a usurpation of democratic processes, such as the World Bank, work with NGOs to execute programmes and projects. Activities and funding, then, according the Brundtland report, should be directed to supporting more decentralised projects (WCED, 1987, n.p.), stating, “A much larger proportion of assistance could be channeled directly through these organizations.” This remains to be seen, and though some of these ideals, though curious bedfellows of neoliberalism, seem progressive, little is mentioned about how this model of decentralization can effectively become a form of increased marketisation. This also calls into question the increasing participation of industry in sectors where the profit motive was conventionally seen as a threat to the equitable and safe delivery of a service. Such concerns are particularly acute in the water sector, where traditionally the role of private interests has been minimized due to the public health nature of the provision of its services. The Brundtland Commission support and promotion of NGOs is done without considering the implications and consequences of directing funding and authority away from public providers (in terms of

accountability, scrutiny or regulatory oversights) much less about the increasing privatisation of services by way of an NGO approach to water and wastewater services.

The Brundtland Commission report was timely in the sense that it was published in advance of three influential water policy moments in UN history: the 1990 Delhi Statement, the Dublin Statement (1992) and Agenda 21 (Agenda 21 being a product of the first so-called Earth Summit in Rio in 1992), which have had a lasting influence in setting UN water policy on a specific and comprehensive neoliberal policy trajectory.

On the increasing involvement of community based organizations the Brundtland Commission suggests (WCED, 1987, n.p.),

Part of the increased aid should go directly to community groups, using intermediaries such as national or international NGOs. Several bilateral aid programmes have already demonstrated the cost-effectiveness of this approach; various NGOs have been responsible for many successful community based schemes to improve housing and provide basic services. They are generally more successful at reaching the poorest.

Such participation involves particularly the poor in the Third World and empowers them, so the argument goes, to make decisions at the local level in accordance with local need (WCED, 1987, n.p.) thereby “fill[ing] the gaps in services left by the local government.” The Brundtland Commission suggested greater participation by governments and industry in NGO projects (“in planning, monitoring, and evaluating as well as in carrying out projects when they can provide the necessary capabilities on a cost-effective basis”, and (WCED, 1987, n.p.) “To this end, governments should establish or strengthen procedures for official consultation and more meaningful participation by NGOs in all relevant intergovernmental organizations.”

Post-Brundtland: New Delhi Statement, Dublin Statement and Agenda 21

The 1990 New Delhi Statements called upon all countries to work towards two basic goals: safe drinking water and basic sanitation; yet the question remained how to go about this. In this regard, the New Delhi Statement represents a key stage of development of a systematic global water policy that was beginning to emerge in the form of Integrated Water Resource Management (IWRM).

In acknowledging the range of challenges with respect to meeting global water needs, The New Delhi Statement represents one of the more comprehensive attempts at water policy for its time. One could suggest that it was a progressive report. However, picking up from the Brundtland Report, the Delhi Statement calls (UNGA, 1990, p. 2) for “new approaches” that would entail “profound institutional, economic and social changes...”

These new approaches are encapsulated in four “Guiding Principles” (some of which include some of the strongest language to date from the UN in terms of institutional reform and these are still cited and relevant to this day). One of these profound changes would be broader institutional reform as covered in Principle No. 2 (UNGA, 1990, p. 3) which suggests, “Institutional reforms promoting an integrated approach and including change in procedures, attitudes and behaviour, and the full participation of women at all levels in sector institutions.” This would be accomplished by creating an (UNGA, 1990, p. 4) “enabling environment of appropriate policies, legislation and incentives” for such institutional reform. In a far-reaching proposal to secure institutional reform the statement (UNGA, 1990, p. 4) suggests “A changing role of Government ... from that of provider to that of promoter and facilitator.” Decentralization would be introduced and become a mainstay of water policy for years to come. In this regard, the language of the UN in terms of the

provision of water was shifting from the responsibility of the state towards a retail oriented model. In this light the statement goes on (UNGA, 1990, p. 4) to note, “local private enterprise can assist in improving the efficiency and expansion of service delivery.” Indeed, decentralisation initiatives are promoted on the basis of community involvement in WSS, and this is addressed (UNGA, 1990, p. 3) in Principle No. 3 that commends “Community management of services, backed by measures to strengthen local institutions in implementing and sustaining water and sanitation programmes.” The aim of this principle, as suggested in the statement is to “empower and equip communities to own and control their own systems.” Community ownership is not defined here, nor is there any supplementary discussion about collective rights to community resources. This is problematic as community ownership does not necessarily entail collective or common ownership rights of a defined community. Rather, community ownership in this regard may be retail-oriented water supply services. These principles do indeed have many progressive elements, however, the displacement of the state opens up opportunities for private sector involvement. This path is the one that has been aggressively pursued which is unsurprising given the resources and interest of private water providers in promoting and implementing a retail model following the New Delhi Statement. This shift in UN thinking about the role of the state vis-à-vis water provision was given significant impetus in what would become one of the most important pieces of UN water policy in the form of the 1992 Dublin Statement.

The Dublin Statement: Forcing the pace of change

Though the Dublin Statement appears to be rather progressive in its call (UNEP, 1992, p. 39) for “institutional arrangements at the national level, such as a water authority ... and a system of

checks and balances to safeguard public and national interests ...” it remains consistent with Brundtland Commission report and the Delhi Statement in its call for institutional reform. The Dublin Statement lodges a similar critique arguing (UNEP, 1992, p. 15) that “the role of governments needs to be reviewed ...” as (UNEP, 1992, p. 38), “Centralized and sectoral (top down) approaches to water resources development and management have often proved insufficient to solve local water management problems.” The statement is very strong in advocating for a shift to more “active participation of people and local institutions, public and private.” The said national authority (UNEP, 1992, p. 39) may “also provide an enabling environment for local resource mobilization and the flow of financial resources and the co-ordination of external support.” This would involve a “participatory approach” that would engage users at all levels, including the private sector particularly as it relates to all aspects of water supply management and services (including financial) and encourage decentralization so that (UNEP, 1992, p. 4) “decisions are taken at the lowest appropriate level.” This would include (UNEP, 1992, p. 29), “Developing institutional frameworks which bring together water utilities, nongovernmental organizations, the private sector and community groups to exchange views, contribute skills and take decisions on water supply and sanitation projects.”

Under the ‘Capacity Building’ provisions that internationally coordinate commercialisation efforts, the 1992 Dublin Statement suggests (UNEP, 1992, p. 7) that governments are “required” to act judiciously in creating an “enabling environment in terms of institutional and legal arrangements ...” In this view, governments are expected to formalize the conditions for increased commercialisation thereby creating a framework for the private sector to operate in the water and wastewater sector. The Dublin Statement suggests doing whatever is institutionally necessary in order to meet global water needs suggesting (UNEP, 1992, p. 31), “Provision should be made for

reliable water, sanitation, solid waste and drainage services to the urban poor, especially women and children, as a priority component of national environmental management strategies, involving the private sector and non-governmental organizations.”

Indeed the Dublin Statement supports increased levels of community participation and the institutionalisation of such participation in “national policies and budget priorities.” This Statement, however, does not address unequal power relations between social groups and therefore it is prudent to question the overall understanding of local political economies particularly as it relates to increased levels of community participation – i.e. are proposals and frameworks for increased participation genuinely inclusive and do they address the unequal power relations at the root of unequal access to resources, those so often characteristic of capitalist development?

Agenda 21

Agenda 21 – specifically within article 18 of the agenda which focuses on water – takes from both the Delhi Statement and the Dublin Principles and places it squarely within the broader and comprehensive context of UN’s position on the environment. Like the Brundtland report, however, Agenda 21 (UNSD, 1992, article 18.54) encourages cooperation between governments and external agencies in working and engaging with “community-based approaches” that rely on a greater degree of “community participation.” Article 18 of Agenda 21 goes a long way to solidifying the UN’s position within the Washington Consensus in promoting its relationship with the operations of other such global governing institutions: “The responsibility for bringing about changes lies with Governments in partnership with the private sector and local authorities, and in collaboration with national, regional and international organizations, including in particular UNEP,

UNDP and the World Bank (Article 8.2 Basis for Action). In terms of encouraging country specific responses, Agenda 21 (UNSD, 1992, Article 18.22) addresses water specifically within the parameters of the Washington Consensus, noting, “International agencies and donors have an important role to play in providing support to developing countries in creating the required enabling environment for integrate water resources management.”

World Water Reports define the role of the State

Decentralisation factors prominently in all four of the World Water Development Reports, replete with all kinds of rhetoric connoting increased community engagement. For example WWDR1 calls for increased levels of “community involvement” and “community action” by “community groups” by way of “community-based initiatives/approaches” or “community-based organisations.” Pointing to the “shortcomings” of centralised water agencies and in doing so suggesting alternatives governance systems, WWDR1 calls for “community-municipal partnerships” and/or “community-based service delivery” (UNESCO, 2003, p. 381). For such community engagement to occur, however, WWDR1 emphasises decentralisation, and encourages such policies in the Third World (2003, p. 339) to devolve authority to the “lowest possible levels of administration.” The neoliberal character of the report is evident in its rationale for decentralisation as it explains (UNESCO, 2003, p. 339),

With users becoming more involved in managing water resources, the concept of management transfer has been a central theme in valuing water. Programmes that transfer existing government-managed water systems to private firms, financially autonomous utilities

and water user associations, are being implemented in many countries. In this context, governance modalities can be linked with water valuation and financing ...

WWDR1 also recognises how decentralisation contributes to broader macro-economic policy trends (2003, pp. 353-354),

The trend towards decentralization in many countries has placed more decision-making power into the hands of civil society and local government, particularly in countries where trimming the central civil service was a main condition of the economic and structural adjustment programmes of recent decades.

WWDR2 (2006) employs similar community rhetoric – particularly around decentralisation and devolution, defining decentralisation (UNESCO, 2006, p. 75) as “a process in which the government relinquishes some of its decision-making powers and management responsibilities to lower levels of government, private sector or community and civil society organizations.” The basis for WWDR2’s support for community development (UNESCO, 2006, p. 82) by way of decentralisation is fourfold. First, as noted above, it provides for alternative to the purported failure of the centralised agencies. The question of decentralisation and the challenge to meet what the WWDR2 argues is an essential water policy is (UNESCO, 2006, p. 75) the “willingness of central government and their attached agencies to relinquish power.” Again, centralised state provision is linked to the lack of progress on positive water reform. In fact the report likens this lack of willingness of centralised governments to decentralise water service to years of colonial rule and argues that it not only undermines traditional resource practices and local agencies options to both manage and deliver services but also, in some cases, where centralised bureaucrats feel threatened, usurps powers and financial resources. Second, decentralisation purportedly allows (UNESCO,

2006, p. 75) for the increasing democratisation of decision-making at the local level through “stakeholder inclusiveness, transparency and accountability ...” Third, WWDR2 argues that democratisation increases the opportunities for empowering local people, particularly the financially marginalised. Fourth and finally, decentralisation promotes cooperation between groups, including the integration of local and traditional knowledge and practices. WWDR2 asserts (UNESCO, 2006, p. 82), “Experience has shown ... that development can be more deeply rooted in systems where governments, private firms and civil society can work together in various constellations. There needs to be an improved water dialogue between governments, civil society and the private sector.” WWDR2 cites a World Bank report highlighting the “potential benefits” of decentralisation, including the scope of reform as local authorities look to compete with each other, thereby, as the argument goes, stimulating innovation and improvement. This is the policy centre-piece of the IWRM framework promoted by WWDR2.

WWDR2 argues (UNESCO, 2006, p. 102) that “very little attention has been paid to increasing capacities and incentives of domestic water operators and local entrepreneurs or to exploring the role of local communities and various kinds of water user associations and community-based organizations.” This discussion of increased community involvement and capacities, then, does not preclude private sector participation or a water market for that matter. WWDR1 posits that as a result of the failure of transnational water corporations and the state to meet MDGs (UNESCO, 2006, p. 72) “local entrepreneurs, communities and local organizations should increasingly be viewed as important stakeholder who can contribute.” In fact, WWDR2 illustrates this very point using case studies from Bangladesh and Angola where community organisations were involved in the retail end of water provision. WWDR2 also points (UNESCO, 2006, p. 102) to “community organizations and federations formed by slum and shack dwellers”

working with NGOs in tandem with local governments and private water utilities. Yet again, however, despite the rhetoric of community empowerment and participation this can be read as another example of the increasing neoliberalisation of WSS, placing reliance on the role of the individual in society centre-stage, not to mention the ongoing marketization of service delivery.

Unlike many of the preceding reports WWDR2 notes the mixed reporting on decentralisation as it relates to the reduction of economic inequalities within a region; yet, even so, the report suggests that decentralisation encourages democratic participation, which, in turn, empowers marginalised groups, including women and levels the playing field between regions. Yet, a precondition for such a pathway, as WWDR2 rightly notes, is an environment where “Stakeholders can voice their rights and preferences”; thus making the democratic deficit characterising so many water agencies a real problem in this regard, not to mention global socio-economic trends that point to poverty as a hindrance to democratic participation. In this regard, WWDR2 in part, considers broader political economy concerns with decentralisation and points out (UNESCO, 2006, p. 82), “Decentralization without the right checks and balances may lead to local elites strengthening their positions at the expense of politically and economically marginalized groups.”

This of course reflects the neoliberal character of the decentralisation process propagated by the UN. In a discussion on recent policy developments WWDR3 points (UNESCO, 2009, p. 65) to the proliferation of private financing initiatives as a result of decentralisation. Decentralisation spreads responsibility over many layers of government thereby transforming central state bureaucracies to decentralised public authorities. And though power, then, may still lie with public authorities, it does so at a local level. The stability and viability of water services can be called into question, not least due, in part, to the lack of institutional capacity at the local level. For example, WWDR3 points out (UNESCO, 2009, p. 293) that as a result of decentralisation,

local bodies face difficult choices in managing water systems, water resources and water and sanitation systems -- on whether to regulate through concessions and contracts with private partners and on how to engage with non-governmental organizations.

The UN throughout its WWDR reports point to this as a problem but maintain support for the principle. Yet as local governments are either cash strapped or have already implemented economic programs that severely curtail public spending, the conditions become ripe for marketisation, either by way of funding, contracted service delivery or full privatization.

WWDR4 (2012) echoes WWDR3's suggestion that decentralised trends over the last decade can be characterised as a shift from centralised authority to decentralised public authority rather than outright devolution to private operations, though full privatizations do occur. The new thinking in WWDR4 is the suggestion that decentralisation programs should continue to embrace centralised responsibility in terms of the regulation of water distribution services but to decentralise the responsibility for the management of these thereby "increase[ing] user ownership and participation." The UN acknowledges the far reaching nature of such reform when it suggests (UNESCO, 2012, p. 51) that new institutional arrangements will be needed under such reform in order to protect the interests of the "poor and disadvantaged groups, particularly women ..." Most importantly for WWDR4 (UNESCO, 2012, p. 273) "water is best managed at local levels" and decentralisation would "promote local and climate-responsive allocation of water among users, facilitated by well-regulated pricing and, potentially, innovative water rights trading mechanisms

Conclusion

There is little nuanced analysis of the political economy of the deregulation of WSS in the majority of UN documents that promote such policies. In the instances where there are critical analyses these seem to be trumped by the UN's overall partiality to a neoliberal policy frame of reference. In fact, the UN's own 2012 'Review of Agenda 21 and Rio Principles', notes (UNDESA & UNDSO, 2012, p. 7) the lack of analysis in four main areas that require a political economy perspective, namely, Agenda 21 did not explore,

... the role of corporations, and multi-national corporations (MNCs) in particular; the role and impacts of trade and globalisation; the role of international economic governance in helping steer the whole system; the importance given to future generations in everyday policy-making.

The UN's jargon camouflages the realities of marketisation when public services are deregulated and access to those services essentially becomes the responsibility of a range of individual actors within the community, be they private citizens or small or large corporations. As such the structural inequalities and unequal power relations inherent within market relations pass without comment not to mention any form of coherent policy redress.

The point here is that though considerable debate once characterised the issue of decentralisation for the UN in relation to its water policy, today it factors prominently as a staple policy goal that goes largely undisputed. For the UN, then, what really matters insofar as the provision of WSS is concerned, is adequately defined property rights supported by effective enforcement mechanisms. The UN recommends flexibility in terms of who or what kind of entity

delivers these services. This is consistent with the free market environmentalist approach as set forth by Anderson and Leal (2001, p. 4) who explain,

At the heart of free market environmentalism is a system of well-specified property rights to natural and environmental resources. Whether these rights are held by individuals, corporations, non-profit environmental groups, or communal groups, a discipline is imposed on resource users because the wealth of the property owner is at stake if bad decisions are made.

As a result of the prevailing free market environmentalist approach to the humanity nature nexus, Anderson and Leal (2001) argue that it is high time that society critically engages and considers the fundamental reconfigurations of our socio-ecological relations, including the state's assumed role as sole adjudicator of the humanity nature nexus.

The neoliberalisation of publicly delivered WSS takes many forms; however, UN policy initiatives and reforms that in some cases promote, in other cases encourage or at very least legitimise the neoliberalisation of water, can be consolidated as attempted here, in efforts to illuminate a cohesive general neoliberal character of the UN's vision as it relates to the state's place and responsibility in the water governance nexus. Within this third causal explanation the UN appeals to the causal mechanisms discussed over the last two chapters in order to summon an account of the capitalist state thereby appealing to ideological assumptions based in capitalist social relations. In this sense, as presented within this causal explanation, the UN presents an account of the private sector within a reformed and re-regulated state that is contingent upon a particular understanding of the individual in relation to his or her community, including access to WSS. Effectively, the UN sets forth an understanding of the state which seeks to justify the policies of

commercialisation and marketisation they promote. These policies will be further explored in the last causal explanation.

Chapter 8: Causal Explanation Four – Neoliberal appeals to retail-oriented relationships with respect to WSS

The first two causal explanations document the conceptual development of a concerted institutional alignment on the part of the UN that would support an overall neoliberal policy framework for WSS. The third causal explanation is an extension of these but one that by way of specific policy promotion vis à vis the state seeks to operationalize and indeed institutionalise these aforementioned discursive mechanisms (i.e. water policies aligned with how we view the atomized individual within society and policy that reacts to the water scarcity proposition). In critical realist terms, this is where causal mechanisms or structures (aforementioned causal explanations) become emergent properties in the sense that they have a real impact on real social relations where social relations are irrevocably transformed.

This chapter will focus on the conceptual transformation of UN water policy from public provision to a retail friendly model within the defined historical trajectory and attempt to explain how, by using the example of the UN, neoliberal versions of the commons are articulated in such a way so as to be compatible with an overall commercialisation project. The underlying theme of this causal explanation revolves around the idea of the value of water. All of the individual themes discussed below, as they relate to WSS, namely *economic valuation, charging, pricing, full cost recovery, private sector involvement, private ownership, privatisation and commercialisation* in general, are predicated on an understanding of the value of water that can be defined in monetary and retail oriented terms.

Inference to the best possible explanation

On the one hand the neoliberal camp embraces private property as it relates to WSS, as a form of ownership – the pursuant claims and entitlements attached to those rights serve as an overarching allocative mechanism. Notions of eco-services, retail-orientation, valuation, marketization, market integration, cost recovery, financing, and customer service factor prominently in such a world view. On the other hand the socio-ecological camp challenges private property relations, not always necessarily in a structural sense and thereby calling into question an economic system based on the very idea of private property, but rather mainly in terms of growing inequality as it relates to WSS. This advocacy on the part of the socio-ecological camp, and in many cases outright resistance to private property, is by and large limited to social democratic reforms. Even so, these reforms remain relatively marginalised in the mainstream insofar as they contribute to a broader challenge to the capitalist system.

The following causal explanation, which finds appeals to the type of value that rights to the ‘commons’ are designed to support: *transferable* (neoliberalism) versus *non-transferable* (socio-ecological), is broadly exemplified in the commodity versus commons debate, but more specifically in the following typologies: privatisation versus centralisation (the market-state nexus); privatisation versus communal or collective rights; privatisation versus mutualisation (re-collectivisation). These competing typologies are enabled by what Bakker refers to as “resource management institutions”, which include laws, rules and norms that are enacted by regulatory reforms passed by the state (Bakker, 2010, p. 145). This includes key reforms which have been discussed in the preceding causal explanations – those reforms, which at a most fundamental level, affect the transformation of property relations more conducive to a retail-oriented version for WSS.

The following causal explanations the contested property relations that define the struggle over water – i.e. private property versus common property, private property versus state property or state property versus common property – and in doing so illustrates neoliberal policy in practice including the target of such reform (i.e. specific property relations, namely private property). Put another way, though each of the preceding causal explanations are illustrative and indeed indicative of the primitive accumulation process in the WSS sector (or as Harvey [2003] would suggest, the process of accumulation by dispossession), effectively, it is under the following causal explanation where neoliberal targets are practically operationalized and indeed realised: where profit is maximized in the water sector (surplus extracted) and where money is turned into capital and accumulated (capital is realised). These neoliberal triumphs have a net effect on the character of resource governance institutions and mechanisms (what Bakker [2010] refers to as the decision-making process) but are also operationalised and reproduced by these governance institutions once these institutions themselves have been transformed. The targets of such reform include resource allocation, performance incentives/sanctions, user participation or what is often referred to as “stakeholder participation” and types of reform: marketisation, commercialisation and devolution/decentralisation.

Neoliberalism’s claim: An historical failure to recognize the value of water

Beder suggests (2001, p. 131) that the ideas that environmental wrongs are the result of a failure to recognize and consider the proper valuation (i.e. economic valuation) of the biophysical world and that the lack of appropriate property rights and market mechanisms attached to our relationship with the environment, are fundamentally conservative ideas. Anderson and Leal,

preeminent authors on the topic of free market environmentalism, touch on these ideas suggesting that values dictated by the market not only drive what takes place at the point of purchase but also guide the behaviours of owners of a thing/resource because these owners must always consider what others (i.e. potential consumers/buyers/customers) may or may not pay for a given thing/resource. Ascertaining value in a thing, according to free market environmentalists, is about tradeoffs. Anderson and Leal (2001, p. 16) suggest,

Making these tradeoffs ... is a simple matter of comparing the additional value of one use to the additional value of another. The calculus is simple; if the additional value of shifting a resource from one use is greater than the value in the use from which it is being taken, then reallocation will be prudent. In other words, if the marginal benefits are greater than the marginal costs, do it.

The prevailing value, however, in accordance with free market environmentalist theory is an economic value to which all other values and value systems are subordinate. Anderson and Leal suggest, then, that because owners have a stake in the market or even potential market (that which is speculative value which can be valorised into money/capital) they will undoubtedly look after that to which they have private rights. Value, then, perceived or otherwise, when measured in economic terms, is a fundamental component of extending free market relations to environmental resources such as water.

Anderson and Leal (2001, p. 10) ostensibly concede to the anthropocentric foundation of free market environmentalism:

We emphasize from the outset that this way of thinking assumes that the environment's only value derives from human perceptions. Under this anthropocentric conception, the

environment itself has no intrinsic value. People cannot manage natural resources for the sake of animals, plants, or other organisms because there is no Dr. Doolittle to “talk to the animals” and find out what is best for them. As long as humans have the power to alter the environment, they will do so based on human values – the only values that are ascertainable.

The UN and the Anthropocene

Anthropocentric tendencies indeed broadly characterize UN’s interest in environmental issues and this is evident as early as 1972 at the UN Conference on the Human Environment in Stockholm Sweden. The principal outcome of the conference was the Stockholm Declaration, which includes 26 principles outlining the UN’s early ideas of how its own mission and mandate relates to environmental protection. To be sure, the conference was significant for its attention to environmental concerns at a time where few countries, not to mention international organisations including international governing bodies as well as corporations, were taking up these concerns. The Stockholm Declaration was one of the first international proclamations of its kind to point to humanity’s mutual relationship with the biophysical world, paying specific attention to the human impact on the environment. As mentioned however, the emerging understanding of the environment can be characterized as being conceived through anthropocentric lenses. The preamble (UNEP, 1972) of the declaration itself reads, “Man is both creature and moulder of his environment ...” Similarly, the Report of the UN Conference on the Human Environment, Stockholm (UN, 1973, p. 64) suggests that it was widely accepted that “nature was man’s most precious possession.” Yet, in a striking admission the report submits, “The concept of ‘no growth’ could not be a viable policy for any society, but it was necessary to rethink the traditional concepts of the basic purposes

of growth.” The actual declaration (UNEP, 1972, ‘Principle 13’, p. 4) and report do indeed enclose environmental resources in broader discussions of economic and social development however, citing “rational management” imperatives and the need to adopt an “integrated and co-ordinate approach” to environmental governance issues. ‘Principle 14’ (UNEP, 1972, p. 5) of the declaration also suggests, “Rational planning constitutes an essential tool for reconciling any conflict between the needs of development and the need to protect and improve the environment. Though this declaration and report were published much before the establishment of a coherent Integrated Water Resource Management (IWRM) framework (see Agenda 21 1992 below), the report, (Recommendations 52, p. 18), refers to “integrated water resource planning and management” and to the “integrated planning and management of natural resources’ (Recommendation 68) in general. The proposed integrated approach here certainly represents a significant milestone in the historical trajectory of the concept – from the very beginning the UN was framing the idea of the environment as a resource input into the broader development agenda.

Characteristic of this anthropocentric worldview, such framing suggests that humanity has some mastery the bio-physical world. For example, the declaration (UNEP, 1972, p. 1) submits, “For the purpose of attaining freedom in the world of nature, man must use knowledge to build, in collaboration with nature, a better environment”, as if to suggest that humans actually do have the capability to alter and build a bio-physical reality. What’s more, the declaration (UNEP, 1972, p. 1) connects humanity’s purported power over nature to the undisputed benefits of capitalist development, namely “man’s capability to transform his surrounding, if used wisely, can bring to all peoples the benefits of development and the opportunity to enhance the quality of life.” In fact, the preamble goes on (UNEP, 1972, p. 1) to suggest that “environmental problems are caused by under-development” in much of the Third World. Though this contradicts much of the scientific evidence

tracking and assessing the deleterious effects of unfettered capitalist development on the bio-physical world over the last seventy years (particularly by way of climate change), and, in turn, on human settlements across the globe, the UN's framing of the environment in the context of the needs of the economy is evident from early on (Abramsky, 2010; Foster, 2015; Foster et al., 2009; Bond, 2012, 2013, 2015; Caffentzis, 2010; Harvey, 2003, 2005, 2010; Kelly, 2003; Klein, 2014; Murphy, 2008; Perelman, 2003). In fact, fourteen years before the Brundtland Commission Report, where the idea of sustainable development gained traction, the Report of the UN Conference on the Human Environment was already connecting environmental imperatives as goals that should (UN, 1973, p. 71) be "pursued together with, and in harmony with, the established and fundamental goals of peace and of world-wide economic and social development." It would appear that the fundamentals of sustainable development were being authored from very early on.

In the historical trajectory of UN environmental policy it was the Brundtland Commission report (1987) that most concertedly sought to square the circle of economic, social and ecological objectives in what is now widely accepted as the sustainable development framework. The Brundtland report contextualises individual greed as human nature, or, put another way, people pursue self-interest as a result of economic imperatives (acting rationally in economic terms). As such, the point is not to address this greed but rather regulate it within the current economic arrangements so as to bring it in line with a broader common (economic) interests. Furthermore, the Brundtland Report and the subsequent elaboration of sustainable development as a model of growth conceives of poverty and ecological degradation as a condition of lack of economic growth and/or absence of markets and therefore both can be eradicated by socially and ecologically conscious economic development. For example, the report (WCED, 1987, n.p.) notes, "Growth must be revived in developing countries because that is where the links between economic growth, the

alleviation of poverty and environmental conditions operate most directly.” In all its discussion of the collective concerns of the community, the report does little, however, to question the liberal propensity to situate the rational economic individual at the heart of all economic transactions.

Rather sustainable development, as set forth in such UN documents as the Brundtland Commission Report, not only seeks technological fixes to mitigate the pressures placed upon the bio-physical world as a result of economic imperatives, but it also looks to economic imperatives to drive humanity’s relations with the biophysical world. In other words, sustainable development initiatives seek to incorporate the “commons and natural resources” into circuits of “additional revenue” (WCED, 1987, n.p.). For too long, the report contends, “air and water have traditionally been regarded as ‘free’ goods, but the enormous costs to society of past and present pollution show that they are not free.” These costs then – social, ecological – so the argument goes, can be addressed by way of price mechanisms so that costs are either internalised by owners or passed along to consumers. Revenue can then be reinvested in measures to mitigate damage to resources and/or restore resources. Prices, the report contends, also act as incentives to reduce consumption and/or pollution.

All significant UN water policy moments subsequent to the Brundtland report would come to incorporate not only the sustainable development framework as a normative goal of development, but within this framework the promotion of the private sector as the panacea to social and ecological objectives. If the MDGs of 2000 were to become the model for human development it would follow, along the UNs line of argument, that the development of a robust private sector, and all of the market qualities that go along with it, in the water sector is part of the normative trajectory related to water and the arc of human development. The MDGs are, perhaps, the foremost initiative – including the two previously declared water decades – that brought much

awareness to the state of the world's water resources and ailing and inadequate infrastructure. The four major water related MDG's include a broad range of topics that are encapsulated by four major themes: (i) water, human rights and politics; (ii) water, institutions and financing capacity; (iii) water services and infrastructure, and, (iv) water and environment.

The UN Millennium Project Task Force on Water and Sanitation structured its activities and research (UNDP, 2005, p. 1) around two key questions: (i) "what will it take to expand water supply and sanitation coverage dramatically and sustainably?" and, (ii) "how can the use of water as a resource be optimized to achieve Millennium Development Goals?" The three year project concluded that the MDGs related to water would not be realised unless 5 commitments were met and 10 "critical actions" taken. Of the 5 commitments one was to deregulation and the strengthening of property rights to individuals: to "deliberate activities to create support and ownership for water supply and sanitation initiatives ..." (UNDP, 2005, p. 1). Though the commitment emphasizes the need to do this in order to support "women and men in poor communities" no attention is paid to the root causes of poverty whatsoever and therefore little attention is paid to the unequal power relations that too often define top-down development projects.

Of the ten "critical actions" set forth by the Millennium Development Task Force on Water and Sanitation many relate to or strongly support, increased commercialisation of WSS. Action 3 (UNDP, 2005, p. 2), for example, calls for "investment and reforms." If the majority of WSS around the world today are publicly owned, as is the case (95%), this would imply broad sweeping reforms of public sector water services. Action 5 (UNDP, 2005, p. 2) promotes reregulation by increased community involvement, yet without specifying whether it should be the public or private sector as the main provider. A simple call to "empower local authorities and communities with the authority,

resources and professional capacity required to manage water supply and sanitation service delivery” does little to address inequity when it comes to the ownership and control of water. Action 6 (UNDP, 2005, p. 2) speaks to the UN’s commitment to pricing water services and their support of the private sector in this regard, demanding, “Governments and utilities must ensure that users who can pay do pay in order to fund the operation, maintenance, and expansion of services – but they must also ensure that the needs of poor households are met.” Action 8 (UNDP, 2005, p. 1) calls for an increase in public private sector partnerships, noting, “Governments and their civil society and private sector partners must support a wide range of water and sanitation technologies and service levels that are technically, socially, environmentally, and financially appropriate”.

Several years later the UNDP 2008-2011 Strategic Plan concretized the Millennium Development Task Force’s vision, suggesting that private enterprise are essential to meeting MDGs. The vision is clear in this objective (UNDP, 2008, p. 9), noting,

There is substantial convergence of view on the critical development actions needed to achieve the MDGs and respond to [the] global challenges... That convergence emanates from the Millennium Declaration and the 2005 World Summit. The necessary actions include: the promotion of economic policies that aim at macroeconomic stability and inclusive growth; good governance; vibrant private enterprise; the active political, economic and social participation of all citizens; the promotion of gender equality; and the scaling up of investments in essential infrastructure and social services.

The 2002 Johannesburg Summit, the World Summit on Sustainable Development, displayed a continuance of this pro-privatisation vision legitimizing the private sector as a “major player” in the development of local, national and the global economy. According to Kofi Annan (2002),

Another vital test will be the World Summit on Sustainable Development in Johannesburg this September – an opportunity to rejuvenate the quest to build a more sustainable future. The Summit must bring the world together and forge more cohesive global partnerships for the implementation of Agenda 21. It must send out a message that sustainable development is not only a necessity, but also an exceptional opportunity to place our economies and societies on a more durable footing. On all these challenges, the United Nations will depend increasingly on the constructive engagement of civil society. Our ability to improve the lives of the men and women of this planet will depend on the ability of all sectors of society to move beyond ideology, and work together in the search for pragmatic solutions.

Despite Annan's calls for ideological neutrality, the UN is in the business of ideological obfuscation. Around the time of the summit Nitin Desai (2002), UN Under-Secretary-General for Economic and Social Affairs, emphasized the UN's important role in shaping mental conceptions, noting,

For too long, environmentalists and industrialists alike have seen a false trade-off between environmental protection and economic growth. We must introduce a new way of thinking – one that sees economic and environmental health as interlinked, mutually supportive goals.

The UN would continue to frame the importance of the private sector in WSS for years to come in various documents but none so plainly as the World Water Development Reports.

UN anthropocentrism, years in the making: Valuation policies pre-WWDRs

Market centric environmentalist principles of value are reflected in the UN's decades-long struggle to promote the idea of the economic valuation of the environment but it really took root in relation to water at Mar del Plata and was later fully articulated in the now infamous Dublin Principles, where water was unequivocally declared an economic good. It was at Mar del Plata where the intentions of development needs in relation to water were clear: water is to be considered "man's heritage". One of the main contributions of the Mar del Plata conference beyond contextualising water governance in terms of water scarcity as previously discussed, is the promotion of the assessment of water resources. The report calls for countries to adopt scientific evaluations of water resources in water management in order to track changes in supply and to adopt the appropriate management strategies to mitigate negative changes.

The Mar del Plata report notes the difficulty in attaching values, particularly monetary values to water as it suggests (UN, 1977, p. 26) that countries should,

Recognize that while monetary values are often difficult to assign to the benefits of water as a recreational, cultural, aesthetic and scientific resource, the benefits are none the less real and substantial, and should be taken into consideration in the environmental assessment of development projects.

This of course would be particularly prudent for demand driven supply models, of which the UN would eventually come to support (as opposed to a general/universal supply model). Part of this proposal is also to begin evaluating water sources. For example, the Mar del Plata report suggests (UN, 1977, p. 12), "Because water is a valuable and scarce resource deliberate administrative policies should be established, such as measuring supplies, licensing diversions, charging for water and

penalizing wasteful and polluting acts.” Some of the neoliberal policy reforms beyond valuation that are suggested here will be considered in further detail later, but for now, the important piece to consider is that valuation precedes such reforms as the Mar del Plata report quite rightly notes.

Though the monetization of benefits that flow from water is an extremely difficult endeavour, the Mar del Plata report calls (UN, 1977, p. 31) for greater focus on demand management, “without causing undue hardship to poorer sections and regions of the community.” This includes an evaluation of water-tariff policies suggesting (UN, 1977, p. 31), “Water charges should [go] as far as possible to cover the costs incurred unless Governments as a policy choose to subsidize them.” “Pricing and other economic incentives ...” according to the report (UN, 1977, p. 11), “should reflect the economic cost of water ...” and “should be used to promote the efficient and equitable use of water.” Some of the Mar del Plata conference participants go as far as to suggest (UN, 1977, p. 104), “that water as a natural resource had a strategic nature and a commercial interest for all countries; it was a determining factor for encouraging economic independence and water management was consequently a political tool for encouraging development and political progress.”

Even as far back as the Mar del Plata conference the UN was calling for private sector participation in the water sector. The report recommends (UN, 1977, p. 73) “that immediate action be taken to develop the appropriate services, utilizing the skills and resources available in both public and private sectors.” Private sector participation would be emboldened by Mar del Plata’s promotion of market-based instruments such as valuation and pricing to manage water.

In accordance with the valuation prescriptions proposed in the Mar del Plata report, one of the principal reforms suggested by the 1990 New Delhi Statement is the adoption of cost recovery

measures, which, necessarily entails the transformation of citizens into consumers or customers. As such, alongside the Government and donors, such a reform provides a stream of additional revenues. In one of the more significant proclamations of the four principles within the New Delhi Statement, No. 4 (UNGA, 1990, p. 6) notes, “there must be widespread promotion of the fact the safe water is not a free good.” Though the statement recommends that prices “reflect local socio-cultural and economic conditions” a broader political economy approach that would assess the effects of such fundamental transformation of WSS is absent – a reoccurring omission in many reports to come. The New Delhi Statement called for the introduction of ‘efficiency’ measures as well as a call to mobilize funds from “existing and new sources, including governments, donors and consumers” (UNGA, 1990, p. 3). To be ‘cost effective’ would require ‘cost recovery’ measures. And, perhaps in one of the strongest marketisation proposals to date, the statement argues, “Appropriate charging mechanisms must be adopted, which reflect local sociocultural and economic conditions” (UNGA, 1990, p. 7).

1992 was indeed a milestone year for UN water policy. The Dublin Statement was formulated at the International Conference on Water and the Environment, Dublin, Ireland – a preparatory session to the Earth Summit in Rio. The Dublin Statement is regarded as the first global recognition that water is an economic good, arguing that water waste and continued degradation of the environment is due to the failure of recognising the economic value of water. For proponents of commodification and privatisation, the Dublin Statement represents the vindication for the commercialisation of WSS.

The Dublin Statement reads as follows:

Principle 1: 'Freshwater is a finite and vulnerable resource, essential to sustain life, development and the environment

Principle 2: "Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels'

Principle 3: 'Women play a central part in the provision, management and safeguarding of water'

Principle 4: 'Water has an economic value in all its competing uses and should be recognized as an economic good'

(UNEP, 1992)

The Dublin Statement supplements Principle No. 4 with the caveat that "within this principle, it is vital to recognize first the basic right of all human beings to have access to clean water and sanitation at an affordable price." The "basic right" in this statement, however, is not referred to as a "human right" as it was previous to the New Delhi Statement, which may or may not be legally recognized. What's more, this basic right is contextualized on the basis of an "affordable price" not a non-retail relationship such as the case with universal provision.

Likewise Agenda 21 (UNSD, 1992) conceives of the need to recognise the economic value water in the context of "water security" at a time of pressing water scarcity and this, as it argues, requires capacity building measures which would include the "the enhancement of involvement of the private sector, where appropriate, in human resource development and provision of

infrastructure.” Suitably, as Agenda 21 (UNSD, 1992, n.p.) states, “Water should be regarded as a finite resource having an economic value with significant social and economic implications reflecting the importance of meeting basic needs.” Further, governments would need to “introduce suitable cost-recovery mechanisms, taking into account efficiency and equity through demand management mechanisms” and encourage “financing of services” further deregulating water in this sector and promoting in its place “community ownership and rights to water-supply and sanitation facilities.”

Agenda 21 contributes to developing a strategic policy framework for all facets of commercialisation including cost recover measures. Article 18.16 (UNSD, 1992, n.p.) of states: “A prerequisite for the sustainable management of water as a scarce vulnerable resource is the obligation to acknowledge in all planning and development its full costs.” And although the UN does not support an all-encompassing all users pay system, noting (UNSD, 1992, n.p.), “actual charging need not necessarily burden all beneficiaries with the consequences of those considerations”, still, they note that “charging mechanisms should ... reflect as far as possible both the true cost of water when used as an economic good and the ability of the communities to pay” (article 18.16). Chapter 8 of Agenda 21 develops a strategic framework for the increasing commercialisation of environmental goods and services, including WSS. Article 8.32 (UNSD, 1992, n.p.) encourages Governments to reorient their water policies adopting economic instruments and market mechanisms. In doing so Article 21 suggests reducing or completely removing subsidies effectively reforming incentive structures conducive to a business climate. This includes the creation of markets and pricing mechanisms as advised in Article 8.32. These reforms should all be done in cooperation with the private sector as stipulated in Article 8.33. Article 8.37 concedes that there is a lack of conceptual and theoretical understanding of pricing and therefore what is necessary is a coordinated effort between Government and business, including “industry, large enterprises [and]

transnational corporations ...” to educate and examine the retail oriented policies towards commercialisation and marketisation.

Certainly the Dublin and Rio Conferences (Agenda 21) were significant for redefining water as an economic good. In fact, water policy expert Biswas noted of their outcomes, “The day when water could be considered to be a free good that would be automatically provided by the governments at very low or not costs is gradually, but most certainly, coming to an end.” In addition, not only did these meetings serve as fora where the proponents of commercialisation could meet and form new partnerships (the neoliberal policy networks Global Water Partnership [GWP] and the World Water Council being two significant examples) but the policy pieces developed at these meetings also lay the groundwork for like-minded policy experts and politicians that would take these policy prescriptions back to their respective constituencies. And so it is WWDR1 that encourage the “The formulation of national policies that include an economic approach [which] is the first step towards proper valuation of water” (UNESCO, 2003, p. 342).” In other words, WWDR1 suggests that incorporating an economic measure within the overall valuation of water is the “proper” approach and that institutionalising this on a national scale is necessary for the success of this market-oriented approach to WSS.

Valuation and the influence of the WWDRs

More than any of its three counterparts WWDR1 commits a significant amount of discussion towards the valuation of water, addressing valuation by way of a complex set of challenges that are to be measured and addressed by immediate and long-term indicators. WWDR1 in effect sets the precedent for the succeeding WWDRs in terms of establishing an economic

valuation for water resources and services. The report suggests that because water has been widely recognized as a free and abundant resource users have had (UNESCO, 2003, pp. 327-328) “very little incentive to use water efficiently and not waste it.” WWDR1 suggests such thinking extends to the way in which water-related services are considered too – very little attention is given to the externalities of providing water services, including extraction, depletion, transfer, treatment and disposal (UNESCO, 2003, pp. 327-328). Yet, because attaching an economic value to water is such a contentious policy reform, very few societies, the report argues, have the political will to address the growing cost of operation and maintenance, not to mention the exorbitant cost of extending services.

WWDR1 argues that attaching economic factors to environmental considerations allows for a more comprehensive sense of the cost and benefits of decisions made in regards to important environmental resources (thus taking stock of externalities), those which may or may not have been considered without the economic tools/instruments available. This is particularly important in the case of freshwater ecosystems, which, according to WWDR1 (UNESCO, 2003, p. 149) are “assets that underpin such a wide range of human activities.” In other words, and this speaks to the UN’s broader conceptualisation of water as a production input into so many areas of human life, in order to “properly” value other aspects of human activity, because these all in so many cases begin with water, it is necessary to establish an economic value of water.

WWDR1 makes the point (UNESCO, 2003, p. 328) that “The concept of water valuation is definitely not new” and that “Communities and indigenous people have assigned religious and cultural values to water for generations.” Yet what is new, is a neoliberal concept of valuation, and with it, a radical revaluation of the qualities of water. Indeed, as WWDR1 notes, the value of water and all its uses has been “socially established” and that “[t]raditional management practices often

reflect these socially determined norms for water allocation, demand management and sustainable practices”; yet the neoliberal model is ushering in a host of reforms that fundamentally re-orders value systems by institutionalising and codifying neoliberal reform.

Building on this idea of the “proper valuation” of water, Chapter 13 of WWDR1, entitled, “The Value of water: Definitions and perspectives” refers to groundwater as a common property resource; yet in doing so notes that the “Lack of awareness and understanding of aquifer systems, combined with the commons property nature of the resource, perpetuates chronic undervaluation of the resource base” (UNESCO, 2003, p. 331). What is significant to this document and that which will come to shape UN water policy, is the fatalistic interpretation of problems with common property resources such as water and its purported undervaluation, which often infer the ‘tragedy of the commons’ metaphor as discussed in Causal Explanation One. For example, the report notes (UNESCO, 2003, p. 333), “it has been increasingly realized that non-exploited water resources have many of the characteristics of a common good because no one can be excluded from using it in its natural state.” Similarly, WWDR1 suggests (UNESCO, 2003, p. 331) that because consumers aren’t always necessarily aware of the “full value of the resource”, in other words, included in this framing is the economic value, they misuse or overuse water. Such generalisations are inaccurate as many community-based water arrangements govern groundwater by way of informal common property arrangements (i.e. social exclusion as potential punishment or shame and guilt etc.).

Recognizing the controversial nature of assigning economic values to water, WWDR1 rationalises the three-pronged approach to sustainable development adopted by the UN following the Brundtland Commission Report. It is argued here that sustainable development would capture the “full value” of water suggesting that there are interdependent implications of water as a

social/cultural, economic and environmental good. As such, water should be grouped within three clusters (UNESCO, 2003, p. 332),

1. Water is a vital common resource as it covers basic human needs and is required to sustain most life support systems.
2. Water, in its productive capacity, helps to maintain economic activities and it has a fundamental role in managing other resources.
3. Water provides both use and non-use benefits; it can generate taxes, derive products for consumption and help create employment of various kinds.

Conforming to governance measures proposed under Agenda 21, WWDR1 contends that as a result of decentralisation the full-value of water is beginning to be recognised (UNESCO, 2003, p. 339),

With users becoming more involved in managing water resources, the concept of management transfer has been a central theme in valuing water. Programmes that transfer existing government-managed water systems to private firms, financially autonomous utilities and water user associations, are being implemented in many countries.

With decentralisation continuing apace WWDR1 notes that private entities are “keen to establish bankable assessments of resources and appropriate charging regimes.” Here we come full circle to the neoliberal idea that water becomes merely a resource input in the broader production process and therefore appropriate economic instruments, measures and institutions are required to facilitate the increasing marketisation of water. Much of this, WWDR1 argues (UNESCO, 2003, p. 339), requires broad sweeping institutional reform, not only as in the case of decentralisation but also in the economic arrangements subsequent to decentralisation that are developed to support the

economic valuation of water (i.e. creating and facilitating enabling environments), some of which will be explored below.

Private sector participation is made sustainable by promoting retail oriented service delivery which provides incentives to private firms for getting involved in the first place. This requires a complex mix of valuation, pricing and cost recovery, all of which WWDR1 supports and indeed encourages. WWDR1 submits (UNESCO, 2003, p. 333), “Better water resource management requires decisions based on economic efficiency, social equity and ecological sustainability ...” Undervalued or improperly valued water, according to WWDR1 (UNESCO, 2003, p. 342), has the ability to negatively impact on economic growth and expansion, and for this reason the private sector, so the argument goes, needs to be part of a holistic participatory approach to water governance. Up until this point, according to WWDR1, the economic aspects of water resource management have been subordinated to environmental and social aspects. WWDR1 proposes that these aspects of water management should be considered not in silos but rather together so that (UNESCO, 2003, p. 333) “valuing water is bridging the concern that water uses must be able to meet different social and environmental functions.” To address this purported governance failure WWDR1 emphasises throughout its analysis that market mechanisms are fundamental components for a “business management” strategy that will correct the skewed valuation of water and its services. WWDR1’s promotion of private sector involvement has already been discussed, but even before this is possible, the institutional and administrative arrangements that would allow for such participation must be in place. Key to this approach is the valuation of water, including pricing and cost recovery.

Market environmentalists promote cost recovery on many levels. First, attaching a price to WSS incentivises users to monitor their use thus meeting broader conservation objectives. Second,

placing a tariff or price on the delivery of WSS transforms universal provision (based on progressive taxation) into an individual retail oriented model of delivery. Third, pricing may incentivise the private sector to invest in WSS as full cost recovery models look to recoup costs thereby providing an opportunity for profitability within the water sector. WWDR1 cites Agenda 21 in its support of cost recovery measures but notes that cost-recovery has been a controversial practice in both residential and irrigation management services, where it has been implemented. Even still WWDR1 argues (2003, p. 336) “The need to move towards ‘cost recovery’ in providing water-related services ...” and there is a great effort within the report to standardize this shift (UNESCO, 2003, p. 509):

There is a growing acceptance of the need for full cost recovery in water services, but this must be done in a way that safeguards the needs of the poor. Valuing water has become critical to optimizing investment and obtaining viable private sector participation ...

As WWDR1 concludes (UNESCO, 2003, p. 342), “valuing water will require policies that can help realize normative reforms and well-prepared introduction of participatory and market-based instruments to meet the broad objective of sustainable water resources management.” Clearly, marketisation of WSS is a normative goal of WWDR1.

WWDR1 develops a distinction between the value of water (its use-value to users), the price of water (charges accrued to users) and the cost of supplying water (capital and operating costs etc.) (UNESCO, 2003, pp. 326-327). Though it may be useful in a normative and conceptual sense this distinction does little to separate WWDR1’s support for the pricing of water, which, according to the report, is an essential part of the valuation of water – in other words, attaching an economic value to water in order that it may be priced. This, ultimately, is an argument that separates the corporate from non-corporate conception of the water commons, a distinction central to this

analysis. The economic valuation of water is, indeed, at the core of WWDR1's proposed (UNESCO, 2003, p. 339) reforms:

[G]iving water a price helps to define how far we are from achieving the Millennium targets, and what economic efforts are needed. It helps to define a framework for sharing water in which all water users are fully responsible. It is an efficient tool, yet it has to be used with caution if water management is to promote the human right to water.

It is widely known that because of a lack of connection the poor typically pay more for water from small-scale usually private local vendors. WWDR1 refers to this situation as a “disturbing fact” but one that can be addressed by a targeted valuation. Targeted valuation explicitly includes (UNESCO, 2003, p. 342), the “introduction of participatory and market-based instruments ...” that will purportedly assist in meeting “the broad objective of sustainable water resources management.” That is, cross subsidization, where the rich pay more, will meet the social (subsidization of user fees) and environmental (externalities associated with provision) while the economic cost of water provision (capital cost, maintenance and operation etc.) are also met. Yet again, the economic valuation of water is fundamental (UNESCO, 2003, p. 342) “towards proper valuation” in terms of the formulation of a sustainable national water provision strategies.

Following up on this point, WWDR2 argues that creating the infrastructure that allows for the “proper” valuation of water contributes to a higher degree of “allocative efficiency” whereby “water is allocated to the highest value uses ...” On the other hand the report is sure to add that such a system only works if there are mechanisms in place to address market failures of not providing for the poor and potential neglect towards ecosystems. WWDR2 concedes (UNESCO, 2006, p. 400) that “[b]ecause of the unique characteristics and socio-cultural importance of water,

attempts to value water, or more specifically water services, in monetary terms is both difficult and, to some people, inappropriate.” WWDR2 addresses the ongoing rhetorical challenge of assigning an economic value suggesting that water’s economic value is often overlooked because water supply services have been considered a public good for so long. It also recognizes that valuing water remained a controversial issue at the time of the report pointing out critical accounts that an economic basis to water is insufficient when weighing up its social, cultural and environmental aspects. Even so, WWDR2 (UNESCO, 2006, p. 400) adds, “Nevertheless, economic valuation ... is an increasingly important tool for policy-makers and planners faced with difficult decisions regarding the allocation and development of freshwater resources.”

The preface to WWDR2 supports economic valuation with the suggestion that (p. 402) “the essential value of water is universally recognized: without water there is no life...” Furthermore, water is a (UNESCO, 2006, p. 402) “defining element” in all respects, a (UNESCO, 2006, p. 403) “physical, emotional and cultural life-giving element ... more than just an economic resource.” Moreover, because of (UNESCO, 2006, p. 403) “increasing competition between water users” water must be seen in its politicised context and thus recognise the environmental issues as well as the social concerns involved. Of these, most notably according to the report, are gender-related concerns. WWDR2 recognises, then, that the way in which people conceive of and value water is highly influenced by cultural and environmental contexts (UNESCO, 2006, p. 405). Yet, though WWDR2 recognises the importance of water as a social, cultural and environmental good, it effectively prioritises the economic aspects of water (i.e. according to WWDR2 water is an economic good). Indeed WWDR2 points to the controversial Dublin principles to suggest that water does have an economic dimension and in this regard is indeed an economic good. Despite the broad debate and resistance to this idea, WWDR2 claims that this is a shared perception as there is a

(UNESCO, 2006, p. 401) “growing consensus on the need to maximize benefits across a range of water uses.”

WWDR2 conceptualises the question of valuation from the outset of its chapter on Valuing Water, implying that because water, like any other resource that is part of productive process, creates commodities then the value of water must be taken into account and measured. There is a need, so the argument goes, to analyse and assess water in all its diversity if it is to be managed sustainably and this includes its economic dimension.

On another level, though it is of utmost importance to consider the social, cultural and environmental aspects of water, WWDR2 argues that the economic dimension of service delivery must also be considered. The report notes that meeting water needs – i.e. providing reliable and safe goods and services including improving old or constructing new infrastructure etc. – comes with a financial cost and it is essential that water policy address this issue. Pricing and cost recovery are policy approaches that address the costs of providing service. WWDR2 suggests that the idea of pricing has been given more prominence, not only because of the purported institutional failure of the state and therefore a need for an alternative model of provision (as addressed in Causal Explanation Three), but also because of the general perception of water. There is (UNESCO, 2006, pp. 413-414) an “increasing tendency to define water as a commodity (rather than a public good) and (a) ... perceived need to use charging to restrain water use as well as to recover costs.”

WWDR2 further explains (UNESCO, 2006, p. 414),

Although previously, water was widely regarded as a public good to be made available to all without charge and financed by from general public revenues, increasingly, policy is changing to one of full cost recovery, except where poverty is an issue. Charging each

customer according to the cost each imposes on the system is seen to be consistent with both the criterion of the sustainability and the principle of fairness. Because of the importance of water for health and well-being, less well-off customers may be charged according to ability to pay, rather than full cost.

Even so, the report does little to address the situations where individuals and families are forced into making trade-offs between marketised socially necessary goods and services. Indeed, as the report quite rightly notes, (UNESCO, 2006, p. 401) “the value of water varies for different users depending on the ability to pay, the use to which the water will be put, access to alternative supplies, and the variety of social, culture and environmental values associated with the resources.” This does not address growing water inequality due to economic valuation. Developed countries are increasingly moving towards a tariff structure that increasingly reflects the ‘true cost’ of consuming and providing water thereby entrenching water inequality. Cost recovery serves several purposes according to WWDR2. Charges are a source of revenue for a service provider, thus satisfying economic incentives; but charges also encourage efficient (highest value) use of water therefore curbing over-consumption thus addressing the “parallel goals of social and environmental sustainability” thereby satisfying the three pillars of integrated water resources management: economic, social and environmental sustainability (UNESCO, 2006, p. 406).

This is a controversial approach, particularly in poor countries where, according to WWDR2, there is “difficulty” in meeting the water and sanitation needs of the poor once services are priced, particularly when a private service provider is involved and cross-subsidisation arrangements are unsuccessful or discouraged. Poor countries remain in a precarious situation where, according to WWDR2, users are “unwilling or unable to pay for water services” (UNESCO, 2006, p. 401) not to mention the upfront capital costs of service extension. Furthermore, cross-

subsidization programs, like those promoted by the World Bank, have, according to WWDR2, left both water resources and systems in a particularly untenable position as they rely on stable ongoing investment in an uncertain market environment. WWDR2 suggests various ideas to address the long-standing issue of the unserved when private operators are involved and suggests various options. For example, one such option, referred to as differential pricing, is when the service providers allocate a minimum amount of service with rising costs for consumption over and above the base level (UNESCO, 2006, p. 96). This still is the marketisation of WSS and operates on a cost recovery basis as evidenced by the reports own assertion that there is reluctance on behalf of private operators for such approaches as ‘lifeline tariffs’ tend to encroach upon their revenues. This approach is, however, made more viable when governments compensate or subsidise private providers to do business. WWDR2 argues that the purported problems (i.e. lack of incentives) of cross-subsidization noted above can and should be addressed by robust local governance processes. The problem, according to WWDR2 (UNESCO, 2006, p. 97), “does not lie with the subsidies but with governance processes that do not allow for transparent and effective negotiation over the tariffs, subsidies and taxes.” WWDR2 effectively quashes the overwhelming evidence and disdain for such approaches (see the voluminous publishing of David Hall and Emanuele Lobina for a detailed analysis of this topic [recommendations: 2001; 2003. 2006. 2007, 2009]).

Much of the discussion on water evaluation in WWDR3 bears traces of the tragedy of the commons parable. Beyond achieving much needed financing WWDR3 suggests that a regulatory framework that includes the economic valuation of water would counter the “first-come, first-served sector basis” ethos that most often informs the allocation of water. Valuing water as such “provides a voice for nature in allocation decisions” (UNESCO, 2009, p. 92) thus not only meeting financial needs but also environmental objectives. Commenting on how financial objectives complement

environmental imperatives WWDR3 argues (UNESCO, 2009, pp. 157-158), “(w)ater, like any resources, when it is scarce or requires scarce resources to supply it, rises in economic value.”

Assertions such as this, reify the neoliberal process in marketisation by disregarding this process as a social one. Much of the analysis in WWDR3 in regards to valuation could be perceived as the natural course of ecological processes and history for that matter, instead of the strategic social and economic enclosure of WSS (this general argument to be expanded in the conclusion).

WWDR3 points out that the pricing of water is often associated with the capital outlays of water infrastructure (i.e. the physical infrastructure as well as the maintenance and general operations. The report explains that rarely is the resource itself priced and if and when it is it is “grossly underpriced” and this undervaluation leads to price distortions and, ultimately, “encourages waste and use of water for low-value purposes in all sectors ...” (UNESCO, 2009, p. 14; p. 61).

Where charges barely meet the cost of operation and maintenance WWDR3 argues this contributes to “widespread non-functionality” (UNESCO, 2009, p. 9). Even where prices have been established WWDR3 (UNESCO, 2009, p. 62) suggests that this has not been enough because the “long history of water as a public good means that water prices have been heavily subsidized by tax funded distributions from individuals and corporations that may not be direct beneficiaries of the services provided.” Such comprehensive pricing schemes proposed by the WWDR3 shift the value of water from a public good where access is facilitated by way of universal provision to an economic good where access is facilitated by a user-pay model.

WWDR3 suggests that pricing mechanisms can be “strong drivers of positive change” and “important drivers of reform”, towards the economic valuation of water (UNESCO, 2009, p. 61).

The report prescribes pricing mechanisms to water once allocation has met social and environmental water objectives so that additional water will be allocated according to it “highest value to society”

(UNESCO, 2009, pp. 157-158). Even so, whilst this may seek to satisfy sustainable development objectives (criticisms of sustainable development set aside for the moment) this does not address the social decisions that make up what constitutes the “highest value” according to society (a point elaborated in the conclusion of this thesis). In fact, much of the WWDR3 focuses on policy strategies that would create an enabling environment for capital to thrive in the water sector, or at very least would encourage market sensibilities amongst state-run water actors/entities as it relates to decision regarding WSS. For example, the report’s support of payments for environmental goods and services would contribute to the user pay principle and also create “a favourable investment climate of sound management accountability and good governance within the water sector” (UNESCO, 2009, p. 241). In this sense the economic objectives under the sustainable development agenda supersede those of social and ecological objectives. WWDR3 argues that the creation of a functioning market, which can and should be promoted by governments, addresses traditional thinking: that water is provided “‘free’ by nature” (UNESCO, 2009, p. 263; p. 286). In line with market environmentalist thinking, the creation of a market introduces economic incentives where “collecting money from water users and paying those providing the resource ...” encourages “efficient and sustainable delivery of watershed services” (UNESCO, 2009, p. 263; p. 276).

Pricing and payments are part of WWDR3’s ‘holistic approach’ to water management that incorporates “sustainable cost recovery” (UNESCO, 2009, p. 9). According to WWDR ‘sustainable cost recovery’ includes “securing all three of the basic source of revenue for water and sanitation services (tariffs, taxes and external aid)” (UNESCO, 2009, p. 65). Though WWDR3’s policy proposals may not necessarily translate into the full privatisation of WSS, they do encourage the marketisation and corporatisation of what was once either goods delivered under a public good/universal coverage ethos or traditional or customary rights (e.g. indigenous rights

arrangements). The marketisation and corporatisation of WSS represents a component piece of the broader neoliberal enclosure movement. On the whole WWDR3 promulgates a model of governance that not only incorporates market players but also promotes management mechanisms that are ever more compatible with a market in water services (i.e. marketisation).

WWDR4 takes up the issue of valuation arguing that “water resources mismanagement and the political neglect of water issues” are a result of the failure to recognize the “full value of water.” WWDR4 addresses (UNESCO, 2012, p. 359) the need for recognizing the “full value of water” on the basis of the supposed increasing need to seek alternative investment schemes that reflect the need for stability in operations. That is, recognizing the full value of water, so the argument goes, incentivises sustainable water infrastructure (i.e. water services that meet social and environmental objectives but also economic imperatives too). What’s more, and this is consistent with the methodological individualist tendencies of the free market environmentalist approach that base policy on individual instead of collective rationale, “valuation is useful for determining what economic incentives are required to align individual behaviour with collective targets and objectives.” Within such a policy framework moral and ethical imperatives associated with public health objectives are superseded by economic imperatives that shape individual behaviour. WWDR4 argues (UNESCO, 2012, p. 537), “the benefits of water, when properly valued show that projects aimed at improving access to basic sanitation and safe drinking water make economic sense.”

Disproportionate emphasis is directed towards the economic aspects of water development within WWDR4, this in the backdrop of incorporating WSS into a green economy framework, which, according to WWDR4 has (UNESCO, 2012, p. 311) “serious implications for water infrastructure” including “direct valuation of natural capital and ecological services as ... [these have] ... economic value.” As such, discussion on the delivery of water services shifts towards

discussions of allocation that are more in line with private rights and pricing than it does any form of collective or common rights to WSS. In this regard, proposed delivery models for WSS are much more aligned with demand driven outputs than any model of universal supply.

One of the sections in the WWDR4 Overview Report addresses, “The impact of unvalued water on future uncertainties.” Under this heading the report (UNESCO, 2012b, p. 13) notes,

Given that increasing pressures on water resources are leading to a shortage of water to satisfy all needs, choices must be made about how to share, allocate and reallocate increasingly scarce water within sectors, from one user group to another, or between sectors.

This, of course, is the classic tragedy of the commons argument: that in the (WWDR4, 2012b, p. 13) “absence of proper valuation water is prone to suffer political neglect and mismanagement” is a standardised neo-classical reaction to water inequality. In fact there is considerable discussion within the report about collective participation over commons goods in relation to common goals and objectives with water policy and this within a community framework; however, WWDR4 contextualises community involvement in terms of an increasingly commercialised and corporatized environment of infrastructure development and service delivery. In fact, genuine community models of development where non-corporatized/-commercialized common or collective rights prevail, are deemed unsustainable. For example, in the case of groundwater, which WWDR4 (UNESCO, 2012, p. 576) refers to as “common water resources”, community-based projects that have not undergone reform are deemed “untenable” due to their inability to raise the necessary funds to operate and maintain the service. This, indeed, is the case of course if one is to assess such projects on the basis of a corporatized model of delivery; in other words, WWDR4’s conclusion is foregone. The failure to adopt measures that recognise the “full value of water” is considered (UNESCO, 2012, p. 534) to

be one of the “root causes of water resources mismanagement and the political neglect of water issues.”

It is on these grounds that the WWDR4 (UNESCO, 2012, p. 13) notes the necessity of “valuing” the full range of socio-economic benefits of water, and this must necessarily come by way of the necessary economic value of water, as this is a “necessary part of effective water management.” This economic value should be reflected in prices for water which would be regulated by public authorities and mindful of the broader goals of the satisfaction of “basic needs and to safeguard public health.” This is an extremely narrow vision of water equality (i.e. basic needs) and sustainability (i.e. simply safeguarding public health rather than guaranteeing it above all other societal priorities, including growing and economy, even if the priority is a green economy).

WWDR4 repeatedly emphasises institutional reform in the context of a purported need to open up and increase investment in water while making the “economic case for investment in water”, which, among other things, includes the valuation of water. Institutional reform, a key focus of WWDR4, is the bedrock for this shift to demand driven delivery. “Institutional arrangements...” as the WWDR4 (UNESCO, 2012, p. 570) notes, “define who controls a resource and how it is used.” In this sense, institutional arrangements create our reality around water in relation to each other by way of rights, as discussed in Causal Explanation One. In other words, institutions (UNESCO, 2012, p. 571) determine “who can use which water, how much of it, when, and for what purpose.” WWDR4 praises many examples of institutional reform throughout the report, such as the National Water Initiative in Australia, which has encouraged the commercialisation and corporatisation of local water services. Similarly, the report points (UNESCO, 2012, p. 571) to the Kenyan example which has included,

The separation of the management of water resources from the provision of water services; the separation of policy-making from day-to-day administration and regulation; the decentralization of functions to lower level government agencies; and increased involvement of non-government entities in the management of water resources and in the provision of water services.

Success in terms of implementing institutional reform has been mixed for many reasons, but failure, as viewed by WWDR4, is often a result of “structural limitations of national economies”; this, according to the report, includes failure to consider not only the legal and institutional frameworks but also the public’s reaction to various reforms, particularly as the public’s perception to market reform has been overwhelmingly negative. Though this may be the case, WWDR4 argues (UNESCO, 2012, p. 277) that due diligence should be given to social and ethical considerations but, even so, it is “vital ... that the case for reform be adequately stated in economic terms.”

It is these kinds of reforms upon which the success of increasing commercial funds in water hinges. “Institutional reform ...” the report notes (2012, p. 575), “... will have a greater chance of success if it has economic rationality; political willingness and sensitivity; and pays attention to social factors and stakeholders.” In line with the overall support for demand management within WWDR4, the principal recommendation of the report (2012, p. 564) is for water providers (be it public or private) to raise tariffs on water users, “Closing the financing gap in the water sector requires the application of a range of instruments including higher collection rates, more efficient service provision with lower costs, more targeted subsidies, and higher user charges.” WWDR4 argues (2012, p. 823) that tariffs that reflect “the true value of water and covers the cost of services provision” are essential. This is consistent with the report’s promotion of market mentalities as it relates to allocation.

In the context of the vagaries of the market and therefore the need for public oversight and regulation, WWDR4 (UNESCO, 2012, p. 284) notes,

Using water values to inform management and allocation policies does not imply that markets should have the last word in such decisions. As is the case with other sectors, the market can be a good servant but a poor master. Public authorities need to intervene to establish regulations designed to prevent transfer of negative externalities, ensure adequate supplies of water and sanitation services to satisfy basic needs, and safeguard public health.

The point still remains, the first four WWDR examined for this thesis do address concerns related the market allocation but still support market-means of allocation so long as social and environmental concerns are addressed. The problem with such a conclusion, however, is that social and environmental priorities often change with the political winds of the day. This change reflects shifts in public policy and can be affected by local, national, regional and global macro-economic trends. If political priorities do not reflect social and environmental objectives, and instead sway in favour of economic imperatives, as is the case over the last forty years of neoliberal economic policy, then the social and environmental concerns noted by the UN in all the WWDRs become redundant.

Conclusion

This chapter outlines the process of the conceptual transformation in the value and valuation of WSS in UN water policy. Analyzing a series of UN documents representing a 40 year policy trajectory economic valuation is considered in relation the broader neoliberalisation of WSS including the increasing commercialisation of WSS. Attaching market mechanisms to the economic

valuation of water supply services is an approach that bases a delivery model on individual behaviours that are measured by economic instruments, not broader objectives in line with the collective good or will, these are ancillary benefits purportedly derived from a focus on the rational economic behaviour of individuals. Though all of the documents analyzed for this thesis call for consideration of social, cultural and ecological objectives and values when considering economic valuation, one must look to the institutional and legal frameworks initiated. These reforms have set priorities in line with economic instruments that come to life in commercialisation imperatives often at the expense of water equality and ecological integrity. Indeed the many reports, agreements, conventions and declarations analysed over the four causal explanations note the challenge of institutional reform in the context of cultural, economic, political, social and ecological changes, but they also ignore the political economy of reforms that trump some of these priorities in favour of others. This neoliberal institutional alignment is in keeping with presenting a coherent water policy framework which ultimately reflects capitalist social relations. Just as critical realism focuses on mind-independent realities it looks at justice in this way to.

By way of a critical realist conclusion we argue that justice, though it can't be seen or touched, is very real. Water justice is real in the sense that all humans, non-humans and living systems meet their water needs, irrespective of abstract structural and institutional forces and factors, including ideas and perspectives that contribute towards or inhibit access to WSS. There is a concrete materiality to the concept of justice when we look through the critical realist lens. Justice, then, can be seen as real or really existing, or not as it may be the case. This idea will be taken up in the conclusion of this thesis.

Chapter 9: Conclusion – The Water Commons Problematic Reframed

“At the end of it all, the analyst is often left with a simple decision: whose side are you on, and which and whose interests do you seek to protect?”

David Harvey, 2010, p. 103

This chapter begins with a summary of the thesis as a whole. Following this account this chapter will shift to reflect on the evidence gathered in relation to the competing conceptions of the water commons, particularly as it relates to the neoliberalisation of WSS. In doing so this chapter first recasts the struggle over water as a struggle over rights and not necessarily water itself. This chapter then shifts to explore the UN’s role in this struggle in its efforts to co-opt the rhetoric of the water commons. This evidence will then be considered in a reflection on the compatibility of the water commons with capitalist social relations. The chapter will conclude by offering up recommendations to the water justice movement.

Thesis summary

Chapter one of the thesis introduces and defines the water commons problematic as the competing conceptions of the water commons. This problematic is characterised by diametrically opposed material interests as it relates to WSS. On one end the spectrum the neoliberal version of the water commons promotes increased marketisation of WSS whereas on the other end the socio-

ecological version of the water commons promotes universal provision consistent with broader human and environmental rights objectives. This chapter also documents the state of the world's water including trends towards commercialisation.

Chapter two provides a literature review on the commons. This consists of a critical reading of prevailing theories and ideas of the commons, including CPR theory and the idea of the 'modern' commons generally. To this end, the commons is considered in relation to various property regimes in terms of how these regimes facilitate common property arrangements, or not as it may be the case.

Chapter three presents the theoretical perspective of the thesis, namely the political economy of the water commons. This chapter anchors its analysis in the idea that property arrangements are synonymous with rights frameworks. As such property arrangements can be seen as a set of claims and entitlements that facilitate access to WSS. Property arrangements are contested but broadly indicative of the prevailing political expression of the day. As such this chapter examines how liberal democracy and neoliberalism facilitate and determine access to socially necessary goods and services such as WSS.

Chapter four explores the main methodological concerns for studying the water commons. Specifically this chapter describes the mixed methodological approach for the thesis (i.e. documentary analysis and CDA) and explains how this approach is complemented by a critical realist perspective. The critical realist perspective is used as a philosophy *for* science and this approach not only informs questions of positionality in the research process, but also, under-labours to frame the discussion of discursive mechanisms as part of a stratified reality that, ultimately, have material outcomes.

Having explored the methodological and attendant philosophical considerations the thesis shifts to explore the empirical data, represented by key UN water policy documents. The following four chapters (Chapters 5-8) are framed as causal explanations as to how UN water policy reflects a broader neoliberal institutional alignment with respect to WSS.

This chapter reflects on the evidence gathered in relation to the competing conceptions of the water commons. Competing claims often stake their interest in WSS in the context of a global water crisis. It is no longer particularly radical to assert or concede to the existence of the fresh water crises. Similarly, nor is it particularly profound to argue that this ecosystemic problematic threatens the earth and its inhabitants. It is well documented and indeed proven that this ecological situation is very real and that it carries with it significant social, ecological and economic consequences (see the voluminous works of Peter Gleick and the Pacific Institute for comprehensive work here). Both sides of the political spectrum recognize the immediacy of this ecological problematic; furthermore, both sides, to varying extents, understand at least some of the associated consequences including those which remain at the level of projections – those which have yet to unfold and take shape, many of which have been accelerated and are now associated with the ongoing threat of global climate change.

What are quite radical in the current moment however, are analyses that look to the socio-political structural factors that lie at the heart of this ecological problematic (Barlow, 2007; Barlow & Clark, 2002; Baker 2004, 2005, 2006, 2007, 2010; Castro, 2006, 2007, 2008, 2008b, 2013; Castro and Heller, 2009; Goldman, 2007; Hall & Lobina, 2003, 2005, 2006, 2007, 2009; Linton 2010; Loftus, 2009, 2011; Sultana & Loftus, 2012, 2015; Shiva, 2001; Swyngedouw, 2004, 2005, 2013). These analyses not only assess the social and environmental impacts of humanity's consumption patterns associated with the global expansion of capitalism, but arguably and more importantly, these

analyses conceptualise and examine the global expansion of capitalism in terms of the penetration of private property relations into every aspect of life, including the water commons. In order to grasp not only the origins of this problematic but also the potential solutions and alternatives, we must look to the fundamental principles of capital accumulation and profit maximization and to how these inevitably produce economic, social and ecological destruction.

Notably, however, in much of the literature critical of market penetration with regards to WSS something has been lost between the lines. In an effort to put a human face on capitalism or to 'green' capitalism as it were and make this economic system more 'sustainable', the quality and number of analyses that situate the root of all inequality, including water inequality, in the expansion of private property relations, is wanting.

The same can be said about literature concerning the commons. Though there has been a recent and much-needed revitalization of the concept of the commons as it relates to challenging and resisting capital accumulation the concept nevertheless has been morphed, taken out of context, co-opted and in some cases outright redefined, by both the political left and right. As a result, current mainstream commons discourse often obfuscates or jeopardizes genuine understanding and realization of the commons as the very existence of forms of social reproduction under common ownership and control.

The question of the commons is one of the most underrated yet effective and timeless challenges to capitalist enclosure. As Dolenc and Žitko (2016, p. 66) suggest, "The commons is becoming a key theoretical concept used by the left as many authors recognize its unifying potential for many ongoing struggles that challenge the current political and economic system." It is a concept and social relation that has been applied to different forms of social reproduction with varying

degrees of success throughout the history of capitalist enclosure – dating back to the 15th century highland clearances – to challenge the basic premises of capitalism. The concept of the commons is a potential bond linking various economic, social and ecological struggles for justice. The challenge for campaigners and where more work needs done from an academic point of view so as to bolster these struggles is in reaching a broader understanding of how isolated struggles link up to the wider commons in different scales from the local to the transnational.

A struggle over rights not water

The water sector, together with many others, has become one of the battlefields over which 'accumulation by dispossession' tactics are waged, often won by capital, and occasionally lost.

Erik Snyngedoun, 2005, p. 83

As with most other common property arrangements within liberal democracies, WSS is a contested terrain. Critically, this terrain is characterized not as much by the biophysical aspect of water as it is the struggle over *rights* to this precious resource. This contestation over rights to water, then, a socio-ecological problematic when considered in the hydrosocial sense, is characteristic of a broader struggle within the liberal democratic political framework over rights to all things hitherto thought to be part of the commons, including the non-human world. This struggle over rights to water within liberal democracies is broadly emblematic of how people interact with each other and, in turn, the non-human world, in very real and material ways so as to satisfy their own material needs, and those of their families and wider communities. Put another way, when considering our

production, distribution and consumption patterns one must consider the totality of all societal processes, structures and institutions as well as the social relations therein; increasingly in modern societies this is characterized by a competitive arena characterized by cuts in public expenditures, incremental commercialisation or partial or full privatisation of socially necessary goods and services, including WSS. In the neoliberal context of this thesis, competition is considered not in the sense that individuals compete with each other for a finite amount of water – though this dynamic is sadly very real in water scarce regions of the world and, also, on a theoretical level in situations where water has been fully privatized or commodified (i.e. one's wherewithal to purchase a fixed amount of water affects another's ability to access that same water). Rather, competition is considered more broadly in a political economy sense where decisions with regards to water, as it is with other such versions of the commons (be it healthcare or education) are made in a policy setting where markets are lauded as the most efficient means for allocating scarce resources across a broad spectrum of goods and services intended to fulfil public need. What's more, governance in this context is defined by unequal power relations (i.e. a democratic deficit defined along class relations).

Rights to goods and services that are considered to be shared or social resources – those thought to be essential for humanity's well-being and survival – have traditionally been held in common. Yet, in this era of economic globalisation many collective resources, rights, and regimes have come into question as they are increasingly exposed to the neoliberal political and economic processes that contest all forms of rights outside that of a private property framework. As WSS are increasingly subordinated to the unequal property relations that define market processes and forces this contestation threatens the very property relations that make up a fundamental element of the water commons: that all humanity and ecosystems have a shared reliance on water for health, well-being and survival.

It can be said that the history of the development of capitalism is the history of the ongoing enclosure of the commons. Though capitalist enclosure has taken on many different forms and challenged myriad customs, institutions and regimes, the defining outcomes are commensurable in terms of their fundamental ontological and epistemological transformations. In terms of an ontological shift, *material properties* or the actual ‘state of being’ of a thing or natural resource (such as water) is altered (i.e. a thing’s biophysical presence or its existence is taken out of its social context or considered outside of the hydrosocial cycle). Epistemological transformations are revealed when humanity’s *relationship* to a thing or biophysical resource is purposefully altered – this is often reflected in the structure of legal rights as well as a host of relevant institutional and administrative arrangements and considerations. At a fundamental level, by way of market mechanisms and processes, including commercialisation, the process of capitalist enclosure introduces individual rights to common property arrangements thus altering the social relations of a shared resource or institution. Likewise, the introduction of exclusive rights to water when considered a shared resource or a commons represents the usurpation of common rights to a resource that is essential for human and ecosystem survival. Enclosure, as a process better conceptualised by Harvey’s eminent characterisation ‘accumulation by dispossession’ (2003), takes the form of increasing marketisation – commercialisation, corporatisation, commodification and privatisation – of things, rights and institutions that hitherto existed outside capitalist relations. Swyngedouw (2005, p. 83) attributes this to an uncritical and “unequivocal celebration of market forces and private ownership.” He (2005, p. 87) notes, “The new accumulation strategies through water privatization imply a process through which nature’s goods become integrated into global circuits of capital ...” As Swyngedouw points out and as Castree exhaustively explores in his vast body literature on capitalism-environment relations (1995 to present), the commodification of a biophysical resources raises questions concerning the humanity nature nexus (in both human and non-human interactions in terms of

social-ecological dualisms). More fundamentally, enclosure of water, considered in the context of a socio-ecological or hydrosocial transformation, embodies the prevailing unequal class relations of the capitalist mode of production. Quite simply, unequal power relations define the prevailing political economy of WSS.

Examining the impacts of globalisation specifically on water resources, water expert Peter Gleick (2002, p. i) comments on this impetus, “We do not think the trend toward globalization and privatization of freshwater can be stopped ...” This geo-political epoch known as economic globalisation is defined and facilitated by what is commonly referred to as neoliberalism – the political form and/or expression of economic globalisation – which gives rise to the increasing power of transnational corporations and supranational enabling agencies such as the UN, the WTO and the World Bank and IMF. Neoliberalism has spawned a host of governance structures, management processes and allocation mechanisms such as self-regulating markets, SAPs, private financing initiatives (PFIs), public private partnerships (P3s), corporatisation, and the general commercialisation of water, including deregulation, liberalisation and privatisation, and these are increasingly facilitated by and within regional and global trade agreements, all of which, taken together, have as their *raison d'être* the extension of capitalist accumulation and profit maximisation. These neoliberal structures and processes presuppose a particular type of *control* and *ownership* over socially necessary goods and services that explicitly seek the enclosure of the water commons.

UN's role in the neoliberalisation of WSS

Economic globalisation can be characterized by a highly organized and concerted movement on the part of the global economic elite and organic intellectuals on the right. This global

managerial elite has a strong presence in the water industry – including transnational corporate and political elites – in part, form what some would argue as a global water ruling class. This elite are bound by a clear and common goal in expanding the global economy so that WSS, be it public or private, is within the reach of capital or the commercial exploitation of natural resources. The political economic landscape that defines economic globalisation is characterized by decrease in direct democratic control and participation at the national level on one hand, and a supranational centralisation of power on the other. This has led to questions of national sovereignty, the concentration and unequal distribution of economic power, but also the increasing power and wealth of an unelected global elite that are deciding the future of the earth's water resources.

For decades now the United Nations, the World Bank and IMF and other global governing and financial institutions have used the idea and discourse of the water commons to frame, justify, rationalise, and subsequently enclose water resources, institutions and regimes that were hitherto considered part of the water commons. In light of recent developments in the movement over the right water, and in the context of the ever-increasing rhetoric over the water commons in relation to WSS, this thesis systematically documents these developments in relation to UN water policy. To this end, this thesis presents an extensive analysis of documents that are directly and indirectly (i.e. sustainable development policy) related to UN policy developments on water, mainly by way of landmark conferences and major policy or institutional developments including conventions, declarations and resolutions as well as policy reports. This exhaustive survey illustrates that as the authoritative political global governing organisation, and in light of its policies on water and their political persuasion, the UN is a significant site for the struggle over water that is dominated by neoliberal water agents and ideology. This thesis tracks the UN's framing of global water policy in relation to the idea of the commons and or collective or community rights to WSS. The intent is to

illustrate how the framing of water issues around commons directly but also meanings associated with the commons (i.e. community-based rights etc.), masks the neoliberal character of UN water policy.

By directly and indirectly employing the language of the commons in relation to WSS, numerous UN water policy landmarks over the last 40 years have arguably done more to depoliticise water policy, and embolden proponents of market solutions than they have to address the issues that arise due to uneven development and ecological degradation. These two issues – uneven development and ecological degradation – are two of the societal problematics that the three pillars of the UN supported sustainable development framework seek to address in relation to water policy. It is an irreconcilable dilemma, that the economic pillar of sustainable development (i.e. economic growth), continues to be sought after with compound growth (or at very least this is the objective of all capitalist states across the global economy [see Harvey, 2010]) and this is bolstered in sectors such as WSS by UN's explicit support of the private sector, even if this growth is grossly uneven.

The thesis argues that the pretense of the commons obscures the class-based project of the increasing commercialisation of WSS. This research illustrates the development of this depoliticisation through UN water policy, and it argues, from a political economy perspective, that the content of this policy reflects the neoliberalisation of WSS that entrenches class relations and therein water inequality. The policy documents, agreements and declarations reviewed for this thesis use inclusive language to legitimize policy proposals and prescriptions that offer market and investment friendly solutions to address very real global water problems. The use of the term commons, but also associated rhetoric such as shared resources, common rights, collective resources, community rights, veil the neoliberal character of the UN's policy framework thus distracting readers and audiences from uneven water development in the first place.

A tension, however, still remains for this thesis, between its theoretical framework and its methodological approach. This tension, also discussed in the methodology chapter, relates to the materialist theoretical approach and the focus on the discursive representations of water. Though unequal material water outcomes are the original inspiration behind this research these are not necessarily the focus here. Rather the focus on the neoliberalisation of the water commons, by way of UN water policy, illustrates how rhetorical devices have the potential to affect very real material outcomes in two ways: first, in terms of how property arrangements facilitate and determine access to water; and second, the process of transforming property arrangements depoliticises the struggle over water.

Policy processes under the auspices of the UN influence policy makers – and publics – mental conceptions of our relationship to water. The UN lends authority and legitimacy to the neoliberalisation of WSS. What the UN water policy trajectory does, with its propensity towards commercialisation and market-driven notions of individuality is to undermine conventional democratic mechanisms (such as participatory modes of water governance) thereby rationalizing an emergence of a market driven ethic with respect to the provision of WSS. This shift to the language of the commons represents an essential strategy in the neoliberalisation of WSS. Furthermore, this shift in discourse does not necessarily represent a shift in policy as a result of a reaction to the intense criticism of market oriented reforms promoted and in some cases outright implemented by the IFIs in the late 1980s; rather, this shift in discourse represents a normalisation and standardisation, and indeed attempted humanisation, of draconian neoliberal policies such as increase user fees for WSS.

The commons

Capitalist relations of production are incongruous not only with a conception of equality that seeks to universalize wants and needs as well as the means by which we satisfy them (i.e. the market), but also that these relations, in which the right to water is increasingly circumscribed (i.e. subordinated to exclusive individual rights, including corporate rights), are incompatible with the idea of the commons.

Attempts to define the commons are frequently conceived within the political and economic circumscriptions of the capitalist economy and its political expression liberal democracy. Because these accounts fail to consider political and economic foundations they fail to convey that the commons, in all forms, are always and everywhere defined in relation to the prevailing property relations that define the capitalist mode of production. Likewise, these conceptions often take the market for granted or the result of the natural evolution of exchange relations between humans. The logical extension of such thinking is the limited delegation of the commons to one of the categories making up the already mentioned binary. In this vein and in addition to their point noted in the epigraph of this chapter, Anton et al. (2000, p. 4) call for an “alternative understanding of public good, one that does not presuppose either a market society or private property understood as entailing the right to exclude others.” Expanding the theoretical, political and practical praxis of the commons is a much grander endeavour outside the scope of this thesis.

Yet, current use of the concept of the commons - often based on rhetorical and/or mainstream parlance - leads to widespread misconceptions of the commons in all its forms and an unawareness concerning the complexities of the property relations that define the commons. Such misuse leads to the misplacement or misdirection of what are often well-intentioned resistance

efforts. By way of critique, David Pepper (1986, p. 115) notes of many environmental movements that “political critique is insufficiently developed...” and therefore “political effectiveness, undeniable as this is, [is] not as great as it might be.” This discussion, therefore, seeks to initiate a dialogue whereby genuine social change could be realized by way of a broader theoretical and practical understanding of the water commons. The contradiction between the capitalist relations of production and the commons is structural, and, therefore, this contradiction cannot be remedied by the system within which this contradiction occurs.

In terms of the critical realist perspective of this thesis the question remains: What is the epistemic fallacy with regards to the water commons? To simplify, epistemology is the realm of thinking whereas ontology is the realm of being (Alderson, 2013). These two concepts are categorically different and, as such, critical realism suggests that an epistemic fallacy occurs when these two concepts are collapsed into each other, as is so often the case in positivist and hermeneutic research programs. This distortion and the proposed fix to come here is the main impetus or starting point for critical realism as a philosophy *for* science as it compels the researcher to explicitly problematise these two irreducible categories.

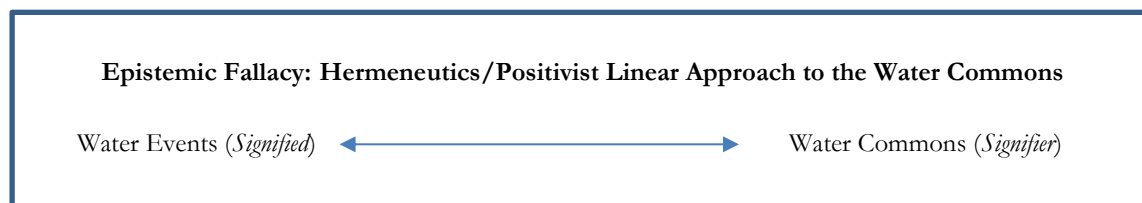
What is observed here and qualifies as the main research topic, that which subsequently became the instigating catalyst for this thesis, is the competing claims to the water commons from diametrically opposed material interests, or what is referred to in this thesis as the water commons dilemma. In other words, if the water commons presumably represents a particular version of a relationship that humanity has or could have with water – that defined broadly by a collective interest, community control, shared reliance etc. – then how could it be possible that claims to the so called water commons are made from diverging material interests? Does this not challenge the elemental characteristics of the water commons, calling into question the very idea itself? In critical

realist terms, this phenomenon comprises the *Domain of the Empirical* for this thesis – this is an observed phenomenon as it were: the competing conceptualisations of the water commons. For critical realists, this is also the realm of the transitive nature of the knowledge concerning water: knowledge is contentious, it is always changing or in transition and in this regard, there is a relativity to knowledge. Knowledge is relative to one's own belief systems and values, however, these are often derivative of corresponding material interests, an issue that will be revisited below (addressed by taking up a political economy approach here).

When the *Domain of the Actual* or the “signified” (i.e. all the surprise events that happen with respect to water), labelled in the semiotic diagram below, is collapsed into the Domain of the Empirical, which in this case is the water commons dilemma, that being the “signifier” these are the conditions that create epistemic fallacy upon which critical realists situate their work. That is to say that our ontological realities, which represent our material realities, coupled with our ontological statements (signified) are very separate from our ways of knowing or our epistemological inquiries (signifier) around our water realities. Put another way, one cannot reduce statements of the world (i.e. ontology) (e.g. water's relations) to statements concerning our knowledge of the world (i.e. epistemology). This is the critical realist definition of epistemic fallacy. In this regard, Alderson (2013, p. 20) claims researchers:

tend to reduce being into thinking, ontology into epistemology, things into thoughts, to mistake their perceptions and reports for reality, or to deny that there is an independent, essential reality. This reduction and loss of reality into ideas, termed the epistemic fallacy, is at the heart of social science ...

Therefore our water realities and the ways in which we go about thinking of these must stay separate in the sense that indeed we can come to know and attempt to grasp our water realities (i.e. water's relations in the intransitive sense) through concepts and ideas but these realities are not necessarily derived from these concepts and ideas; though they may "causally interact" as Alderson (2013) suggests. Analyses that do not go deeper than this surface exploration between the signified and the signifier, then, suffer from "epistemic fallacy."

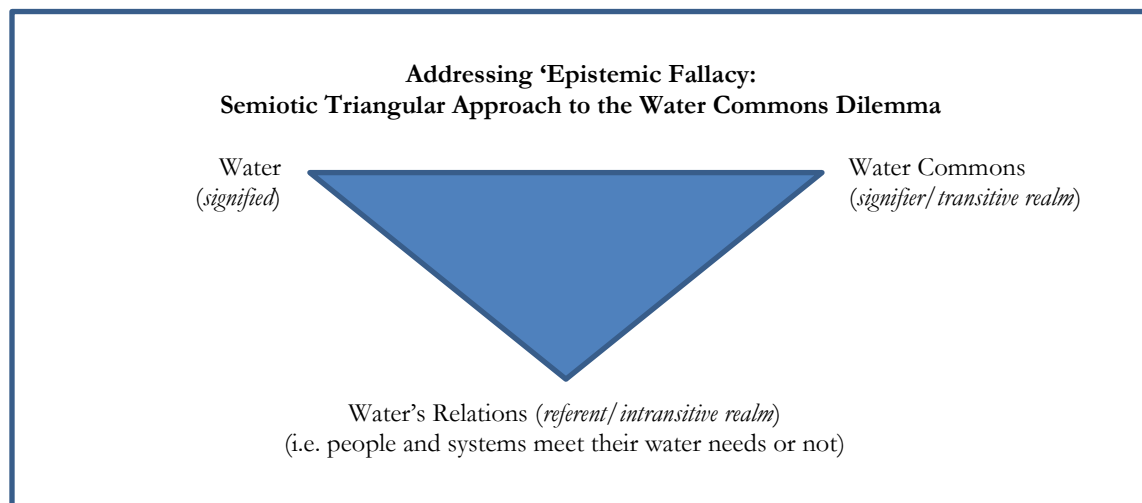


These are the perilous research conditions whereby the struggle over the water commons is limited to language games, or more visible discussions in our society regarding a clash of values, morals or ethics and how these factor into or can be limited by policy reform. There is a risk in this regard, of losing sight of the importance of the actual bio-physical aspect of water itself (i.e. the hundreds of millions around the world that go without satisfying their most basic water needs, some of whom live in First World countries, such as the indigenous peoples of Canada). These are also the conditions that obfuscate the broader systemic and structural forces that have a concrete impact on water's very real (social) relations and those that may actually contradict water equality. It is commonplace to think of water as being a part of the commons: that all individuals and ecosystems should be able to satisfy their water needs simply because water is the essence of life and therefore there is a moral and ethical imperative that predicates water's relations. This thesis argues, however, that we must examine our water reality (and all subjects of research inquiry for that matter!) on the basis of how things are and not how they ought to be.

Critical realism compels the researcher to move past positivism and hermeneutics to propel the discussion forward to the real (or back to the source as it may alternatively be articulated), which is the intransitive or what Bhaskar refers to as the *referent* within a proposed semiotic triangle. This semiotic triangle (modeled below using the water commons example), as developed from a critical realist sensibility, intends to round out positivist or hermeneutic research which is “too concept dependent, but it is not concept exhaustive” as Alderson (2013, p. 51) argues. She explains, arguing that strong versions of semiotics work in a linear fashion where the *signified* (i.e. the concept) or object of examination is explored in conjunction with its *signifier*, that being all those words and/or references that seek to capture the character of the *signified*. The focus, then, is limited to perceptions and thus the world is limited by the concepts employed. Water equality, for example, is far more complex than any one concept or idea one may choose to employ. There is, moreover, very limited room for critical examination of concepts in hermeneutic analyses because concepts and ideas are relative to the eye of the beholder – there is limited or no context in which to anchor these claims or perceptions. What is missed here is a deeper understanding of the contextual forces and factors upon which the real is realised. In addition to the *signified* and *signifier*, the critical realist semiotic triangle adds a *referent* to the equation so that researchers may cross reference to the real relations or intransitive relations that are the original object of study in the first instance.

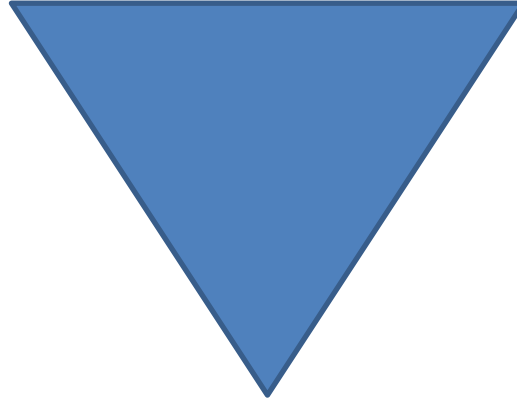
In this way, water’s relations are, ultimately, the *referent* in this regard (as displayed in the semiotic triangle diagram below): water relations play out in the everyday material conditions of individual constituents, families and communities (including ecosystems) in terms the reproduction of water needs: some fulfil their water needs and much more, and some partially or not at all. These are water’s real relations and these should be the decisive focus of any research project seeking a deeper understanding of how water’s relations play out. The biophysical matter of water (the

intransitive quality of water) is interwoven to a host of structures that are as real as the relations these structures create. Critical realism argues, then, that our understanding of water should not be limited simply by how we come to know objects or things by way of concepts, ideas or even our sensations. The biophysical matter of water, the intransitive realm of water (intransitive in the sense that it is independent from human existence and human thought) is real as are the relations it sustains. These are the relations that comprise the Domain of the Real. The question becomes, then, how do we achieve such an analysis: how do we reach to and focus our inquiry on the Domain of the Real?



Application of Critical Realism to the Water Commons Dilemma

WATER (*signified*)
- Domain of the Actual
- Surprise Events: water scarcity, poor or inadequate water supply systems; the daily water routines; water abuse, water greed



WATER COMMONS
(*signifier*)
- Domain of the Empirical
- Transitive realm: knowledge is always changing/in contention

WATER'S RELATIONS (*referent*)
- Domain of the Real: people and systems meet their water needs or not
- Intransitive realm: water's relations are independent of human mind and thought; even so, individual constituents do have a relative degree of human agency contingent to knowledge of structures and class consciousness. Because water's relations are independent of human mind and thought but that human actions can have an effect on the way in which they play out.

This thesis recovers water's relations from this epistemic fallacy to analyze the essence of policy formation around water and to discover the inconsistencies and contradictions therein as it relates to assertions and claims to the water commons. The task becomes, as stated above, how to bridge the gaps between the signified, the signifier and the referent. This is where critical realism is instrumental in seeking out a deeper understanding of the forces and factors at play within the power relations that define the political economy of water. Instructively, in following the edicts of critical realism, a researcher is to appeal to a second order argument, or transcendental knowledge inquiry, to take any given analysis past the mere appearance of the phenomenon in question to a more fulsome analysis that considers broader societal forces and factors that produce particular

outcomes realised by water's relations (the referent). It's fine and well to label water as a commons (epistemological task from the outset) but how do we actually come to realize and experience water's relations. Though there are many different versions of transcendental knowledge this thesis appeals to a materialist account of history where the struggle over rights to water is the main focus and how the outcome of this struggle over water makes possible water's relations (the Domain of the Real). These societal forces and factors are the content of the Real as are the outcomes they produce. Though separate from the intransitive realm of water (intransitive in the sense that nothing happens without water!), these are the enduring structures and generative mechanisms that have an indelible impact on the way in which people actually meet their water needs or not as it may be the case, thus having an effect on water's relations. It is here where the detailed causal explanations make their contribution, where structural forces and factors serve as generative mechanisms to the relations that are operationalised and realised, or not as it may be.

Of the competing conceptions of the water commons one version, namely the neoliberal, is increasingly fortified in discursive representations, as has been borne out by the data here, but also reproduced in material relations by way of policy reform; while the other, namely the socio-ecological, though reproduced discursively and to a degree represented by policy that seeks to protect the public interest at large (as ill-equipped, ill-defined or ineffectual as it may be over time and space), remains by in large on the level of ethical and moral claims confronted by a system that acts otherwise. Using UN water policy, this thesis shows how neoliberal policies are reproduced by way of enduring structures and mechanisms of the capitalist relations of production and its attendant political expression liberal democracy.

There is a need to re-politicize contemporary struggles over the commons. That is to say that by their very nature, struggles or contestations of rights over the commons are overtly political

processes. They entail diametrically opposed views over how humans are to interact with one another and with nature. Neoliberalisation increasingly depoliticises struggle over the commons so that non-corporate successes over the contestation of rights to the commons arrive in the form of social reforms and do not represent any structural challenge to the system nor alter, in any significant way, our relationship with the commons. What we have, then, are successes in the form of social reform that merely, albeit progressively, tip the balance of rights in favour of some without genuine change to the political conditions that cause this power imbalance in the first instance. This thesis reinstates the struggle of the commons within the political sphere. That is to argue that the struggle over the commons is by nature and definition inherently political.

Direct access to the fresh water commons implies stewardship of this precious resource, and also ownership and control; adequate access implies the means to realize and sustain needs or means of subsistence; whereas equitable access implies equality in the two aforementioned categories. Direct, adequate and equitable access are issues that are wrapped up in the realm of rights and property relations. Hurl suggests, “the commons does not presently exist; it must be actively created in a manner that ensures the direct control over public services by workers and the community.” Similarly, Dolenc (2013) discusses the practice of commoning but challenges commons projects that do not address capitalist social relations. She argues,

While they are worthwhile as sites of individual emancipation and as valuable experience of grassroots organising - on their own they often represent a-political, fragmented actions that cannot address the underlying structural logic of the problems at hand. In addition to that, these 'complementary commons' initiatives often represent middle-class life projects, since only people with sufficient income and spare time can engage in them.

The commons cannot simply be about distributional or re-distributional concerns and principles – rights, allocative mechanisms etc. The commons must also be about the ownership and control of the resources and means by which individuals and communities achieve social reproduction. By displaying how the collective or common ownership rights are antithetical to capitalist social relations and its attendant political expression liberal democracy, this thesis points to the structural barriers to a commons approach limited to analyses that accept these social and political relations.

Toward water justice

In the final analysis of this thesis, the struggle over water is much more than simply a struggle over contending views over the idea of the water commons – such a position can be arrived at far too easily without having to dig deeper. What's more, such a position misses the complexity of this struggle which can be located in the political economy of water. Instead, this struggle is materially fortified and, as such, has material implications that result in hundreds of millions of innocent lives suffering on a daily basis and millions being lost on an annual basis – these relations are real and tangible, not abstract. This struggle can be situated in the material reality of unequal class relations that define the capitalist global economy. Any commons-based movement seeking genuine and radical reform on a stream towards water justice must address the property relations that are at the heart of the capitalist global economy.

A commons-based approach must be anchored in a class instrumentality – an appreciation of class interests – that connects water struggles across the planet: from unmet water needs of indigenous peoples across Canada, for example, to cities in Latin American to inner city families in

Detroit, Michigan and across the US struggling with water quality, to the complex and distressed water conditions in parts of sub-Saharan Africa, South East Asia and beyond. With this in mind, besides their relationship to poor quality WSS, what overwhelmingly connects these populations is a broader social struggle that ultimately determines their water realities. Indeed water inequality may be the most acute of struggles for many in these dire circumstances but inequality is also too often experienced for these same populations in the spheres of education, housing, and food security, thus pointing to something broader going on here – water inequality is not the only grave injustice facing these populations. To isolate water inequality to singular experiences of individuals, families, communities, or even nations such as Papua New Guinea or India, is to disconnect these water struggles from a broader class struggle that defines the capitalist global economy and which is experienced across all spheres of life for systematically disadvantaged groups. And though the local complexities of water inequality are vast and diverse, the need for clean and safe WSS and social class are the two constants. Commons-based approaches and institutions must focus on the local needs of course but also be connected by an overall transnational struggle that seeks to change the material conditions of working people and other subordinate and disadvantaged groups.

As such commons-based approaches and institutions should reject the instrumental market rationality and calculations of neoliberal global governing bodies that seek to remedy global water equality – it is precisely these institutions that further fortify water inequality by way of market sensibilities – rather than addressing the unequal material conditions that define the capitalist global economy. A commons-based approach must avoid legitimizing the operations of neoliberal governance institutions such as the UN as this legitimacy has a tremendous effect on not only the sovereignty of nation states but the ability for those resisting neoliberalisation to reclaim essential social services such as WSS.

A commons-based approach has great potential in this regard because, unlike the human rights-based approach which from a material standpoint is an abstract idea, the commons-based approach challenges status quo capitalist property relations in action and in therefore in very real, practical and material ways. For this to be certain, however, the commons approach must be focused on achieving radical change with people's material reality – this is to consider the property relations that are at the heart of all that we do in terms of satisfying our most basic needs, water needs included.

There is much contestation between local and global governance perspectives (Woodhouse and Muller, 2017), particularly as how these processes and mobilisations may take place under a commons-based movement. In seeking to traverse this gap the water justice movement should align their efforts in commons-based institutions that acknowledge and accept the complexities between perspectives, but also accept that the water inequality juggernaut is fortified by advocacy on the part of neoliberal institutions on the global scale (which in turn impact governance arrangements at the local level) for market-based approaches. For perhaps more than any other resource other than air, water is fluid and always in motion spanning local, regional, national and global geographic boundaries but also those of culture, religion and politics. How commons-based institutions come to reconcile these contested spaces may be the most pressing question in seeking a direct water democracy on the path to water justice.

There is a burgeoning body of literature documenting water struggles around the world and much of it has given practical and conceptual clarity to the political and economic processes that call into question the managerial-technological governance and provisory practices and processes of WSS. Though many writers (Bakker, 2010; Castro, 2008; Linton, 2010; Bond, 2010; Swyngedouw, 2003, 2004, 2005, 2013) document and to some degree examine the shifting nature of the property

relations associated with water (i.e. public or community forms of social provision to corporatised or private) future literature and the water rights movement in general needs to develop a nuanced analysis of this transformation as it takes place in the context of the competing relations that make up the highly contested terrain of the liberal democratic civil society. And so it is that often our understanding of the right to water or the idea of the water commons in general is circumscribed by the limitations of analyses whose scope does not exceed the parameters of the liberal democratic framework, not to mention analyses that fail to consider this framework in its totality (i.e. social, political and economic), as the political economy approach presented in this thesis attempts.

Undertaking a critique of the contemporary status quo understanding of civil society is a theoretical and conceptual necessity. This status quo conception views this sphere as a space of transformative potential, where unequal power relations can be disputed, challenged and in some cases resolved; rather than, in contradistinction, a space which comprises competing relations, interests and factions, defined by the prevailing private property relations and therefore unequal power relations to begin with.

What's more to appear as legitimate players and to be included in policy negotiations Kaldor (2003) suggests that civil society organisations may be 'tamed', 'institutionalized' and 'professionalized.' She suggests (2003, p. 589) that new social movements in the 1990s were "tamed within a global framework." Thus, in their interaction with neoliberal actors and institutions civil society organizations are forced to negotiate and play within defined parameters. Under such conditions it remains unclear which concerns carried by civil society and social movements may be addressed, although it would appear that the most radical platforms and campaigns that challenge property relations and marketisation are likely to remain most marginalized. As Chandhoke (2002, p. 41) notes, "global civil society actors legislate and mandate a normative and thus a morally

authoritative structure for the national and international community.” In this way, having access to the political process civil society groups have the ability, or at least potential, to set the priorities thus further de-democratizing the political process for ordinary people, excluded groups and structurally disadvantaged communities. Scholte et al. (1998) suggest there are three types of civil society groups: conformers, reformers and radicals. Conformers include peak business associations that may or may not conform to capitalist global governing institutions. In many cases the organizations advocate for fewer regulations so as to increase the flow of capital and in other cases they may speak to the demands of labour in order to maintain a relatively healthy workforce. The important point is that these organizations do not necessarily challenge the capitalist framework within which profit maximization and capital accumulation reign. Reformers may challenge the status quo on many levels (e.g. health, labour, environmental and consumer groups) but do not challenge the conditions (i.e. capitalist property relations) that create these unequal relations in the first place, those originating in the political and economic structures. This category includes a host of organizations such as many unions and human rights organizations. Radicals view the current trading and global governing regime as inherently unjust and therefore forge to alter its make up or advocate for its abolition. Scholte et al. point out that the distinction between conformers, reformers and radicals is not as straight forward in practice – there is much overlap in terms of their advocacy. Yet, capitalist organizations, like the WTO they write about, skew their relations with civil society organizations in favour of conformist groups. This calls into question the very nature of democratic representation between civil society organizations and the populations, issues and causes they purportedly represent. Furthermore, in their interactions with neoliberal actors and institutions civil society organizations have the potential to normalize the neoliberalisation of social reproduction (liberalisation, deregulation, commercialisation and privatization of social services) thereby depoliticizing these struggles and in turn the very idea of global civil society as a terrain of

contestation (Chandhoke, 2002). Support for the non-profit sector is used on many occasions to rationalise the cutting of the public sector (Salamon, 1994). The production of socially necessary goods and services are deregulated and the production and provision of them is thence devolved to the community level where dependence on volunteerism to produce and distribute these goods and services and limited private and public funds to facilitate these processes is tenuous in times of budgetary cut backs, to say the least.

Despite this important critique, civil society organizations critically fill a growing void in the political representation of marginalized and disenfranchised groups and in doing so advocate on civil and economic rights issues too. In doing so, some organizations even attempt to bridge the gap in the provision of socially necessary goods and services where services have either never existed or have been cut as a result of government retrenchment. As such, the aforementioned is not necessarily a critique of any one or group of civil society agents or organizations, or on these organizations as a whole. The burgeoning presence of so-called civil society organizations are symptomatic of the broader neoliberal climate of increased cutbacks to the public provision of socially necessary goods and services. Yet, this transformation in provision is a key component to the increasing privatisation of these services. This of course raises further policy concerns that need to be explored in future research focusing on WSS. There is a need therefore – a theoretical, political and normative necessity – to examine the competing responses to the water commons problematic but in the context of the totality of all mitigating forces impinging on the right to the water commons in the first place, as the political economy approach attempts. From this critical perspective civil society can be recalibrated as a terrain of competing relations.

A materialist conception of civil society delivers a more systematic framework from which we can explore the political economy of water so as to highlight the unequal property relations that

are at the root of inequality within an increasing commercialized world. Put another way, the basis for the reinvigoration of civil society as a terrain of contested and estranged relations is to emphasize the centrality of property relations in determining the material outcomes of unequal power relations that characterize and that are indeed a cornerstone of liberal democracy. The impetus here is that we should explore and examine capitalist social relations as they are and not as they ought to be.

In overlooking the competing class relations that gave rise to this struggle there is a tendency to situate resistance efforts in the very structures that gave rise to this struggle. Alarming, however, as awareness of the acute stresses on the world's freshwater supplies and WSS becomes more widespread debate over the solutions and mitigating strategies bear the hallmarks of the neoliberal propensity to situate the individual – the private citizen – at the centre of the water problematic. This hegemonic conception of an individual, personified in private property, severs the individual from his or her community thereby disregarding the structural dynamics of the production and distribution of WSS; the individual is also thereby disconnected from the hydro-social aspects of water itself.

A commons-based approach must reject status quo market driven accounts that envisage some form of commercialisation to satisfy much needed investment in modern infrastructure. So long as market mentality prevails in relation to socially necessary goods and services such as WSS there will be inequality as we see in other spheres across the planet, such as housing and food, even though these have been guaranteed since the inception of the UDHR in 1948. Inequality is an inevitability of market-based systems, it is at their core.

This history of liberal democracy is a history of competing interests; in some senses this was the impetus of the birth of the modern nation-state – to regulate and adjudicate the struggle between

groups over rights to socially necessary goods and services. More generally, this contestation is a struggle between classes. Today we are seeing the systematic challenge of all things that were historically struggled for under the liberal democratic framework: from labour rights, to civil, social and economic rights, to environmental rights. The boundaries of capital encroachment are being re-imagined and redrawn. Because the free market within liberal democracies is defined by the unequal distribution of wealth, not everyone has the right to the ownership and control over the means by which societies meet their most basic of material needs. It is in this context – when particular goods and services and the means to produce them, become privatised – individuals, families and communities are effectively separated from the conditions of their subsistence. In this way and as Cunningham (1990, p. 100) argues,

The most important feature of a capitalist society for present purposes is that its legal and political structures protect the freedom of the relatively few individuals (including corporate individuals) who privately own major resources and means of production and distribution to dispose of society's wealth as they please.

It is in this context that we should contextualise the incomplete enclosure of water including WSS. Though we may challenge this idea to suggest that education, healthcare, WSS and other such socially necessary goods and services are generally provided universally, we know this not to be the case around the world. We also know that this universal provision where it does exist, if it does, is challenged and cannot not be assumed, or its future existence assured.

Suffice it to say that progressive global civil society actors have affected meaningful change for millions of people, whether it be by building shelter, schools and hospitals, installing water taps, or, more broadly, applying political pressure on governments and the private sector to improve the

material conditions of peoples' lives. It must be said, however, that too often even these same organizations are forced to work within the orthodoxies and parameters set out by the political and economic powers that be. As Chandhoke argues, these actors "function as most human actors do, within the realm of the possible, not within the realm of the impossible" (Chandhoke, 2002, p. 52). The version of the water commons movement that seeks genuine change where every individual's water needs are met must be radical and therefore upset the status quo. Such a movement must think the unimaginable, for only in this achievable material realm will genuine water justice be achieved.

Both future scholarly work on water justice and the water rights movement in general must consider a more nuanced position on the public-private binary, as Castro (2008, p. 74) advises where he cautions against "blur[ring] the distinction between water privatization and public water management." His argument in this regard is that water commodification can and does take place under both public and private regimes and, as such, a broader understanding of the "socio-economic and political forces spearheading the expansion and consolidation of capitalist relations" is necessary in buttressing a comprehension of water equality that takes into consideration the totality of neoliberal forces seeking market penetration into such essential social services such as WSS. This includes a consideration of both discourses and "structural tendencies" or systemic conditions that drive capitalist expansion and the neoliberalisation of WSS more specifically. Without such an understanding, well-intentioned progressive struggles towards water equality, those based on the idea of WSS being a public good or conceiving the delivery of and access to these services as a social or human right, may become strange bedfellows of the neoliberal processes they seek to resist in the first place.

There are indeed many successful progressive examples where the struggle over WSS is challenging neoliberal policies that are in favour of market-based sensibilities and profit-based individualistic endeavours. These include human rights-based campaigns but also the very practical examples of remunicipalisation of WSS through public-public partnerships or commons-based mobilizations. Where these many diverse social struggles over water need to coalesce is in their practical policies and measures whereby water inequality is being addressed on a material basis in terms of governance and managerial considerations – both in terms of WSS being defended against a corporate onslaught and a general market ethic (i.e. both in the private and public sectors) but also in terms of entrenching these services and extending them where they exist so as to meet the most basic water needs of people across the planet. This must include broader discussions on formal arrangements for not only the concretization of social or citizenship rights to WSS but also the introduction and formalization of democratic processes where citizens' rights are translated into direct participation when it comes to decisions regarding WSS. This would be to challenge the neoliberal processes that seek to depoliticise WSS and to take back WSS in an explicitly political struggle and in doing so articulate these services as such: as a bundle of services that must be determined by democratic political processes so as to challenge the unequal power relations that are at the root of neoliberal governance and management processes as it relates to WSS and other such essential social services.

Conclusion

It can be said, then, that questions over access to water are wrapped up in these notions of *control* and *ownership*. These notions and the political and economic processes within which they are

made manifest, maintained and reproduced cannot be separated from the question of an individual's access to water. One's access to water is necessarily based on socially legitimated claims and entitlements – whether private or collective – that are prescribed by institutional and administrative arrangements and legal frameworks that are dictated and arranged by the political and economic order of the day. Similarly, the notions of control and ownership characterise humanity's relationship to the non-human world in terms of similar socially legitimated claims and entitlements that ultimately affect the way in which water, and similarly all other aspects of the biophysical and non-human world, is treated or used in and out of its ecological surrounding (e.g. water takings, pollution, diversion etc.). This socially legitimated power, wrapped up in the notions of control and ownership, are embodied in the prevailing rights structure of any given social formation (Anderson and McChesney, 2003; Berle and Means, 1968; Caruthers and Ariovich, 2004; Hinkelammert, 1986; Reeve, 1986; Singer, 2000; Teeple, 2005).

Because of humanity's common reliance on water for survival as well as the critical role in which water plays with all other life forms and in ecosystems the world over, the question of access to WSS is a question of collective concern and socio-ecological stewardship. Yet in this era of economic globalisation, the neoliberal processes that define, maintain and reproduce the prevailing rights structure within the capitalist mode of production – those that produce, maintain, perpetuate and indeed entrench inequalities and discriminations of all kinds (Harvey, 2010; Teeple, 2000; McMichael, 2000), increasingly expose all forms of social reproduction, including WSS, to ownership rights and in strong versions of exclusive control and ownership. Indeed, ownership in capitalist societies is typically exclusive and control is prescribed to individuals, including corporations. Consequently, because of these neoliberal processes and despite water's relational context and its

social nature (i.e. the hydrosocial cycle), the right to water increasingly becomes an issue borne to that of an individual rather than community.

Adhering to a critical realist perspective, the intransitive nature of water relations will never change – humans and non-humans and other living systems live or die depending on access to water. The transitive reality, however, is impacted to a degree by perceptions (rights to some degree have an impact on access to water and indeed so does geography). What's more, our very real material conditions have an impact greater than any perception, idea or aspiration on whether or not we have access to water. There is enough water to go around in this world – for individual consumption, sustainable agriculture and sustainable industrial production – however, it boils down to political and policy priorities. Accepting that there is an intransitive reality to water we are compelled to accept this unchanging reality of water and therefore we are forced to face the idea of water justice – every living thing needs water to survive but the question is how do humans, non-humans and other living systems meet their water needs? This reality cannot be manipulated in any way: water needs are met or not. Nothing survives without water so the question becomes not one of a struggle over water itself but rather how societies guarantee clean and safe water to everyone and all living systems that depend on it. In this sense, water justice becomes a normative requirement for all societies.

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