

THE HUMAN RIGHTS IMPLICATIONS OF THE BOTTLED WATER INDUSTRY

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Acknowledgements

All of our achievements are the result of the collaborative efforts of many individuals.

My achievements are not solely mine, but they also belong to many others.

This dissertation mainly belongs to the following eight people in the following percentages:

Rudolf Przybylski: 10 %;

Annie Przybylski: 10 %;

Hartmut Przybylski: 10%;

Sandra Przybylski: 10%;

My grandmother, Stella Ríos: 10%;

My mother, Claudia Brizuela: 10%;

My father, Andrés Pereda: 10%;

And last but not least, my supervisor, Anton Kok: 10%.

Before confusion sets in, I would like to clarify that this does not mean I only drafted 20% of my dissertation!... It only means that, without these people's help and support, my work would have been 80% harder than it actually was...

For that I am, and will be, eternally grateful.

I share this achievement with all of them!

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Todos nuestros logros son el resultado de los esfuerzos conjuntos de muchas personas.

Mis logros no son solo míos, sino le pertenecen a muchas otras personas también.

Esta tesis le pertenece fundamentalmente a las siguientes ocho personas en los siguientes porcentajes:

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Hartmut Przybylski: 10%;

Sandra Przybylski: 10%;

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Mi mamá, Claudia Brizuela: 10%;

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Y por último, pero no por ello menos importante, mi director de tesis, Anton Kok: 10%.

Antes de generar confusiones, me gustaría aclarar que esto no significa que solo redacté el 20% de mi tesis... Simplemente significa que, sin la ayuda y apoyo de estas personas, mi trabajo habría sido un 80% más difícil de lo que realmente fue.

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Summary

Given the current problem of unequal access to water which affects millions of people around the world, the purpose of this study is to attempt to determine how the bottled water industry fits in the project of universal and equitable access represented by the recognition of water as a human right.

The emerging notion of the human right to water upholds that the provision of safe drinking water – at least the minimum amounts necessary to satisfy basic human needs – should be provided to all persons, regardless of their socio-economic status.

On the other hand, the bottled water industry treats water as an ordinary commodity, subjecting this water to market forces, limiting consumption so that only those who can afford it can have access to it, and thus reinforcing a notion of restricted access to water.

In light of the above, it is striking that, while some people die of thirst, the market of bottled water has simultaneously grown exponentially in the last couple of years. Hence, a question arises as to what extent this two “water ideologies” can be said to be compatible.

It is concluded that, in certain circumstances, the bottled water industry, far from fostering the realisation of the human right to water, may negatively impact on its realisation. This is mainly because the industry is part of a larger trend of water commodification that reinforces a project of restricted access to water, promoting institutional structures where only those with economic means can have access to the most important and essential element for human survival.

Chapter one: Introduction

1. Introduction

- 1.1. Research rationale
- 1.2. Purpose of the study
- 1.3. Scope and limitations
- 1.4. Research questions
- 1.5. Hypothesis
- 1.6. Structure
- 1.7. Literature review
- 1.8. Methodology

1.1. Research rationale

Water sits at the intersection between life and death. The origins of life in general, and of human life in particular, are inextricably linked to this natural element. Furthermore, not only the genesis of life itself but also its subsistence and further development depend on the availability of sufficient and adequate water resources.

Freshwater is a unique natural resource that possess distinctive physical and chemical attributes. In essence, it is an essential, scarce, fugitive, and unevenly distributed resource that is a part of a network because all water systems are interconnected.¹

Even though the importance of water for life is widely recognised by all human beings, the problem of unequal access to water for drinking and sanitation purposes is an issue that affects millions of people around the world. Indeed, according to the United Nations, at present approximately 884 million people do not have access to safe drinking water and more than 2.6 billion lack access to basic sanitation.²

¹ H Savenije "Why water is not an ordinary economic good, or why the girl is special" (2002) 27 *Physics and Chemistry of the Earth* 742-743.

² United Nations General Assembly (July 2010) Resolution A/RES/64/292.

Furthermore, given that there is virtually not a single human activity that does not depend on water³ and that populations continue to grow, constantly increasing the demand for this scarce resource, the decision-making process regarding water allocation has become increasingly complex.⁴

The multiple competing uses of this limited resource are multi-sectoral, ranging from human consumption to land irrigation, energy production, urban and industrial use, navigation, leisure, and so forth. Water uses are not only direct – direct consumption – but also indirect – when used in the production of a specific good or product –,⁵ allowing water to be classified either as a consumer or a producer good.⁶

In addition, water demand cannot be measured exclusively in terms of human consumption, but must be also inclusive of environmental values.⁷ After all, water is an indispensable and non-substitutable component of all ecosystems.⁸

In this context, characterised by multiple competing uses and unequal distribution of one of the most fundamental natural resources, I fear that the creation of the “new market of water” epitomised in the bottled water industry, far from being a promising avenue for helping populations in difficulty, could threaten to exacerbate the problem of unequal access to safe drinking water.

In light of the aforementioned, I believe it is of utmost importance to critically analyse and evaluate in detail how the bottled water industry fits in the project of universal access represented by the recognition of the human right to water.

³ Savenije (n 1 above) 742-744.

⁴ G Syme, B Nancarrow & J McCreddin “Defining the components of fairness in the allocation of water to environmental and human uses” (1999) 57 *Journal of Environmental Management* 51-52.

⁵ H Cooley et al “Global water governance in the twenty-first century” in P Gleick (ed) *The World’s Water Volume 8: the Biennial Report on Freshwater Resources* (2014) 4-5.

⁶ J Booker, R Howitt, A Michelsen & R Young “Economics and the Modelling of Water Resources and Policies” (2012) 25(1) *Natural Resource Modelling* 173.

⁷ Recent developments in the economic modelling literature have acknowledged that water demand must not only take into consideration human, but also environmental needs. See Booker et al (n 6 above) 170-172.

⁸ Booker et al (n 6 above) 172.

1.2. Purpose of the study

The purpose of this study is to analyse the human rights implications of the bottled water industry, particularly in relation to the modern conception that categorises water as a human right.

To this end, the emerging legal construction of the human right to water is used as an ideological tool to question whether bottled water fosters or hinders the realisation of the above mentioned right.

The core of my argument revolves around two different water ideologies that are compared and contrasted throughout the dissertation: (i) water as a human right, and (ii) water as a commodity.

On the one hand, the recognition of water as a human right is underpinned by the premise of universal and equitable access to this natural resource. This conception upholds that the provision of safe clean water – at least the minimum amount necessary to satisfy basic human needs – should be provided to all persons, regardless of their socio-economic status.⁹

On the other hand, the categorisation of water as a commodity is grounded on the notion of restricted access, limited on the basis of the economic capacity of individuals. Accordingly, water is understood as a tradable good, and access to it is determined by the possibility of each human being to position him or herself as a consumer in the market.¹⁰

In light of the above, the present dissertation aims at exploring how these two conceptions coexist together, interact and mutually limit and condition their respective spheres of action. In my view, water management schemes are conditioned by these water ideologies. Hence, decisions regarding how water is allocated, to whom, and under what conditions will necessarily vary depending on which ideology prevails.

⁹ See chapter four above.

¹⁰ See chapter four above.

1.3. Scope and limitations

Not all aspects of the human right to water are taken into account in the present dissertation, but one in particular constitutes the main rationale for my critique: the concept of universal and equal access to water as informed by the principle of equality and non-discrimination. Accordingly, this constituent element of the human right to water is used to question the ideological foundations of the bottled water industry and how the industry operates in practice.

As for other important aspects that define the legal content of the human right to water, they are briefly mentioned but essentially fall outside the scope of my analysis.

Moreover, the description of the legal obligations arising out of the human right to water is modest, and only those duties that have a direct connection with the expected fair allocation of water resources are explained in further detail.

Some of the topics that will not be analysed in the present dissertation inquire into:

- i) What is the quality and quantity of water human beings are entitled to by virtue of the human right to water;
 - ii) What is a reasonable distance between a household and a point of access (whether a tap, a water well, a river or lake, or even bottled water) for that water to be considered “accessible”;
 - iii) What is the “right price” for water and what is meant by the term “affordable water”;
 - iv) What is the best, or most appropriate, water service delivery model – public, private, community-based, self-supply, or combined models –;
 - v) How national legal frameworks should regulate the bottled water industry;
 - vi) How national water permits or licenses’ schemes operate and/or should operate;
 - vii) What is the relationship between land rights systems and water permits.
-

The described approach is coherent with the stance taken in relation to the categorisation of the human right to water as an “emerging right in international law”. Indeed, given that the existence of this right is currently controversial – as it is not firmly established in any treaty –, if my dissertation further engaged in the exploration of its alleged legal content and corresponding State obligations my conclusions would lack substance and would be reduced to a mere set of hypothesis or conjectures as to what the human right to water entails.

However, it is also true that the human right to water is slowly but surely emerging as a new component of the human rights theory in the international arena, and that different actors – States, Non-governmental organisations (NGOs), judicial and quasi-judicial national and international bodies, scholars, among others – have made positive strides towards its recognition.

In view of this, a cautious approach is adopted where only the aspect related to “equal access to water” is analysed and used to question the foundations of the bottled water industry. This is because, in my opinion, irrespective of the discussions around what is the specific content of this right, and regardless of the legal documents (whether binding or not) where it has been or is to be recognised, the human right to water will always necessarily be grounded on the principle of equality and non-discrimination, simply because this is a fundamental and basic pillar of human rights law. However, it must be noted that it is not the purpose of this dissertation to engage in an extensive analysis of the legal foundations of the human right to water.

The present dissertation goes beyond the views advanced by the bottled water industry’s critics that have traditionally resorted to environmental discourses that focus on the negative ecological impacts of the industry. In contrast, my research offers an original critique of the bottled water industry via an innovative approach that revolves around the concept of “universal and equal access to water” as construed by the human rights theory.

Furthermore, the originality of my work also lies in the stance taken with regards to the human right to water – which is pictured as an “emerging right in international law” –,

and the innovative analysis of its content. Many authors have already engaged in the documentation of this right's legal sources and the identification and description of the extent of its legal content and obligations, using mainly General Comment No. 15 of 2002 of the United Nations Committee on Economic, Social and Cultural Rights (Committee on ESCR) on the human right to water as a guideline. It is keeping this in mind that I decided to move away from these classical approaches to the content and obligations arising from the human right to water, which have been covered by many authors, especially from 2002 onwards.

Moreover, my dissertation puts forward a series of arguments that challenge conventional views upholding that there is a clear differentiation between the bottled water market and the public provision of tap water. My study further identifies a bridge that connects these two seemingly different compartments of water management and situates it at the point where water allocation decisions take place.

Lastly, it must be noted that the present dissertation frames the bottled water industry and its ever-expanding market within a larger phenomenon known as "water commodification". By understanding water as a "commodity", its economic value takes precedence over its importance as a fundamental condition for human, animal and plant life, thus threatening the very foundations of the human right to water. The aforementioned terminology has been carefully chosen following the works of many authors such as M

Barlow & T Clarke,¹¹ P Bond & J Dugard,¹² P Gleick,¹³ M Gottdiener¹⁴ D Harvey,¹⁵ Jaffee & Newman,¹⁶ and Shiva.¹⁷

1.4. Research questions

The main questions driving this research are:

- i) Are there different water ideologies?
- ii) From a legalistic point of view, is there a human right to water?
- iii) How is the bottled water industry configured?
- iv) How does the bottled water industry fit in the project of universal water access represented by the human right to water?

1.5. Hypothesis

The hypothesis I attempt to prove through my research is that the bottled water industry, in certain circumstances, far from fostering the human right to water, negatively impacts on its realization.

¹¹ M Barlow & T Clarke *Blue gold: the battle against corporate theft of the world's water* (2003).

¹² P Bond & J Dugard "Water, Human Rights and Social Conflict: South African Experiences" (2007) 1 *Law, Social Justice & Global Development Journal* http://go.warwick.ac.uk/elj/lgd/2008_1/bond_dugard/; P Bond "When Commodification Annuls the Human Right to Water" (2007) <http://www2.ohchr.org/english/issues/water/contributions/universities/UniversityofKwaZulu-Natal.pdf> (accessed 23 November 2014) 3.

¹³ P Gleick *Bottled and sold: The Story behind Our Obsession with Bottled Water* (2010).

¹⁴ M Gottdiener "Approaches to Consumption: Classical and Contemporary Perspectives" in M Gottdiener (ed) *New Forms of Consumption: Consumers, Culture and Commodification* (2000) 3-6.

¹⁵ D Harvey "Neoliberalism as Creative Destruction" (2007) 610 *The ANNALS of the American Academy of Political and Social Science* 22; D Harvey "The 'New' Imperialism: accumulation by dispossession" (2009) 40 *Socialist Register* 40.

¹⁶ D Jaffee & S Newman "A bottle Half Empty: Bottled Water, Commodification, and Contestation" (2012) *Organization & Environment* 26(3) 320; D Jaffee & S Newman "A More Perfect Commodity: Bottled Water, Global Accumulation, and Local Contestation" (2013) 78(1) *Rural Sociology* 1.

¹⁷ V Shiva *Resisting water privatisation, building water democracy. A paper on the occasion of the World Water Forum in Mexico City* (2006) <http://www.globalalternative.org/downloads/shiva-water.pdf> (accessed 21 January 2016) 2.

Thus, the way in which the bottled water industry is currently shaped and configured may have to be re-interpreted and its magnitude and extension re-dimensioned so as not to interfere with the realisation of the human right to water.

1.6. Structure

In order to contextualise the main topic, that is, the consideration of the human rights implications of the bottled water industry, a clear understanding of the way in which the bottled water industry is configured, and of the human rights approach to water are needed.

To this end, the initial section of the dissertation provides a description of the background of the research problem, referring in particular to the human right/commodity dichotomy regarding water.

An analysis of the legal foundations of the human right to water is then presented.

The current configuration of the bottled water industry is subsequently addressed.

The final section of the dissertation focuses on analysing different levels of interaction between the above mentioned water ideologies, addressing the question of whether the bottled water industry undermines the human right to water.

Chapters one and five respectively provide the introduction and conclusion to the dissertation.

Chapter two focuses on analysing different water labels and ideologies. These discourses illustrate different understandings on what is the legal nature of water, which will in turn inform the way in which issues related to ownership, use and conservation of water are addressed by governments.

Chapter three examines the legal basis for the human right to water at the international level, touching upon its legal content and corresponding State's obligations. Additionally, a brief mention is made of the emergence of this right within national legal schemes and the ways in which it has manifested in some countries.

Chapter four explores the evolution of the relatively new industry of bottled water, paying particular attention to the way in which this market is currently configured. Special

mention is made of the different types of products and its distinctive characteristics. Moreover, reference is made to the different arguments for and against the bottled water industry as expressed by its supporters and detractors.

Chapter five examines whether the discourse that sees water as a commodity (epitomised in the bottled water industry) is compatible with the conception that recognises water as a fundamental human right. The relationship between these two discourses is analysed in its legal, social, economic and political dimensions.

1.7. Literature review

Although the categorisation of water as a human right is a topic surrounded by controversy, the core analysis motivating this research project departs from the assumption that water is an emerging right in international law. Such an approach reflects the stance taken by the researcher in this respect.

In order to support this position, relevant international legal sources are taken into consideration, including, but not limited to: the International Covenant on Economic, Social and Cultural Rights; General Comment No 15 by the Committee on ESCR; the Convention on the Rights of the Child; the Convention on the Elimination of All Forms of Discrimination Against Women; the Convention on the Rights of Persons with Disabilities; the United Nations General Assembly Resolution A/RES/64/292,¹⁸ and the Human Rights Council Resolutions A/HRC/12/50¹⁹ and A/HRC/15/L.14.²⁰ Works by authors such as E Bluemel,²¹ A Kok & M Langford,²² G McGraw,²³ and I Winkler²⁴ are analysed in this respect.

¹⁸ United Nations General Assembly “The human right to water and sanitation” (July 2010) Resolution A/RES/64/292.

¹⁹ Human Rights Council “Report of the Human Rights Council on its twelfth session” (February 2010) Resolution A/HRC/12/50.

²⁰ Human Rights Council “Human rights and access to safe drinking water and sanitation” (September 2010) Resolution A/HRC/15/L.14.

²¹ E Bluemel “The implications of Formulating a Human Right to Water” (2005) 31 *Ecology Law Quarterly* 957.

²² A Kok & M Langford “The right to water” in D Brand & C Heyns (eds) *Socio-economic rights in South Africa* (2005) 191.

Furthermore, a brief analysis of national legal systems, legislation and jurisprudence serving as a legal basis for the recognition of the right to water at the domestic level will also be included. In this regard, authors such as P Bond & J Dugard,²⁵ P Danchin,²⁶ and A Kok & M Langford²⁷ are analysed.

A review of different water labels and ideologies will be presented. In this regard, works by authors such as M Barlow & T Clarke,²⁸ J Booker et al,²⁹ A Sementelli,³⁰ and B Smith³¹ are mentioned.

The emergence, evolution and distinctive features of the bottled water industry are analysed in light of the works of D Holt,³² C Ferrier,³³ D Jaffee & S Newman³⁴ and R Wilk.³⁵

Moving on to the consideration of the relationship between the bottled industry and the human right to water, several subtopics are examined in an attempt to explore the legal, social, economic and political dimensions of this relationship.

Issues of governance, power distribution, legitimacy, public trust, inequality, and discrimination are analysed in light of the works of P Bond,³⁶ V Brei & S Böhm,³⁷ W Dicke

²³ GS McGraw "Defining and defending the right to water and its minimum core: legal construction, and the role of national jurisprudence" (2010) 8(2) *Loyola University Chicago International Law Review* 127

²⁴ I Winkler "The Human Right to Water: Significance, Legal Status and Implications for Water Allocation" (2012).

²⁵ Bond & Dugard (n 12 above).

²⁶ P Danchin "A Human Right to Water? The South African Constitutional Court's Decision in the Mazibuko Case" (13 January 2010) <http://www.ejiltalk.org/a-human-right-to-water-the-south-african-constitutional-court%E2%80%99s-decision-in-the-mazibuko-case/> (accessed 21 May 2014).

²⁷ A Kok & M Langford "The right to water" in D Brand & C Heyns (n 15 above).

²⁸ Barlow & Clarke (n 11 above).

²⁹ Booker et al (n 6 above) 168.

³⁰ A Sementelli "Naming Water: Understanding How Nomenclature Influences Rights and Policy Choices" (2008) 13(1) *Public Works Management & Policy* 4.

³¹ B Smith "Water as a public good: the status of water under the general agreement on tariffs and trade" (2009) 17 (291) *Cardozo Journal of International and Comparative Law* 291.

³² D Holt "Constructing Sustainable Consumption: From Ethical Values to the Cultural Transformation of Unsustainable Markets" (2012) 644 *The ANNALS of the American Academy of Political and Social Science* 263.

³³ C Ferrier "Bottled water: understanding a social phenomenon" (2001) 30(2) *AMBIO: A Journal of the Human Environment* 118.

³⁴ Jaffee & Newman (n 16 above).

³⁵ R Wilk "Bottled water: the pure commodity in the age of branding" (2006) 6(3) *Journal of Consumer Culture* 303.

³⁶ Bond (n 12 above).

& M Albrow,³⁸ M Doria,³⁹ P Gleick,⁴⁰ D Hall & E Lobina,⁴¹ D Jaffee & S Newman,⁴² O Jayyousi,⁴³ L White,⁴⁴ and R Wilk.⁴⁵

The construction and development of the market of water is examined taking into consideration the works of D Harvey,⁴⁶ D Holt,⁴⁷ P Gleick,⁴⁸ A Opel,⁴⁹ and R Wilk.⁵⁰ Additionally, special mention is made of the social phenomenon described by D Harvey⁵¹ as “accumulation by dispossession”, and the specific analysis of this conception in relation to water advanced by D Jaffee & S Newman.⁵²

Issues surrounding the realisation of the human right to water and the prioritisation of certain water uses over others will be analysed taking especially into consideration the role of law and public policies in this endeavours. In this respect, works of authors such as E Filmer-Wilson⁵³ and G Syme et al⁵⁴ are considered.

³⁷ V Brei & S Böhm “‘1L=10L for Africa’: Corporate Social Responsibility and the Transformation of Bottled Water into a ‘Consumer Activist’ Commodity” (2014) 25 (1) *Discourse & Society* 3.

³⁸ W Dicke & M Albrow “Reconstituting the Public–Private Divide under Global Conditions: The Case of Dutch and British Water Management” (2005) 5(2) *Global Social Policy* 227.

³⁹ M Doria “Bottled water versus tap water: understanding consumers’ preferences” (2006) 4(2) *Journal of Water and Health* 271.

⁴⁰ P Gleick “*The World’s Water 2004-2005: The Biennial Report on Freshwater Resources*” (2004).

⁴¹ D Hall & E Lobina “Water as a public service” (2006) PSIRU Reports.

⁴² Jaffee & Newman (n 16 above).

⁴³ O Jayyousi “Water as a Human Right: Towards Civil Society Globalization” (2007) 23(2) *International Journal of Water Resources Development* 329.

⁴⁴ L White “‘If you don’t pay, you die’: On Death and Desire in the Postcolony” in D Barak-Erez & A Gross (eds) *Exploring Social Rights: Between Theory and Practice* (2007) 56.

⁴⁵ Wilk (n 35 above).

⁴⁶ Harvey (n 15 above).

⁴⁷ Holt (n 32 above).

⁴⁸ Gleick (n 13 above).

⁴⁹ A Opel “Constructing Purity: Bottled Water and the Commodification of Nature” (1999) 22(4) *Journal of American Culture* 67.

⁵⁰ R Wilk (n 35 above).

⁵¹ Harvey (n 15 above).

⁵² D Jaffee & S Newman (n 16 above).

⁵³ E Filmer-Wilson “The Human Rights-based Approach to Development: the Right to Water” (2005) 23(2) *Netherlands Quarterly of Human Rights* 213.

⁵⁴ Syme et al (n 4 above) 51.

1.8. Methodology

The methodology used in this dissertation is analytical and theoretical.

Chapter two follows a predominantly descriptive technique; however, it also contains a critical analysis of the diverse approaches and ideological constructions underlying the different existing legal definitions of water. Indeed, the decision to categorise water as a public good, a commodity, a natural resource or a human right will have a profound impact on society, governments, businesses and the environment. The choice of nomenclature conditions how water can be used, by whom and under what conditions, therefore raising fundamental political, economic, social, and ethical questions.

Chapter three uses a descriptive technique to recall the international documents that constitute the legal basis for the human right to water at the national and international levels.

Chapter four similarly follows a predominantly descriptive technique, focusing on exploring the emergence, evolution and constituent characteristics of the bottled water industry, as well as describing the different types of bottled water currently available in the market. However, this chapter also advances a critical analysis of the different arguments for and against the bottled water industry as advanced by its supporters and detractors.

Chapter four addresses the question of whether the bottled water industry undermines the human right to water following an analytical method. In order to answer this question, a multidisciplinary approach is followed, taking into consideration the fields of Law, Economics, Philosophy, Political Science, Consumer Studies, Environmental Studies and Ethics. The theoretical foundation of my thesis is therefore of a multidisciplinary nature.

Chapter two: Water labels and water ideologies

2. Water labels and water ideologies

2.1. Introduction

2.2. Water labels and ideologies

2.3. The public-private divide

2.4. The human right/commodity dichotomy

2.4.1. Water as a commodity

2.4.2. Water as a human right

2.4.2.1. The human right to water in international law

2.4.2.2. The right to water in national legal systems

2.1. Introduction

In order to comprehend the human rights implications of the bottled water industry, it is imperative to firstly understand the status of water in the human world. Indeed, the way in which legal systems, governments, markets, and citizens define water informs the manner in which issues related to ownership, use and conservation of water are and are expected to be addressed within state and local governments. As a result, the terminology employed to label water or – to use Bond’s terminology – the water ideology¹ that underlies such terminology has an enormous repercussion on the opportunities for the use and enjoyment of this natural resource.² The choice of nomenclature conditions how water can be used, by whom and under what conditions, therefore raising fundamental political, social, economic, and even

¹ P Bond “When Commodification Annuls the Human Right to Water” (2007) <http://www2.ohchr.org/english/issues/water/contributions/universities/UniversityofKwaZulu-Natal.pdf> (accessed 23 November 2014) 3.

² A Sementelli “Naming water: understanding how nomenclature influences rights and policy choices” (2008) 13(1) *Public Works Management & Policy* 4.

ethical questions, and impacting directly on governments, businesses, the environment, and, ultimately, on people's actual access to water.³

Given the multi-sectoral demand of this essential natural resource – ranging from human consumption to land irrigation, energy production, urban and industrial use, navigation, leisure, and so forth –, achieving a balance between all the competing uses of water and developing management frameworks that stipulate what is fair, equitable or just in terms of water allocation decisions is, undoubtedly, not an easy task.⁴

What is then the best possible allocation of water resources? The response to this question will undoubtedly vary depending on which water ideology prevails. A market-oriented response will identify the best water uses with those that are able to generate more profit. A human rights based approach will instead prioritise the satisfaction of basic human needs, and will therefore identify uses that are primarily aligned with this goal as the possible best.

In light of the above, the present chapter will explore the importance of nomenclature, focusing specifically on examining two different water ideologies. The first one sees water, or access to water,⁵ as a human right; the second one, epitomised in the bottled water industry, views water as a pure commodity. The analysis of these concepts will provide a preliminary basis for the consideration and study of the human right implications of the bottled water industry in subsequent chapters.

2.2. Water labels and ideologies

Is water a public or a private good? Is it a commodity or a human right? Is it a natural resource, a product, a mineral, or something else? Water may fall under more than one of

³ Sementelli (n 2 above) 4-5.

⁴ G Syme, B Nancarrow & J McCreddin "Defining the components of fairness in the allocation of water to environmental and human uses" (1999) 57 *Journal of Environmental Management* 52.

⁵ E Filmer-Wilson "The Human Rights-based Approach to Development: the Right to Water" (2005) 23(2) *Netherlands Quarterly of Human Rights* 230.

these categories at the same time.⁶ The multiplicity of labels can be explained by the diversity of uses water is subject to. Each label emphasises a different dimension of this element: social, economic, political, environmental, and so forth. For instance, the categorisation of water as a human right stresses its social dimension, focusing on its implications as an essential component of a dignified human life.⁷ On the contrary, a market-based approach underscores its economic value and highlights its use for productive or commercial purposes.

Bond & Dugard have systematised the existing water categories by identifying three main discourses or water ideologies across the world, namely: the socio-economic rights discourse, the neoliberal discourse, and the sustainable development rhetoric.⁸

The first approach regards water principally as a social, rather than a commercial good. It focuses on the promotion of equality in access and the achievement of social justice in water-delivery models.⁹ This ideology is in line with the categorisations of water as a human right and as a public good.

The neoliberal approach maintains that the best way to manage water is by treating it just like any other ordinary economic good.¹⁰ According to this understanding, its commercialisation must be regulated by traditional neoliberal economic theories.¹¹ This discourse is consistent with the view that sees water as a commodity and, to a certain extent, as a private good.

Lastly, the sustainable development approach is a strategy based on the principle that water is a scarce resource that simultaneously involves different dimensions: economic efficiency, social equity and environmental sustainability.¹² Despite its potential as a more nuanced rhetoric, Bond & Dugard have argued that the implementation of this conception in

⁶ Sementelli (n 2 above) 5.

⁷ O Jayyousi "Water as a Human Right: Towards Civil Society Globalization" (2007) 23(2) *International Journal of Water Resources Development* 331-332.

⁸ P Bond & J Dugard "Water, Human Rights and Social Conflict: South African Experiences" (2007) 1 *Law, Social Justice & Global Development Journal* 4.

⁹ Bond & Dugard (n 8 above) 2-4.

¹⁰ Bond & Dugard (n 8 above) 4.

¹¹ Bond (n 1 above) 3-5.

¹² Bond & Dugard (n 8 above) 4.

practice has been more consistent with water commodification than with the achievement of social justice.¹³

2.3. The public-private divide

The so-called public-private divide is traditionally understood as a distinction between state administration and the market economy as two opposite forms of governance or ways of exercising power.¹⁴

According to Dicke & Albrow, though, there is not just one public-private divide, but many; and the characterisation of this dichotomy can be expanded to different spheres of our lives.¹⁵ Moreover, given that the line between these divides is neither clear-cut nor pre-determined, the distinction can be characterised as a dynamic social construction. Factors such as political context and national culture play a major role in setting the parameters that draw this line.¹⁶

The aforementioned divide has implications in the field of water management.

Although it can be rightly said that water jointly possesses both public and private good attributes, the prevailing or dominant view in this respect holds that it is predominantly public, belonging either to the people or to the state – the latter acting either as owner or public trustee of this resource.¹⁷ At least three powerful arguments can be used to support this assertion.

The first argument concerns the distinctive characteristics of water that make it different from all other goods. Indeed, the combination of physical and chemical attributes

¹³ The fiercest advocates of this more nuanced rhetoric, the Bretton Woods Institutions – the World Bank and the International Monetary Fund –, continually promote and develop water projects and policies that are distinctly market-oriented and consistent with water commodification. See Bond & Dugard (n 1 above) 4.

¹⁴ W Dicke & M Albrow “Reconstituting the Public–Private Divide under Global Conditions: The Case of Dutch and British Water Management” (2005) 5(2) *Global Social Policy* 229.

¹⁵ Other “families of opposition” that represent different interpretations of the public-private divide are: “in the open versus hidden” (contrast between the public sphere and domestic life); and “the community of citizens versus personal interests”. See Dicke & Albrow (n 15 above) 229-230.

¹⁶ Dicke & Albrow (n 15 above) 232.

¹⁷ B Smith “Water as a public good: the status of water under the general agreement on tariffs and trade” (2009) 17(291) *Cardozo Journal of International and Comparative Law* 301.

that characterise this substance determine its uniqueness. In this regard, it has been said that freshwater is essential, in the sense that it is fundamental for all life on earth; scarce, because it is a finite resource; fugitive, given that it flows under gravity; part of a network, because all water systems are interconnected; and unevenly distributed.¹⁸

Linton contends that, given that all water is part of the hydrological cycle, this resource may be characterised not only as a substance, but also as a process.¹⁹ The transient, fugitive, and dynamic nature of water determines that every single human involvement with this element impacts, in one way or another, on the hydrological processes and on other people.²⁰ As a consequence, the use of water by humans cannot be regarded as an exclusively private affair, but as an activity with social implications.²¹

The second argument is related to the public-ownership consensus that characterises the historical development of water law and the current status of water in the majority of legal systems in the world.²²

The above mentioned consensus indicates that states in the world consistently assert the public control and ownership of water, while simultaneously rejecting the private ownership of substantial water resources.²³ This trend is a longstanding, constant, and worldwide phenomenon.²⁴

Indeed, early systems of water regulation as diverse as the Code of Hammurabi of ancient Mesopotamia, the Dharmaśāstra of the Hindu tradition, the Corpus Iuris Civilis of the ancient Roman Empire, and the Li-Chi of the Chinese, all favoured public ownership and control of water.²⁵

¹⁸ H Savenije “Why water is not an ordinary economic good, or why the girl is special” (2002) 27 *Physics and Chemistry of the Earth* 742-743.

¹⁹ J Linton “The human right to what?” in F Sultana & A Loftus (eds) (2013) *The Right to Water: Politics, Governance and Social Struggles* 48-49.

²⁰ Linton (n 19 above) 48-49.

²¹ Linton (n 19 above) 49.

²² Smith (n 17 above) 295-306.

²³ Smith (n 17 above) 301.

²⁴ Smith (n 17 above) 297.

²⁵ DA Caponera “Earliest water regulations and management” in Caponera, DA & Nanni, M (1992) *Principles of water law and administration: national and international (2nd edition)* 13-23.

Today, the study of current domestic water laws shows that the scales are clearly tipped in favour of the public sector domain. A still-in-progress database of states' water laws and standards developed jointly by the United Nations (UN) Food and Agriculture Organisation and the World Health Organisation indicates that at least 56 countries in the world categorise water as predominantly public. The study also indicates that there are no countries in which public ownership of water is rejected.²⁶

Lastly, the third argument concerns the public's perception regarding the nature of water and the complex issue of its allocation. It should be noted in this respect that there is plenty of evidence to suggest that the large majority of people support the view that water is a common good that belongs to everyone and should, for that reason, be managed for the welfare of society as a whole.²⁷ I shall expand upon this remark in chapter three.

Despite the arguments offered, exceptions to the principle of public-ownership are many, and private uses of water are often authorised. Some of these exceptions take the form of permit systems or water concessions, declarations of special zones, common waters (community or tribal waters), among others.²⁸ Moreover, the recognition of types of water – such as surface water (streams, rivers, lakes, wetlands, and oceans), groundwater (aquifers), and international waters – entails that diverse legal regimes may apply to different bodies of water.

In this context, the bottled water industry represents an exception to the aforementioned and well-accepted public-ownership principle. This relatively new industry is built upon an ideology that sees water as a private good that is therefore excludable and rivalrous.²⁹ In Economics, excludability and rivalry³⁰ are the two distinctive characteristics of

²⁶ The database can be accessed at <http://www.waterlawandstandards.org/> and <http://faolex.fao.org/waterlex/index.htm> (accessed 9 December 2014). See also Smith (n 14 above) 301.

²⁷ Syme et al (n 4 above) 55-56.

²⁸ DA Caponera "Possible contents of and reasons for water law" in Caponera, DA & Nanni, M (1992) *Principles of water law and administration: national and international (2nd edition)* 138-144.

²⁹ J Booker, R Howitt, A Michelsen & R Young "Economics and the Modelling of Water Resources and Policies" (2012) 25(1) *Natural Resource Modelling* 169.

³⁰ A good is rivalrous when consumption by a single person prevents others from enjoying that same good. A service or good is excludable when it is possible and easy to prevent the people who have not paid for it from

private goods, which are typically allocated through free market mechanisms. By contrast, water allocation policies not only pursue economic goals, but also physical, social, and environmental ones; which is why water is normally managed through integrated economic models instead of pure market mechanisms.³¹ Given that water destined to enter into the market inside a plastic bottle and intended for direct human consumption is treated like an ordinary private good, it is therefore excised from the legal regime applicable to water in general, and subject to a different one. In words of Jaffee & Newman, “the commodity of bottled water sits intriguingly at the intersection of current debates regarding the appropriate boundary between the private and public spheres.”³²

2.4. The human right/commodity dichotomy

In recent times, two new ideological constructions have emerged in relation to the status of water. They can be depicted as direct descendants of the public-private bifurcation, and will be subsequently characterised as the “human right/commodity” dichotomy.

In this section, the expansion of the current process of “water commodification” and the progressive interpolation of human rights law principles in the management of water will be analysed in an attempt to understand the ideological differences that lie beneath the project of universal and equal access to water and the notion of restricted access which lies at the base of the bottled water industry.

having access to it. See M Ellery “An inclusive approach to safeguarding the basic needs of the poor” 12 November 2009 <http://blogs.worldbank.org/endpovertyinsouthasia/inclusive-approach-safeguarding-basic-needs-poor> (accessed 25 September 2015).

³¹ Booker et al (n 29 above) 186-188.

³² D Jaffee & S Newman “A More Perfect Commodity: Bottled Water, Global Accumulation, and Local Contestation” (2013) 78(1) *Rural Sociology* 2.

2.4.1. Water as a commodity

The origins of the term “commodification” can be traced back to Marx’s writings on capitalism.³³ In his texts, the author explained that commodities are things that are measured by money and possess an exchange value.³⁴ In capitalist systems, the value based on the use of any material good or service is reduced to its exchange value, which is dictated by its market price.³⁵ Such reduction of things to its exchange value is “at the essence of the commodity form”.³⁶

Another interpretation of the term explains that the process of commodification can be understood as “the incorporation of formerly public, common-pool, or otherwise non-market goods, resources, and services into the market”.³⁷ Such understanding highlights that the main goal motivating the conversion of public goods (such as nature in general, and water in particular) into marketable commodities, is to conquer domains that have traditionally remained outside the market, in order to gain profitability.³⁸

In the last couple of years, a modern understanding of water that frames this natural resource in economic terms has progressively started to take place, highlighting water’s economic value over its importance as a fundamental condition for human, animal and plant life.³⁹

The commodification of water resources is a complex phenomenon that has become more acute over the past decades and especially during the era of globalisation, aggravating

³³ M Gottdiener “Approaches to Consumption: Classical and Contemporary Perspectives” in M Gottdiener (ed) *New Forms of Consumption: Consumers, Culture and Commodification* (2000) 3-6.

³⁴ Gottdiener (n 33 above) 3.

³⁵ Gottdiener (n 33 above) 3.

³⁶ Gottdiener (n 33 above) 3.

³⁷ Jaffee & Newman (n 32 above) 5.

³⁸ D Harvey “The ‘New’ Imperialism: accumulation by dispossession” (2009) 40 *Socialist Register* 35; Jaffee & Newman (n 32 above) 4-5.

³⁹ D Jaffee & S Newman “A bottle Half Empty: Bottled Water, Commodification, and Contestation” (2012) *Organization & Environment* 26(3) 320.

the problem of unequal access to water which characterises the present time.⁴⁰ According to Shiva, this phenomenon can manifest itself in several forms, such as groundwater over-pumping and overexploitation, the privatisation of public water supplies, the rerouting and diverting of rivers, and the unethical expansion of the bottled water industry, among others.⁴¹

The commodification trend upholds that water resources have been traditionally ill-governed and markedly under-priced. In this context, the implementation of rigid free market economy ideas and policies is said to represent the best solution to the so-called global water crisis since it would allegedly promote the minimisation of inefficiencies in water distribution systems through the use of adequate pricing techniques.⁴²

The most well-known incursion of market-based principles into the domain of water management is the privatisation of water supply systems. In this regard, it must be noted that water service delivery models have undergone substantial changes over the course of the 20th century, oscillating between privately and publicly-oriented approaches. Smith has identified three distinct phases in the modern progression of water service delivery models: a localisation period characterised by locally-owned private water enterprises (1820-1930); a nationalisation phase, typified by greater state intervention (1940s-1970s); and a neoliberal period, characterised by increased private sector participation, more decentralised management, implementation of full cost recovery models and a tendency towards the reduction of cross-subsidisation (1970s-present).⁴³

It is the latter neoliberal phase that has given rise to the modern waves of privatisation and corporatisation⁴⁴ that characterise current water distribution frameworks world-wide.

However, the incredible growth of the bottled water market in recent years represents a new and distinct form of commodification that demands a different analytical framework.⁴⁵

⁴⁰ V Shiva "Resisting water privatisation, building water democracy. A paper on the occasion of the World Water Forum in Mexico City" (2006) <http://www.globalalternative.org/downloads/shiva-water.pdf> (accessed 21 January 2016) 2.

⁴¹ Shiva (n 40 above) 2.

⁴² Bond (n 1 above) 3.

⁴³ L Smith "The murky waters of the second wave of neoliberalism: corporatization as a service delivery model in Cape Town" (2004) 35 *Geoforum* 377-380.

⁴⁴ For the difference between privatisation and corporatisation see Smith (n 31 above) 379-381.

Given that the bottled water industry is more prone to market forces and regulations and poses fewer obstacles to capital accumulation than tap water (in other words, is essentially more profitable), Jaffee & Newman have referred to it as a “more perfect commodity”.⁴⁶

Furthermore, given that bottled water alters the prospects for public water systems,⁴⁷ the question arises as to what extent this industry (and the ideology that sustains it) can be said to be compatible with a human rights-based approach that highlights the value of water as a fundamental component of a dignified human life.

2.4.2. Water as a human right

The ideology that sees water, or access to it, as a human right is a still-under-construction initiative that has gained momentum over the last couple of years in the global arena.

The main motivating force propelling this approach is the patent failure of the current water distribution scheme to offer a solution to the global water crisis and cater for poor communities without access to safe water.⁴⁸ It seems clear that categorising water as a public good and guaranteeing its provision as a public service have proved insufficient to tackle widespread “water injustice”. In light of the foregoing, the outlined scheme promotes a human-centred framework where the needs of the people are placed at the heart of the system.⁴⁹ Such approach integrates human rights standards and principles into the development process, guaranteeing that the satisfaction of basic human needs takes precedence in all economic and political decisions over the management and use of water resources.⁵⁰

⁴⁵ Jaffee & Newman (n 32 above) 2.

⁴⁶ Jaffee & Newman (n 32 above) 21.

⁴⁷ Jaffee & Newman (n 32 above) 21-23.

⁴⁸ Jayyousi (n 7 above) 331.

⁴⁹ Jayyousi (n 7 above) 331-332.

⁵⁰ Filmer-Wilson (n 5 above) 213, 230-231.

Another basis for the emergence of this conception is a growing concern that the commercialisation of water resources and services may act as a deterrent for the project of universal access implicit in public policies regarding water management. The treatment of water as an economic good has raised fear and mistrust amongst many sectors of society.⁵¹ In this context, the recognition of a human right to water comes to reaffirm a “principle of equality in access to safe drinking water”⁵² to explicitly limit the advance of the economic frontier and therefore safeguard people’s access to this resource.

The latter argument illustrates the basis for the “human right/commodity” dichotomy analysed in the present dissertation. In this respect, I contend that the bottled water industry is not a neutral activity, but has implications in relation to a human rights-based approach to water. The fact that the market of bottled water is grounded on an ideological construction that is diametrically different from the premise of universal and equitable access to water advanced by a human rights approach demonstrates that the dichotomy is real, and that the compatibility between these two conceptions is and will remain problematic as long as the basic water needs of vulnerable populations remain unmet, and the problem of unequal access to water continues to be unresolved.

The legal basis of a human right to water at the national and international levels will be briefly analysed in the chapter below so as to illustrate the ways in which this ideology has manifested within different legal systems. This analysis aims at achieving a deeper understanding of the theoretical and practical implications that come with the recognition of such right.

⁵¹ E Bluemel “The implications of Formulating a Human Right to Water” (2005) 31 *Ecology Law Quarterly* 963-967.

⁵² The World Health Organisation’s Guidelines for drinking-water quality (WHO Guidelines) define “safe-drinking water” as water that “does not represent any significant risk to health over a lifetime of consumption, including different sensitivities that may occur between life stages.” See World Health Organisation *Guidelines for drinking-water quality - Forth Edition* (2011) 1 http://www.who.int/water_sanitation_health/publications/dwq_guidelines/en/ (accessed 25 September 2015).

Chapter three: The human right to water

3. The human right to water
 - 3.1. Introduction
 - 3.2. The human right to water in International Law
 - 3.2.1. The legal content of the human right to water
 - 3.2.2. Alternative interpretations of the right's content
 - 3.2.3. State's obligations
 - 3.3. The right to water in national legal systems

3.1. Introduction

Is there a human right to water? Although it is tempting to answer in the affirmative, the answer to this question is not immediately obvious.

From a philosophical point of view, it could be argued that the recognition of water as a human right is the morally correct thing to do given that water is an essential element for human survival and access to it is a necessary precondition for a dignified life. Such understanding is in line with the view that regards human rights as an inspirational or philosophical concept reflecting a shared system of values and common morality supported by a broad consensus of states.

However, the right has not been incontrovertibly defined in International Law.¹ Indeed, from a strictly legalistic standpoint, a detailed analysis of human rights law reveals that the legal foundations of a human right to water are somewhat shaky.

Hence, the following sections will explore the legal basis for this right, both at the national and international level.

¹ J Scanlon; A Cassar & N Nemes "Water as a Human Right?" (2004) *IUCN Environmental Policy and Law Paper No. 51* <https://portals.iucn.org/library/efiles/documents/EPLP-051.pdf> (accessed 6 January 2016) 1-2;

3.2. The human right to water in international law

One important feature that characterises the right under consideration is the lack of wide explicit recognition in international law.² This is because there is not a single treaty where the right to water and its corresponding obligations are explicitly acknowledged.³

The current international framework of the human right to water is typically a fragmented one, where different forms of recognition coexist.⁴ Indeed, some forms of recognition expressly categorise water as a human right (sources of a non-binding character), while others merely establish an obligation of the state to provide water services. Some sources view it as an independent entitlement, while others see it as a derivative right that can be grounded in various rights such as the rights to food, health, adequate standard of living, life, adequate housing, a healthy environment, among others. Furthermore, water has been conceived both as an individual and as a collective right.⁵

Furthermore, the international community has taken a series of incremental steps towards its recognition: for instance, the adoption, in 2010, of a Resolution by the UN General Assembly,⁶ and two Resolutions by the UN Human Rights Council⁷ on the human right to water and sanitation; the designation of the first and second international water decades by the UN;⁸ the appointment of the first UN Special Rapporteur on the right to safe drinking water and sanitation in 2008; the inclusion of objectives that link access to water and

² A Kok "Privatisation and the right to access to water" in K de Feyter & F Gómez Isa (eds) *Privatisation and human rights in the age of globalisation* (2005) 260.

³ G McGraw "Defining and defending the right to water and its minimum core: legal construction, and the role of national jurisprudence" (2010) 8(2) *Loyola University Chicago International Law Review* 137.

⁴ E Bluemel "The implications of Formulating a Human Right to Water" (2005) 31 *Ecology Law Quarterly* 957-967.

⁵ See generally A Kok A & M Langford "The right to water" in D Brand & C Heyns (eds) *Socio-economic rights in South Africa* (2005); S Tully "A human right to access water? A critique of General Comment No. 15" (2005) 23(1) *Netherlands Quarterly of Human Rights*; Scanlon, Cassar & Nemes (n 1 above) 1-2; McGraw (n 3 above) 137-145.

⁶ UN General Assembly "The human right to water and sanitation" (July 2010) Resolution A/RES/64/292.

⁷ Human Rights Council "Report of the Human Rights Council on its twelfth session" (February 2010) Resolution A/HRC/12/50; and Human Rights Council "Human rights and access to safe drinking water and sanitation" (September 2010) Resolution A/HRC/15/L.14.

⁸ International Drinking Water Decade (1981-1990) and Water for Life Decade (2005-2015).

social well-being within the list of the UN Millennium Development Goals;⁹ the proliferation of declarations, international conferences and action plans where the right to water is explicitly acknowledged; and treaty interpretation in the form of general comments adopted by various human rights committees – more importantly, General Comment No 15 of 2002 on the right to water by the Committee on ESCR (General Comment 15)–.¹⁰

Taking into consideration these new, non-binding developments, together with the relatively constant way in which States have traditionally managed and regulated water,¹¹ some conclusions can be drawn with regards to the sources of this right at the international level. Indeed, some scholars have suggested that, at present, the legal basis for the human right to water is not to be found in treaties, but mainly in other sources of international law – as established in Article 38(1) of the Statute of the International Court of Justice –, namely international custom and general principles of law.¹²

Despite this confusing legal framework, the human right to water is slowly but surely emerging as a new component of the human rights theory in the international arena, and different actors – States, Non-governmental organisations (NGOs), judicial and quasi-judicial national and international bodies, scholars, among others – have made positive strides towards its recognition.¹³ Hence, recent efforts to further the human rights agenda for the twenty-first century have inspired the categorisation of this entitlement as an emerging right,¹⁴ and this is precisely the stance taken on this issue in the present dissertation.

In spite of these recent advances, issues of validation, legitimacy, entitlement and implementation inevitably arise from this ambiguous legal basis and status.

⁹ See Goal 7, targets 7.C and 7.D of the UN Millennium Development Goals. <http://www.un.org/millenniumgoals/environ.shtml> (accessed 8 January 2015).

¹⁰ Committee on ESCR (2002) General Comment No 15 – the right to water (arts. 11 and 12 of the International Covenant on Economic, Social and Cultural Rights).

¹¹ See Section 2.3 in Chapter two above.

¹² McGraw (n 3 above) 137-145; Scanlon (n 1 above) 9-12; G Syme et al “Defining the components of fairness in the allocation of water to environmental and human uses” (1999) 57 *Journal of Environmental Management* 144; among others.

¹³ Syme et al (n 12 above) 138-145

¹⁴ Scanlon et al (n 1 above) 1-2.

3.2.1. The legal content of the human right to water

Given that the basis for the ideological critique of the bottled water industry featured in the present dissertation focuses on “equal access to water”, not all the constituent components of this right’s legal content will be taken into account. Instead, one aspect in particular will be further analysed: the concept of universal and equal access to water.

This is because, in my opinion, irrespective of the discussions around what is the specific content of this right, and regardless of the legal documents (whether binding or not) where it has been or is to be recognised, the human right to water will always necessarily be grounded on the principle of equality and non-discrimination, simply because this is a fundamental and basic pillar of human rights law.

At the international level, probably the most specific, illustrative and extensive document outlining the traditional interpretation of the content of the human right to water is General Comment No 15 on the right to water.¹⁵ Although this is only a general comment issued by a treaty body, in view of the current state of international law, most authors resort to the aforementioned document as the foundation for their legal studies of this right, and this is precisely why the present dissertation follows a similar approach in this respect.¹⁶

According to General Comment 15, the right entails a prerogative to claim a sufficient quantity of water of adequate quality:¹⁷

The human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses. An adequate amount of safe water is necessary to prevent death from dehydration, to reduce the risk of water-related disease and to provide for consumption, cooking, personal and domestic hygienic requirements.¹⁸

¹⁵ General Comment No 15 (n 10 above).

¹⁶ Some of the authors that follow the same approach are: E Bluemel; E Filmer-Wilson; A Kok; G McGraw; J Scanlon, A Cassar & N Nemes; S Tully; I Winkler; among others.

¹⁷ Scanlon et al (n 1 above) 28.

¹⁸ General Comment No 15 (n 10 above) para 2.

Scanlon contends that three facets comprise the content of this right: i) accessibility, both physical and economic; ii) adequate quality, for personal and domestic use; and iii) quantity, demanding a continuous and sufficient water supply.¹⁹

The above-mentioned understanding is in line with the notion of “core content” or “minimum core”²⁰ of socio-economic rights; which has been adopted by the CESCR and further developed in General Comment No 3²¹ of the Committee on ESCR.²² It aims at providing the minimum standards to guarantee that the basic physical needs of humans are met.²³

Furthermore, the fulfilment of the right must be assessed according to the principle of progressive realisation as established in Article 2, paragraph 1, of the ESCR, which specifies that States must realise the rights established in this Covenant in a progressive way, as immediate realisation would be impossible.²⁴

General Comment No 15 also emphasises that the manner in which the human right to water is to be realised must be sustainable, that is, ensuring that it can be enjoyed by present and future generations;²⁵ and that the equal enjoyment and exercise of this right must be guaranteed, discarding any type of arbitrary discriminatory treatment on the road to its realisation.²⁶

The right to water contains both freedoms and entitlements. (...) the entitlements include the right to a system of water supply and management that provides equality of opportunity for people to enjoy the right to water.²⁷

¹⁹ Scanlon et al (n 1 above) 28.

²⁰ Bluemel (n 4 above) 976.

²¹ Committee on ESCR (1990) General Comment No 3 – the nature of State parties obligations (arts. 2 para 1 of the Covenant) para 10.

²² G McGraw (n 3 above) 155.

²³ McGraw (n 3 above) 158.

²⁴ Asbjorn Eide; “Economic, social and cultural rights as human rights”; In: Asbjorn E, Krause C, and Rosas A; “Economic, social and cultural rights: a textbook”; Second Revised Ed.; 2001; Martinus Nijhoff Publishers; page 36.

²⁵ General Comment No 15 (n 10 above) para 11.

²⁶ General Comment No 15 (n 10 above) para 13.

²⁷ General Comment No 15 (n 10 above) para 11.

This understanding is enlightening as to the extension of the State obligation to provide access to water – stressing the issue of non-discrimination²⁸ –, and as to the way in which water resources should be managed, that is, for the common good.

In order to avoid unnecessary repetition, a more extensive analysis of the content of the human right to water in relation to the notion of equal and universal water access and its theoretical and practical implications will be advanced in chapter five.

3.2.2. Alternative interpretations of the right's content

As for other interpretations of the content of the right to water, it is relevant to point out that the right might also be understood as a juxtaposition of different aspects that are inextricably linked to the use of this element, beyond the strict consideration of the satisfaction of basic human needs. Wider interpretations of the concept capture the broader relationship that ties humans and water, focusing on aspects such as cultural meaning, economic implications, and environmental uses, among others.

General Comment No 15 also fosters a wider interpretation of this concept by underlining that water is a social, cultural and economic good.²⁹ Additionally, other international documents highlight its role as an important part of the development and environmental agenda.³⁰

In this respect, Linton advances an original interpretation by envisioning the aforementioned right from a relational perspective. According to this stance, the right to water is conceived as a “relation between the collective identity of people on one hand, and the process by which water articulates with society on the other”.³¹ Such an interpretation

²⁸ I Winkler *“The Human Right to Water: Significance, Legal Status and Implications for Water Allocation”* (2012) 113.

²⁹ General Comment No 15 (n 10 above) para 11.

³⁰ Take for instance the Mar del Plata Action Plan from the UN Conference on Water (1977), the Dublin Statement on Water and Sustainable Development (1992), Agenda 21 from the UN Conference on Environment and Development at Rio de Janeiro (1992), the Programme of Action of the International Conference on Population and Development (1994), among others. See McGraw (n 9 above) 138-142.

³¹ J Linton “The human right to what?” in F Sultana & A Loftus (eds) (2013) *The Right to Water: Politics, Governance and Social Struggles* 57.

gives rise to two important rights claims: firstly, the right to participate in water governance processes; and secondly, the right to participate in a share of the value created in the “hydrosocial production process”.³²

3.2.3. States’ obligations

Human rights law establishes relationships between right-holders (individuals and groups) and duty-bearers (State and non-State actors).³³

Taking into consideration the interpretation of the human right to water advanced by the Committee on ESCR, the classic tripartite typology regarding the extent of States’ obligations corresponding to human rights termed “respect, protect, and fulfil” is outlined below.³⁴

The obligation to respect requires States to refrain from interfering with the enjoyment of the right to water.³⁵ In particular, this means that existing water supplies must be adequately preserved and protected from pollution; that States must respect existing water allocations that allow for the satisfaction of peoples’ basic needs and abstain from reallocating this resources for other purposes; and that arbitrary water disconnections as a consequence of people’s inability to pay are in violation of this right.³⁶

The obligation to protect entails that third parties should be prevented from interfering with the enjoyment of the human right to water.³⁷ As a consequence, States are required to adopt and implement adequate measures to control third parties’ behaviour so that it does not obstruct the realisation of this right.³⁸ Such duty demands that, when water services are

³² Linton (n 31 above) 57.

³³ E Filmer-Wilson “The Human Rights-based Approach to Development: the Right to Water” (2005) 23(2) *Netherlands Quarterly of Human Rights* 223.

³⁴ Winkler (n 28 above) 108.

³⁵ Winkler (n 28 above) 108.

³⁶ See Winkler (n 22 above) 108; and Scanlon (n 1 above) 22.

³⁷ Winkler (n 28 above) 108-109.

³⁸ Bluemel (n 4 above) 973.

operated by the private sector (the case of privatisation of public water services), third parties are to be prevented from compromising access to sufficient safe-drinking water.³⁹

Finally, the obligation to fulfil requires that States develop national water strategies where sufficient water to satisfy citizens' basic needs is allocated in a non-discriminatory fashion (effectively balancing people's basic needs with other water uses); and that adequate infrastructure is developed so as to ensure water access for all.⁴⁰ Additionally, given that individuals are the "active subject of all economic and social development," the obligation to provide water should take place when they cannot realise the right by their own means.⁴¹

3.3. The right to water in national legal systems

Legal developments towards the express recognition of a human right to water have already taken place within national legal systems. Different levels of recognition can be identified in this respect, ranging from express constitutional recognition – as it is the case in South Africa⁴² – to recognition through judicial interpretation⁴³ – such as the cases of India,⁴⁴ Peru⁴⁵ and Argentina.⁴⁶

Such positive strides towards the inclusion of a right to water within national bills of rights represents a major shift in discourse from one of charity to one of water entitlements paired with corresponding State obligations.⁴⁷ As a consequence, communities are to be progressively empowered to demand water services from their governments.⁴⁸

³⁹ Scanlon (n 1 above) 22.

⁴⁰ Winkler (n 28 above) 111.

⁴¹ Winkler (n 28 above) 111.

⁴² Section 27 of the Constitution of the Republic of South Africa of 1996 recognises a right to sufficient water; and Section 3 of the Water Services Act recognizes the right of everyone to basic water supply and basic sanitation.

⁴³ Bluemel (n 4 above) 977.

⁴⁴ *Subhash Kumar v. State of Bihar* AIR (India) 1991 SC 420.

⁴⁵ *Exp. 06546-2006-PA* Tribunal Constitucional del Perú (2007) and *Exp. 06534-2006-PA/TC* Tribunal Constitucional del Perú (2007).

⁴⁶ *Kersich, Juan Gabriel y otros c. Aguas Bonaerenses y otros s. amparo* Corte Suprema de Justicia de la Nación Argentina (2014).

⁴⁷ Bluemel (n 4 above) 973.

⁴⁸ Filmer-Wilson (n 33 above) 230.

To begin with, affirming that water is a human right⁴⁹ that each and every individual possesses, entails a much stronger protection than simply affirming that water is a public good that has to be provided as a public service. Indeed, under a public good-public service regime, the State has the responsibility to provide water to its inhabitants. However, a failure to comply with this obligation does not provide a sufficient basis for citizens to bring individual judicial claims for water.⁵⁰ Recognising access to water as a human right could lead to a more speedy and effective implementation.⁵¹

Additionally, given the public interest involved in the provision of water supplies, legal proceedings dealing with this issue serve as a space where citizens have the possibility to question and influence the direction of social policies through holding their governments accountable for their decisions.⁵² As a result, this type of litigation fosters a form of participative democracy that beneficially impacts on the policy-making process by compelling governments to continually revisit and improve their policies regarding water management.⁵³

Courts can also play an active policymaking role in this respect through the exercise of judicial review and activist judicial interpretation. Although judicial decisions alone are insufficient to solve complex social issues such as that of water inequality, they do exert pressure on political leaders to deal expeditiously with these problems and put them high up on the agenda.

For instance, in India, following an application filed by the NGO *Pani Haq Samiti*, a Bombay High Court ordered in 2014 that the company in charge of providing water supply in Mumbai, Brihanmumbai Municipal Corporation (BMC), should formulate a policy to provide

⁴⁹ In this paragraph, the word “right” is understood as a valid judicial claim that can be enforced by a court of law.

⁵⁰ Scanlon et al (n 1 above) 21-22.

⁵¹ Scanlon et al (n 1 above) 21.

⁵² Inter-American Commission on Human Rights “The substance of the right to effective judicial protection against the violation of social rights” in *Access to justice as a guarantee of economic, social, and cultural rights. A review of standards adopted by the Inter-American system of human rights* (2007) 66 <http://www.cidh.oas.org/pdf%20files/ACCESS%20TO%20JUSTICE%20DESC.pdf> (accessed 15 July 2015).

⁵³ *Mazibuko and Others v City of Johannesburg and Others* 2010 4 SA 1 (CC).

water to all slums, whether legal or illegal. Such decision came to address the precarious situation of residents occupying new-erected slums, since BMC had taken the decision to stop water supply in all informal settlements built after the year 2000.⁵⁴

Similarly, neighbours of an informal settlement named “Villa 31 bis” in the Province of Buenos Aires in Argentina managed to spur the construction of the infrastructure necessary to provide water supply and sanitation services to their neighbourhood through an injunction – *acción de amparo* – granted in their favour by a Buenos Aires court in 2006.⁵⁵

Furthermore, in Argentina, an *acción de amparo* awarded in 2002 in favour of the children of an indigenous community – Paynemil Mapuche community – that was adversely affected by waters polluted with lead and mercury due to oil extraction activities, meant that the Government of the Province of Neuquén was ordered to provide 250 litres of drinking water per person per day until a permanent solution to clean up the contaminated groundwater was implemented.⁵⁶

Despite the undeniable gap between legal and/or judicial recognition and effective implementation at the national level, making the human right to water expressly justiciable provides citizens with an important tool to seek and demand water justice.⁵⁷ Indeed, judicial proceedings are an arena where issues such as the scope and extent of water management policies, the privatisation of water supplies, or even the concession of water permits to private parties could be validly questioned in an attempt to foster the realisation of this right.

⁵⁴ International Environmental Law Research Centre “*Pani Haq Samiti & Ors. v Brihan Mumbai Municipal Corporation & Ors.*,” December 2014 <http://www.ielrc.org/content/e1407.pdf> (accessed 18 July 2015).

See also DNA India “Bombay High Court asks BMC to supply water even to illegal slums” 16 December 2014 <http://www.dnaindia.com/mumbai/report-bombay-high-court-asks-bmc-to-supply-water-to-even-illegal-slums-2044258> (accessed 15 July 2015).

⁵⁵ *Asociación Civil por la igualdad y la justicia c. GCBA s. amparo* Cám. de Apelaciones en lo Cont. Adm. y Trib. De Buenos Aires (2006).

⁵⁶ *Provincia del Neuquén c. Agrupación Mapuche Paynemil y otro s. acción de amparo* Juzgado de 1ra Instancia en lo Civil Nro. 5 de Neuquén (2002).

⁵⁷ P Bond & J Dugard “Water, Human Rights and Social Conflict: South African Experiences” (2007) 1 *Law, Social Justice & Global Development Journal* 15.

Moreover, if the right to water was to be firmly established in national legal systems, the legal foundations of the bottled water industry could ideally be challenged, if it was found that this instance of water commodification negatively affects legitimate rights.

In light of the above, the following section will explore the foundations of the bottled water industry in an attempt to understand its current configuration and its impact on the human right to water

Chapter four: The bottled water industry

4. The bottled water industry
 - 4.1. Introduction
 - 4.2. Evolution
 - 4.2.1. Neoliberal economic policies
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4.1. Introduction

While the method consisting of placing water inside rigid containers to facilitate its transportation and consumption has been utilised by humans for centuries, the modern bottled water market is a relatively new industry which burst forth in the past twenty years.¹ The tremendous expansion of this industry has been characterised by a rapid consolidation

¹ D Holt "Constructing Sustainable Consumption: From Ethical Values to the Cultural Transformation of Unsustainable Markets" (2012) 644 *The ANNALS of the American Academy of Political and Social Science* 244.

process, increasing demand and constant growth. As a result, the aforementioned industry has a current estimated value of USD \$ 100 billion.²

The market's annual growth rate has remained consistently above 6% since the year 2000,³ with only a brief pause in the period 2008-2009.⁴ Moreover, although bottled water is a mature and well-established market in Western Europe and the United States, Africa and Latin America represent emerging markets that are ripe for investment. As for bottled water sales in Australia and Asia, they nearly doubled in the period 2005-2010.⁵

The demand for bottled water has skyrocketed in the last couple of years, positioning it as one of the most popular products of the packaged beverages market.⁶ For instance, according to information presented by the Beverage Marketing Corporation during the International Bottled Water Association 2014 Annual Business Conference, bottled water is expected to become the number one packaged drink sold in the United States by 2016.⁷

In terms of worldwide volume consumption, the United States, China, Mexico, Germany and Italy are currently the biggest bottled water consumers.⁸ As for the leading players, Nestlé, Coca-Cola and PepsiCo are the three biggest bottled water companies.⁹

Furthermore, the bottled water industry has an embedded cultural and historical meaning that goes well beyond the mere act of hydration. On the one hand, water is undoubtedly one of the most iconic symbols of nature and simultaneously one of the most important natural elements for human life. On the other hand, the industry is a representation

² UNESCO "UNESCO Water e-newsletter No. 153: bottled water" 1 September 2006 <http://www.unesco.org/water/news/newsletter/153.shtml#know> (accessed 10 June 2015).

³ B Rani et al "Bottled Water – A Global Market Overview" (2012) 1(6) *Bulletin of Environment, Pharmacology and Life Sciences* 1.

⁴ Holt (n 1 above) 245.

⁵ Rani et al (n 3 above) 1.

⁶ D Jaffee & S Newman "A More Perfect Commodity: Bottled Water, Global Accumulation, and Local Contestation" (2013) 78(1) *Rural Sociology* 9.

⁷ International Bottled Water Association "Bottled water sales and consumption projected to increase in 2014, expected to be the number one packaged drink by 2016" 4 December 2014 <http://www.bottledwater.org/bottled-water-sales-and-consumption-projected-increase-2014-expected-be-number-one-packaged-drink> (accessed 10 June 2015).

⁸ Rani et al (n 3 above) 2.

⁹ Holt (n 1 above) 249.

of the power of industrialised society over nature. As a result, every single bottle of water symbolises the tension between the majesty of untamed nature and the modern technology which makes it possible to control it.¹⁰

As illustrated by these facts and figures, the bottled water market is a strong and resilient one, and is expected to keep growing stronger at a very fast rate.

In an attempt to better understand the distinctive features of this industry, the present chapter will subsequently explore its evolution, identify the different types of products it offers, and present the discourses for and against it as advanced by its supporters and detractors.

4.2. Evolution

Bottled water is essentially any drinkable water that is placed in a sealed container and offered for sale. Even though at present most people accept this trading mechanism as legitimate and perceive it as “natural”, such has not always been society’s way of interpreting it. Years ago, the idea would sound almost absurd. After all, people could have access to potable water in their homes or in public spaces. In fact, who would be willing to pay extra for something that literally falls from the sky for free and can be obtained from a tap for a very low price? From this perspective, bottled water resembled the idea of “selling ice to Eskimos”.¹¹

Why and how, then, did this market become so successful in such a short span of time?

Holt upholds that people drink bottled water because they rely on a belief that they are healthier for so doing, have established habits around this belief, and live in a social context that accepts and continually reinforces this ideology.¹²

¹⁰ R Wilk “Bottled water: the pure commodity in the age of branding” (2006) 6(3) *Journal of Consumer Culture* 308.

¹¹ Wilk (n 10 above) 304-305.

¹² Holt (n 1 above) 250.

Following this argument, I contend that the “backstage institutional structures”,¹³ or the foundations upon which the modern bottled water market is constructed, resulted from a combination of certain political, economic, social and cultural conditions, of which the most relevant are: neoliberal economic policies, technological innovation, consumerism, health considerations, social status and stratification, and advertising and marketing strategies. I briefly elaborate on each of these below.

4.2.1. Neoliberal economic policies

Trends towards the privatisation of public services and water supply systems in the 1990s sparked a depiction of the public sector as an inadequate and inefficient water management system.¹⁴ Such policies laid the groundwork for bottled water to become an object of trade because they facilitated an ideological shift in perception on the nature of water from a public good to a branded commodity.¹⁵

4.2.2. Technological innovation

A major factor in the development of this industry was the switch from glass to plastic packaging.¹⁶ In 1989, manufacturers developed the technology that allowed PET (polyethylene terephthalate) to be used in smaller bottles.¹⁷ This technological innovation was decisive, since it facilitated massive consumption and boosted production.¹⁸

4.2.3. Consumerism

The establishment of a throw-away society and a culture of immediacy substantially changed social practices and traditional hydration habits. As a result, people gradually started relying more and more on bottled water as a primary source of hydration, regardless of the

¹³ Holt (n 1 above) 248.

¹⁴ Wilk (n 10 above) 305-307.

¹⁵ Wilk (n 10 above) 305-307.

¹⁶ Holt (n 1 above) 245.

¹⁷ Holt (n 1 above) 245.

¹⁸ Holt (n 1 above) 245.

severe environmental impacts of this unsustainable market.¹⁹ Holt contends in this regard that the current bottled water industry is a reflection of an underlying consumption ideology characterised by clear patterns of unsustainability.²⁰ Moreover, according to this author, the industry is governed by some of the values that embody the phenomenon known as consumerism, that is, materialism, possessive individualism, and sometimes narcissism.²¹

4.2.4. Health considerations

The safety of public water supplies that had once been taken for granted was questioned, partially because of the new trend towards the involvement of the private sector in water selling.²² In addition, accidents involving water contamination and bacteria outbreaks worked as stimulus to the bottled water market, instilling fear and distrust in public institutions.²³ Take for instance, the 2000-2002 cholera outbreak in the Eastern and Northern parts of South Africa; the 1993 cryptosporidium outbreak in Milwaukee, United States (US); or the 1998 cryptosporidium and giardia outbreak in Sidney, Australia.²⁴

4.2.5. Social status and stratification

Bottled water prices are substantially higher than that of tap water. In terms of volume unit, this product is 240 to 10 000 times more expensive.²⁵ As a result, access is strongly conditioned by income, and can be interpreted as a sign of social status.²⁶

Bottled water was originally born as a form of status-driven drinking.²⁷ Before the late 1980s, Perrier pioneered the idea by attempting to offer a bit of “European sophistication” through commercialising imported water in glass bottles.²⁸

¹⁹ Holt (n 1 above) 237.

²⁰ Holt (n 1 above) 237-238.

²¹ Holt (n 1 above) 237-238.

²² M Doria “Bottled water versus tap water: understanding consumers’ preferences” (2006) 4(2) *Journal of Water and Health* 273-274.

²³ Doria (n 22 above) 273.

²⁴ See Doria (n 22 above) 273, and Holt (n 1 above) 246-247.

²⁵ Jaffee & Newman (n 6 above) 9.

²⁶ C Ferrier “Bottled water: understanding a social phenomenon” (2001) 30(2) *AMBIO: A journal of the Human Environment* 118.

Nowadays, this item is still regularly used as a luxurious symbol for upper class-living. Take for example the products offered by the luxury bottled water brand “Bling H2O”, which sells bottles that come encrusted with Swarovski crystals, filled with water from springs in the Great Smokey Mountains of Tennessee, and sold for thousands of dollars.²⁹

4.2.6. Advertising and marketing strategies

The bottled water industry’s greatest achievement has been creating a product that, in the eyes of unaware consumers, is substantially different from plain tap water. Such perceived different quality is the main justification for the substantial price difference.

Successful added-value strategies and aggressive marketing campaigns have managed to embellish the simple biological act of hydration, giving rise to a new form of cultural consumption.³⁰ Concepts such as individualism, health, aesthetics, purity, immediacy, convenience, and even social status come into play every time consumers choose bottled water over tap water and other beverages.³¹

Determining whether the added value that companies implicitly promise is real or imaginary, that is, whether bottled water is actually healthier or better than tap water, is somewhat complicated. There is large debate in the scientific literature about whether bottled waters have better qualities than tap water.³² Nevertheless, given that companies reinforce the consumption of bottled water through advertising and marketing strategies, consumers become more prone to choosing bottled water over tap water.³³

²⁷ Holt (n 1 above) 245.

²⁸ Holt (n 1 above) 245.

²⁹ The products can be seen at the Bling H2O website at <http://www.blingh2o.com> (accessed 2 July 2015).

³⁰ Wilk (n 10 above) 307.

³¹ A Opel “Constructing Purity: Bottled Water and the Commodification of Nature” (1999) 22(4) *Journal of American Culture* 69-70.

³² Doria (n 22 above) 271.

³³ Doria (n 22 above) 274.

4.3. Bottled water types

Different types of bottled water can be identified taking into consideration factors such as the water source, the original quality of the water, the elements artificially added to it, the treatment processes (or lack of them)³⁴ and the size and type of containers used to commercialise the water.

As a result, the industry is comprised of a number of different products that, despite being designated by the same name, are certainly not the same.³⁵

In order to understand how this differentiation criteria works, it is important to distinguish between two concepts that will necessarily come into play when analysing the bottled water industry: one is “raw water”, which is untreated water as it is naturally found in nature; and the other is “finished water” (also known as “product water”³⁶), which is water that has passed through all the treatment processes necessary to turn raw water into safe-drinking water.³⁷ Finished water may or may not be entirely safe for human consumption.³⁸ Indeed, water contamination can occur after all the deemed and mandatory treatment processes have taken place.³⁹ This is why neither bottled nor tap water are an absolute guarantee of safe hydration. For instance, certain heavy metals may leach from aged and corroded piping, contaminating municipal tap water by the time it reaches household taps.⁴⁰ Furthermore, research has shown that water inside low-quality plastic containers can also

³⁴ Some of the most popular treatment processes water normally goes through in order to become potable are: coagulation, sedimentation, filtration, disinfection, reverse osmosis, ozonation, among others.

³⁵ Ferrier (n 26 above) 118.

³⁶ P Gleick “*The World’s Water 2004-2005: The Biennial Report on Freshwater Resources*” (2004) 32.

³⁷ United States Environmental Protection Agency “Drinking water glossary” http://water.epa.gov/lawsregs/guidance/sdwa/upload/2009_08_28_sdwa_fs_30ann_glossary_web.pdf (accessed 28 September 2015).

³⁸ World Health Organisation *Guidelines for drinking-water quality - Forth Edition* (2011) 50, 56-59 http://www.who.int/water_sanitation_health/publications/dwq_guidelines/en/

³⁹ World Health Organisation (n 38 above) 16-17.

⁴⁰ See M Ahmad & A Bajahlan “Quality Comparison of Tap Water vs Bottled Water in the Industrial City of Yanbu (Saudi Arabia)” (2009) 159 *Environmental Monitoring and Assessment 2*; United States Environmental Protection Agency http://www.epa.gov/nrmrl/wswrd/cr/corr_res_lead.html (accessed 28 July 2015) and Health Canada http://hc-sc.gc.ca/fn-an/securit/facts-faits/faqs_bottle_water-eau_embouteillee-eng.php#a1 (accessed 28 July 2015).

pose a health risk due to toxic chemicals from such bottles being released if stored for long periods in hot storage areas and/or directly exposed to sunlight.⁴¹

Treated or finished water is a much different element than is raw water at the point of capture or withdrawal.⁴² Substantial resource inputs are implicated in the processes of withdrawal, storage, treatment, transportation and delivery of water.⁴³

Given that national and international safety and quality standards⁴⁴ demand that all water destined for human consumption (whether bottled or tap water) be turned into safe drinking water, bottle water classifications focus predominantly on the differences of waters in its raw state, taking into consideration its source, composition, or original quality.

In this regard, countries' legal systems typically distinguish between (i) waters that originate from pure and unpolluted water sources which do not require extensive treatment processes and (ii) waters that come from other sources which are not necessarily pure (including municipal tap water), but have gone through all the purification processes necessary to remove any chemicals and/or contaminants. The first category comprises so-called natural water (as it is called in South Africa) or natural mineral water and spring water (US and Europe). The second category encompasses prepared water (South Africa) and purified water (US).⁴⁵

A large percentage of bottled water comes from public municipal sources.⁴⁶ Indeed, as much as half of the bottled water that is sold in the US is just (already safe-drinking) tap

⁴¹ Natural Resource Defence Council <http://www.nrdc.org/water/drinking/qbw.asp> (accessed 28 July 2015).

⁴² J Booker, R Howitt, A Michelsen & R Young "Economics and the Modelling of Water Resources and Policies" (2012) 25(1) *Natural Resource Modelling* 179.

⁴³ Booker et al (n 42 above) 179.

⁴⁴ As for international standards, take for instance the WHO Guidelines or the Codex Alimentarius Standard for Natural Mineral Water (Codex Standard 108-1981).

⁴⁵ See Act No 54 of 1972 (South Africa); Code of Federal Regulations - T 21 165.110 (United States); *The natural mineral water, spring water and bottled drinking water (England) Regulations 2007* (No 2785); and European Commission Website "Natural mineral waters and spring water" http://ec.europa.eu/food/safety/labelling_nutrition/mineral_waters/index_en.htm (accessed 28 September 2015).

⁴⁶ Jaffee & Newman (n 6 above) 9-10.

water that has been filtered or treated.⁴⁷ Furthermore, some well-known brands such as Aquafina⁴⁸ and Dasani⁴⁹ consist of purified tap water.

As for bottled water classifications in particular, they will depend on the laws of each state. For instance, in South Africa, Regulations No 718 of 2006 and No 455 of 2010 (under the Foodstuffs, Cosmetics and Disinfectant Act 1972⁵⁰) set out the standards and rules for bottled water in the country. As a result, three classes of bottled water are distinguished in South Africa:

viii) Natural water: refers to bottled water that derives from an underground formation and is bottled at source. This water is typically pure unpolluted water that can only be subjected to a very limited set of treatments. It comprises natural mineral water, natural borehole water and natural spring water.⁵¹

ix) Waters defined by origin: these waters originate from a specific environmental water source that has not passed through a community water system. It comprises water originating from rain, rivers, streams, springs, glaciers, icebergs, snow melt, mist and/or the sea.⁵²

x) Prepared water: this designation comprises waters that are sourced from any type of water supply and have undergone any acceptable treatment resulting in clean drinking water. This category includes municipal, surface or ground water which has been subjected to treatments that altered the chemical composition of such waters.⁵³

Many countries have similar laws on the subject.⁵⁴

⁴⁷ See Jaffee & Newman (n 6 above) 9; and Consumer Reports “Knowing where your water comes from” July 2012 <http://www.consumerreports.org/cro/magazine/2012/07/do-you-know-where-your-bottled-water-comes-from/index.htm> (accessed 12 August 2015).

⁴⁸ Aquafina official website <http://www.aquafina.com/en-US/faq.html> (accessed 10 August 2015).

⁴⁹ Dasani official website <http://www.dasani.com/dasani-water/> (accessed 10 August 2015).

⁵⁰ Act No 54 of 1972.

⁵¹ See Part I of R. 718 of 2006.

⁵² See Part II of R. 718 of 2006.

⁵³ See Part III of R. 718 of 2006.

⁵⁴ For instance, the US regulates bottled water by the Food and Drug Administration, under the *Federal Food, Drug, and Cosmetic Act*. In the case of Australia and New Zealand, bottled water is regulated through the Food Standards Code of the *The Food Standards Australia New Zealand*. In Canada, the Canadian Food Inspection

Finally, bottled water can also be distinguished by the container's volume, as this may be of portable size or may come in 20 litre bottles which are used in water dispensers. An important difference between these two operating modes lies in their environmental impact (or ecological footprint), since this is quantitatively larger in the case of smaller bottles. Notwithstanding this difference, the same market-non market conflict⁵⁵ (public provision-private selling of water) characterises the essence of both of these types of bottled water, which is why my analysis will simultaneously cover both scenarios.

4.4. Supporters and detractors of the bottled water industry

Despite its enormous expansion in recent years, the bottled water industry has sparked strong criticism among certain groups, spawning resistance, fuelling protests, and urging certain groups to take measures to actively oppose the fast-paced evolution of this new market.

While supporters value the convenience, perceived better quality, taste, and the embedded cultural meaning of bottled water, detractors typically question the negative environmental and social impacts associated with this industry, and its ideological foundations.

There is a powerful link between bottled and tap water in this regard. Indeed, as studies show, supporters' and detractors' perceptions and opinions regarding bottled water are intimately linked to their perceptions and opinions concerning tap water.⁵⁶ As a result, a large percentage of bottle water drinkers are simultaneously sceptical towards the safety of their local tap water, or dissatisfied with tap water's taste, or eclipsed by the advertised advantages of bottled water. On the other hand, critics typically condemn the negative impacts of the bottled water industry while simultaneously advocating for the strengthening and improving of public water supply systems.

Agency is in charge of enforcing the *Canadian Food and Drugs Act and Regulations* and the *Consumer Packaging and Labelling Act and Regulations* with regards to bottled water. See Gleick (n 36 above) 26-31.

⁵⁵ Wilk (n 10 above) 307.

⁵⁶ Doria (n 22 above) 273.

4.4.1. Supporters' arguments

For bottled water supporters, this product represents the convergence point where cultural beliefs, social habits, subconscious desires and fears meet. Although many aspects come into play when determining consumers' preferences, bottled water drinkers usually rely on the belief that this product is better than tap water in one or many of the following aspects: quality, safety, taste, and/or convenience.

As regards quality, a 2006 cross-national study pointed out that several factors regularly influence public perception of drinking water quality. Such factors include: risk perception, organoleptic properties,⁵⁷ previous personal experience, impersonal and interpersonal information, demographic variables, and "contextual cues provided by the supply system, perceptions of chemicals, trust in water companies and other groups".⁵⁸

Many studies have shown that bottled water is generally perceived as having good quality, while tap water perceptions are not unanimously positive among members of the population.⁵⁹ For instance, a comprehensive survey conducted in the US a few years back indicated that approximately half of the sample mentioned health concerns and tap water risks as the main reason for consuming bottled water.⁶⁰

Sellers are well aware of this factor and use it in their advantage. Indeed, according to Wilk, the industry often implicitly contrasts the "purity" of bottled water with the potential dangers of water from public supplies in the belief that fears and distrust of tap water are the key forces driving the industry.⁶¹

Another factor determining bottled water consumption is related to the convenient "on-the-go-hydration" it offers. Such convenience is highly valued by people who do not have the habit of carrying refillable bottles around on a daily basis, and by those who are used

⁵⁷ The term "organoleptic properties" encompasses the water characteristics that affect the senses of taste, odour, and sight. See Doria (n 22 above) 272.

⁵⁸ M Doria; P Hunter & N Pidgeon "Perceptions of drinking water quality and risk and its effect on behavior: a cross-national study" (2009) 407 *Science of the Total Environment* 5455.

⁵⁹ A Saylor; L Stlaker Prokopy & S Amberg "What's wrong with the tap? Examining perceptions of tap water and bottled water at Purdue University" (2011) 48 *Environmental Management* 589.

⁶⁰ Doria (n 22 above) 273.

⁶¹ Wilk (n 10 above) 317.

to drinking water regularly throughout the day.⁶² Furthermore, the disappearance of traditional water fountains in public places,⁶³ and the fact that in certain contexts such as restaurants and bars asking for tap water is socially unacceptable, are circumstances that work as a stimulus for bottled water consumption.

As for organoleptic properties, many consumers prefer bottled water because of its colour, hardness,⁶⁴ taste, and odour.⁶⁵

Studies also indicate that in many situations bottled water is not seen as an alternative to tap water, but as a substitute for soft drinks and alcoholic beverages. This is particularly true in contexts where tap water is not readily available. For instance, a 2013 ban on bottled water at the University of Vermont in Burlington (US), far from encouraging students to drink more water, resulted in a considerable increase in the consumption of less healthy bottled beverages.⁶⁶ In response to this unintended effect, university authorities were forced to review their approach and develop alternative ways to make water a more convenient option within the university campus.⁶⁷ The situation described above is related to the issue of consumer's freedom of choice, which is the most recurrent argument employed by sellers to call into question local bottled water bans.

5.2.1. Detractors' arguments

Bottled water criticism can be divided into two categories depending on whether the critiques revolve around the (negative) environmental or social impacts of this industry. In other words, criticism centers either on the problem of unsustainability, or inequality this industry generates.

⁶² Saylor et al (n 59 above) 592.

⁶³ Jaffee & Newman (n 6 above) 10.

⁶⁴ Water hardness is determined by the presence of the minerals Calcium (Ca) and Magnesium (Mg) contained in the water. See World Health Organisation (n 37 above) 225.

⁶⁵ Doria (n 22 above) 272.

⁶⁶ T Kingkade "When the University of Vermont banned bottled water, students drank more unhealthy beverages" *The Huffigon Post* July 2015 http://www.huffingtonpost.com/entry/university-of-vermonts-removal-of-bottled-water-caused-students-to-drink-more-unhealthy-beverages_55a58255e4b04740a3de4e85 (accessed 5 September 2015).

⁶⁷ Kingkade (n 66 above).

4.4.2.1. Unsustainability

The most common anti-bottled water discourse focuses on the high environmental impacts associated to this industry. Indeed, the processes of advertising, packaging, labelling, transporting, and cooling of this product generate hidden environmental costs that could be easily avoided through the consumption of readily available local tap water.⁶⁸ Jaffee & Newman contend that “few other commodities illustrate the notion of unsustainability quite so dramatically (as bottled water)”.⁶⁹

To begin with, bottled water demands gigantic energy expenditures and carbon emissions that contribute to anthropogenic global warming and climate change. Indeed, bottled water production, transportation and distribution consumes between 1 000 and 2 000 times more energy per unit volume than tap water.⁷⁰

Secondly, the industry generates an enormous and unnecessary amount of garbage. The fact that plastic bottles are recyclable represents only a tiny fraction of the bigger picture because the fact is, the majority of plastic bottles are not recycled. Instead, they end up in landfill waste sites, oceans, or incinerators. In this scenario, the mountains of plastic bottles represent the staggering environmental impact of the sum of thousands of “seemingly innocuous individual choices”.⁷¹

Lastly, bottled water can create water shortages in the regions surrounding bottling plants’ facilities.⁷² Given that large amounts of water are extracted and transported away, the depletion rate is much higher than the rate generated by moderate extraction for domestic and/or agricultural purposes. As a consequence, these plants’ extraction activities alter the ecological balance of ecosystems.⁷³ In these cases, the state plays a key role in the regulation

⁶⁸ Opel (n 31 above) 69.

⁶⁹ Jaffee & Newman (n 6 above) 25.

⁷⁰ Jaffee & Newman (n 6 above) 10.

⁷¹ Saylor et al (n 59 above) 588.

⁷² “Case against Coca-Cola Kerala State: India” <http://www.righttowater.info/rights-in-practice/legal-approach-case-studies/case-against-coca-cola-kerala-state-india/> (accessed 28 September 2015).

⁷³ *Perumatty Grama Panchayat vs State of Kerala* High Court of Kerala (India) KLT 731 2004.

of the limits for water extraction as set in licenses and permits conceded to bottled water companies.

4.4.2.2. Inequality

A variety of social actors comprise this group of detractors. They are ideological opponents from diverse political, socio-economic and cultural backgrounds who question the conceptual foundations upon which the bottled water industry is cemented.

The common denominator among them is their disapproval of the industry's negative social impacts in relation to the issue of unequal distribution of safe-drinking water.

Ideological opponents frame their anti-bottled water thinking in a variety of ways.

Some critics emphasise that water is a special economic good, which justifies a different treatment in comparison with other goods. Such differential treatment entails that decisions regarding water allocation should be based on a “multi-sectoral, multi-interest and multi-objective analysis” in a broad social framework, involving social, economic, environmental and ethical considerations.⁷⁴ Given that the bottled water industry treats water as a purely economic good, critics emphasise the inadequacy of this approach to confront the problem of global water inequality.

Other authors refer to water as a public good, inferring that water resources belong to the public. This approach confers a privilege of use before others⁷⁵ and sets the standard that waters should be managed in the public interest. In this respect, Wilk upholds that the conception that sees water as a public good is inspired in the fact that water is a necessity of life and should, for that reason, be made accessible as a right rather than a privilege.⁷⁶

Under this conception, the main issue is that, whenever a private company extracts water (whether considered the owner of such water, or a mere customer of a town selling its

⁷⁴ H Savenije “Why water is not an ordinary economic good, or why the girl is special” (2002) 27 *Physics and Chemistry of the Earth* 741.

⁷⁵ See B Smith “Water as a public good: the status of water under the general agreement on tariffs and trade” (2009) 17(291) *Cardozo Journal of International and Comparative Law* 295;

⁷⁶ Wilk (n 10 above) 316-317.

own resources, or a customer of a municipality administering a public service), the control of a part of that water source is being taken out of the public sector and put in private hands.

Moreover, detractors also frame their criticism in terms of the existing social consensus on the public status of water and the way in which water should be ideally managed. Public opinion is clearly tipped in favour of public involvement in the management of water resources.⁷⁷ A summary of seven studies developed over a decade in Australia determined that the public interpretation of the concepts of justice, fairness and equity in relation to the issue of water allocation were relatively stable and consistent throughout that decade.⁷⁸ Water was consistently seen as a public good and as a resource that should be managed for the welfare of the community as a whole.⁷⁹ Furthermore, the study found out that, in order for citizens to accept imposed water allocation decisions, the perceived fairness of such decision-making processes was of paramount importance. In this regard, citizens consistently expressed that water markets alone (such as the case of the bottled water market) were not considered fair or acceptable methods for allocating and re-allocating water, and that economic arguments were of lesser importance when deciding how water should be managed.⁸⁰

Additionally, bottled water bans around the world are clear manifestations of the way in which public perceptions of the bottled water industry are turned into anti-bottled water actions. Such bans have been carried out by towns – such as the towns of Bundanoon⁸¹ (Australia) and Concord⁸² (Massachusetts, US) – and universities.⁸³ Additionally, some

⁷⁷ Smith (n 75 above) 295, 300-305.

⁷⁸ G Syme et al “Defining the components of fairness in the allocation of water to environmental and human uses” (1999) 57 *Journal of Environmental Management* 67-68.

⁷⁹ Syme et al (n 78 above) 55-56.

⁸⁰ Syme et al (n 78 above) 67.

⁸¹ The town of Bundanoon was the first community in the world where the sale of plastic bottled still water was prohibited, in July 2009.

⁸² Concord was the first town in the US to ban the sale of single-serving plastic water bottles through a bylaw that was passed in 2013. The bylaw can be accessed at http://www.concordma.gov/pages/ConcordMA_TownClerk/Water%20Bottle%20Bylaw.pdf (accessed 15 September 2015).

⁸³ For instance, University of Leeds, University of Canberra, University of Vermont, University of Ottawa, and University of Winnipeg, among others.

municipalities have restricted city spending on bottled water, and some towns and cities such as San Francisco (US) have enacted local laws to forbid the purchase of single-serving PET bottled water with public funds.⁸⁴

The above-mentioned discourses certainly do not exhaust the list of possible critical approaches to the bottled water industry. In an attempt to continue expanding my analysis in relation to this aspect, the following chapter will address this issue from a human-rights perspective. Consequently, the “human right/commodity” dichotomy in relation to water will be further examined so as to unravel how the bottled water industry affects the realisation of the human right to water.

⁸⁴ See “Bottle Water Bans” on Google Maps https://www.google.com/maps/d/viewer?mid=zuJHZqXY_eHo.k1kb4SkEP-k8&hl=en_US (accessed 15 September 2015).

Chapter five: The relationship between the bottled water industry and the human right to water

5. The relationship between the bottled water industry and the human right to water
 - 5.1. Introduction
 - 5.2. The human right to water as a question of prioritisation
 - 5.2.1. A question of quantity
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 - 5.5. Tap vs bottled water
 - 5.6. Bottled water types and their impact on public water supply systems
 - 5.7. Some ethical considerations regarding the bottled water market

5.1. Introduction

Does bottled water foster, or hinder, the realisation of the human right to water?

At first glance, it would seem logical to think it does. After all, bottled water allows for safe water to reach places where it may not be easily available or accessible. However, a deeper analysis reveals that this is not necessarily the case, since, after all, the bottled water industry and the human rights approach to water are based on different ideological conceptions regarding what is the meaning of water, its value, how it should be allocated and managed.

The creation of the “new market of water” epitomised in the bottled water industry, far from being a promising avenue for helping populations in difficulty, may threaten to exacerbate the problem of unequal access to safe drinking water.

Barlow and Clarke contend that bottled water companies are engaged in a continual search for new water sources to “feed the insatiable appetite of this business.”¹ In this quest for profit, they use all types of water resources, moving on to new ones when the old sources are depleted.²

Many communities around the world have called into question, even via judicial proceedings, the supposedly “harmless” activities of bottled water and soft drinks plants within their territories, unfolding many instances of “hydropiracy”.³

For instance, in 2003, in the city of Plachimada (Mumbai, India), a multiple strategy that included protests by local villagers, national and international support, political will and positive rulings, meant that a Coca-Cola⁴ plant installed in that city was forced to close down its facilities.⁵ It was found that the plants’ activities had created water scarcity in a previously water-abundant area because of excessive and illegal extraction, and that the remaining water resources had been polluted due to deposited waste material and the pumping of wastewater into dry bore wells.⁶

In light of the above, in subsequent sections the argument will be advanced that, in most circumstances, the bottled water industry, far from fostering the human right to water, negatively impacts on its realisation.⁷

As a result, the way in which the bottled water industry is currently shaped and configured may have to be re-interpreted and its magnitude and extension re-dimensioned so as not to interfere with the realisation of this right.

¹ M Barlow & T Clarke (2002) “Who Owns Water?” The Nation September 4.

² Barlow & Clarke (n 1 above) 4.

³ V Shiva “Resisting water privatisation, building water democracy. A paper on the occasion of the World Water Forum in Mexico City” (2006) <http://www.globalalternative.org/downloads/shiva-water.pdf> (accessed 21 January 2016) 3.

⁴ The Coca-Cola Company possesses various bottled water brands sold around the world. The most well-known of these brands is Dasani.

⁵ Shiva (n 3 above) 3-4.

⁶ Shiva (n 3 above) 3-4.

⁷ Exceptions to the generality of this proposition will be specified below.

5.2. The human right to water as a question of prioritisation

The act of naming water as a human right constitutes an important value judgment in itself, since it entails prioritising certain uses and interests over others. A human rights-based approach determines that water is explicitly recognised as a social good, and that this dimension takes priority over the stance that sees water as an economic commodity.⁸

General Comment No 15 states that the priority in terms of water allocation must be given to personal and domestic uses, as well as to the prevention of starvation and disease.⁹ These observations imply that the quest for economic efficiency in water resource management should ideally not compromise the survival of any human being on this earth.

As for the implications of the recognition of the human right to water in water allocation decisions, the UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation has rightly said that

This new vision requires a shift in the mindset of policy-makers, national governments, local authorities, NGOs, UN agencies, the private sector and also of the people themselves. It means that the most vulnerable, the poorest, the indigenous, the slum dwellers and the homeless, those who are usually voiceless, are no longer left behind and have to be prioritized in policy making.¹⁰

Following from this argument, a revision of national water policies and allocation decisions regarding the bottled water industry is a compulsory task. States should impose adequate limits on private entities in order to prevent the exacerbation of the phenomenon of water commodification and its potential pervasive effects over socially disadvantaged groups. By setting reasonable boundaries to the expansion of the water market, the industry is thus prevented from growing in unethical ways that may unfairly affect vulnerable populations.

⁸ E Filmer-Wilson “The Human Rights-based Approach to Development: the Right to Water” (2005) 23(2) *Netherlands Quarterly of Human Rights* 228.

⁹ Committee on ESCR (2002) General Comment No 15 – the right to water (arts. 11 and 12 of the International Covenant on Economic, Social and Cultural Rights) para 6.

¹⁰ See the statement of the UN Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation at the United Nations General Assembly Plenary Meeting on the Human Rights to Water and Sanitation (27 July 2011) <http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=11276&LangID=E> (accessed 2 October 2015).

Except in cases of emergency, or in contexts where public water provision systems are not in place, bottled water should be regarded as a non-priority area of water management, and emphasis should be placed instead on water allocations that are conducive to the satisfaction of basic human needs on a non-discriminatory basis.

The human right to water does not mandate that all the water of the globe is to be allocated to human beings for drinking and sanitation purposes. It mandates that States must ensure that everyone has access to the sufficient amounts necessary for a dignified life. If allocation conflicts arise, the value of water as a social good must be prioritised over its value as an economic commodity.¹¹ In other words, this is an issue of political priority setting.¹²

Thus, my argument is not that all the water should be destined to fulfill this right and the bottled water industry should be prohibited altogether. Instead, all the efforts should be put firstly on satisfying the human right to water, and only afterwards other uses should be allowed, following a sort of “principle of priority”.

Indeed, it is contrary to the essence of the human right to water to allow even a fragment of the total water resources in the world to be commodified and destined to the bottled water market while, simultaneously, millions of people lack access to this resource.

In any case, the chronology of these two situations should be inverted. Accordingly, firstly all the efforts should be placed on achieving universal access, and only afterwards the excess of available water could be destined for profiting purposes.

Even in the last scenario, it could be validly argued that water cannot be used by the bottled water industry because such trading form represents a violation of the “public-ownership consensus”. An example of such situation can be found in India, where the Courts have managed to limit and, in some instances, prohibit the activities of bottled water plants resorting to the public trust doctrine, which states that water resources are meant for public

¹¹ Filmer-Wilson (n 8 above) 228.

¹² H Savenije “Why water is not an ordinary economic good, or why the girl is special” (2002) 27 *Physics and Chemistry of the Earth* 743.

use and enjoyment, and therefore it is unjustified to subject them to private ownership or enjoyment.¹³

There are obvious practical difficulties in the implementation of this strategy, though. Indeed, it is not an easy task to efficiently balance the pressing interests of different water users, in this case domestic users and big corporations, in a context of economic power imbalance. However difficult it may sound, though, this is the path the human rights approach mandates.

5.2.1. A question of quantity

Bottled water companies can access water through different means depending on the national legal scheme of the country where their activities are performed. They can either own the land where water resources are located, or acquire water licenses and permits allowing them to perform water extractions from different sources such as rivers, lakes, groundwater, stream, ponds, among others. Such extractions are performed independently, through the use of the land owner or licensee's own water infrastructure, and without the need to rely on state infrastructure to do so. However, bottled water companies can also use the water from public water supply systems as medium or large-scale water users.¹⁴

A human rights based approach mandates that the rights of land owners and licensees delimiting the maximum quantity of water they are entitled to extract are established according to human-centered parameters. This is because human rights guide, and, in many cases, constrain choices about water governance models.¹⁵

When human-centered parameters are not followed in this respect, the quest for profit can lead to human rights violations.

Take for example the case of the Nestlé's Cabazon Arrowhead spring water plant located in a desert area in the Morongo Band of Mission Indians Reservation (in California),

¹³ Shiva (n 3 above) 4.

¹⁴ T Boldt-Van Rooy "Bottling up our natural resources: the fight over bottled water extraction in the United States" (2002) 18(2) *Journal of Land Use & Environmental* 276-278.

¹⁵ O Jayyousi "Water as a Human Right: Towards Civil Society Globalization" (2007) 23(2) *International Journal of Water Resources Development* 330.

which is one of the largest bottled water plants in the world.¹⁶ The company leases the property from the aforementioned tribe, and pumps the local groundwater for bottling purposes. According to Gleick, by 2010, the plant was producing more than fifty million cases, or a billion bottles a year.¹⁷

In 2014, California suffered one of the most severe problems of water scarcity on record, leading its Governor to declare a drought state of emergency in January 2014, and announcing mandatory water reductions that called on Californians to reduce their water usage by 20%.¹⁸

In this context, criticisms started to emerge as the strict limitations on water use of the emergency declaration did not similarly apply to the Nestlé's facilities in the Morongo reservation.¹⁹ Indeed, given that the plant is located within a piece of land that is managed by a Native American tribe and not by the state governments of the US, it is exempt from control from California water agencies and has been able to keep confidential information in relation to the quantity of groundwater that is pumping, as other plants are required to disclose. Furthermore, the water is not being used locally, but being exported, negatively impacting on the natural balance of the local ecosystem, and therefore aggravating the drought effects.²⁰

This example illustrates how a strategic contract can create a clear advantage for businesses in relation to the quantity of water they are allowed to use, pushing citizens and

¹⁶ P Gleick (2010) "Bottled and Sold: The Story Behind Our Obsession With Bottled Water" 64.

¹⁷ Gleick (n 16 above) 65.

¹⁸ "Governor Brown declares draught state of emergency" 17 January 2014 <https://www.gov.ca.gov/news.php?id=18368> (accessed 28 January 2016).

¹⁹ Business Insider "People are furious that Nestle is still bottling and selling California's water in the middle of the drought" 10 April 2015 <http://www.businessinsider.com/nestle-is-bottling-water-from-california-2015-4> (accessed 28 January 2016).

²⁰ "Nestlé is bottling water straight from the heart of California's drought" 14 July 2014 http://www.salon.com/2014/07/14/nestle_is_bottling_water_straight_from_the_heart_of_californias_drought/ (accessed 28 January 2016); "Little oversight as Nestle taps Morongo Reservation water" 12 July 2014 <http://www.desertsun.com/story/news/environment/2014/07/12/nestle-arrowhead-tapping-water/12589267/> (accessed 28 January 2016); "Nestle continues to sell bottled water sourced from California despite record drought" 15 July 2014 <https://www.rt.com/usa/172764-nestle-california-bottling-plant/> (accessed 28 January 2016); Business Insider (n 19 above).

their basic water needs into the background, and ultimately threatening the realisation of the human right to water.

5.2.2. A question of quality

Deficient water allocation decisions may lead to situations where bottled water companies are granted access to water of a better quality than that destined for local communities.

Take, for instance, the case of the small town of McCloud in California (US). In 2003, the town entered into negotiations with Nestlé to discuss the terms of a contract that would allow the firm to build the largest bottling plant in the country through the use of water from the surrounding springs of Mt. Shasta. The contract meant that the firm would have been able to take advantage of publicly owned local springs for a very low price to sell bottled water to distant markets for a considerable mark-up. The proposal also conferred a privilege of use which stated that, in case of drought, residents of the town would have to drink well water, while Nestlé would get the pure spring water.²¹

Even though resolute local opposition led Nestlé to rescind its proposal before it was signed by the town of McCloud, the case herein represents a clear example of how multinational corporations can exert their power to acquire privileges in relation to the quality of the water they have access to, using a public good (in this case the public resources of an economically depressed community) to make a profit.

5.3. Universal vs restricted access to water

The recognition of water as a human right is underpinned by the premise of universal and equitable access to this natural resource.²² This conception upholds that the provision of

²¹ D Jaffee & S Newman "A More Perfect Commodity: Bottled Water, Global Accumulation, and Local Contestation" (2013) 78(1) *Rural Sociology* 14-19.

²² Filmer-Wilson (n 8 above) 230-232.

safe drinking water – at least the minimum amounts necessary to satisfy basic human needs – should be provided to all persons, regardless of their socio-economic status.²³

On the other hand, the categorisation of water as a commodity (embodied in the bottled water industry) is grounded on the notion of restricted access, limited on the basis of the economic capacity of individuals. Accordingly, water is understood as a tradable good, and access to it is determined by the possibility of each human being to position him or herself as a consumer in the market.²⁴

The act of placing a specific amount of water of a certain quality inside a sealed plastic bottle that is destined to be consumed individually and sold exclusively to consumers with the ability to pay for it cannot be interpreted as a mere change in the water distribution method – that is, shifting from pipes to plastic bottles. The process outlined above implies a substantial shift in the traditional conceptual system that sees water as a collectively consumed good that is essentially non-apportionable, indivisible and non-exclusive. Through this fundamental change in perspective, water is perceived more as a product which can be freely bought and sold than as an essential natural resource with tremendous social and environmental implications.

Even though the word “universal” is not specifically featured in General Comment 15, or in the historic 2010 UN General Assembly Resolution where 122 States voted in favour, none against, and 41 abstained in the voting to officially recognise water as a human right,²⁵ the conclusion can be drawn that, just by placing it in the category of “human right”, the right will thus entitle “everyone” to access water (of a certain quality and in a given quantity).

Indeed, the right cannot be considered fully realised as long as safe water for drinking and sanitation purposes is not accessible to every single person. The human right to water

²³ E Bluemel “The implications of Formulating a Human Right to Water” (2005) 31 *Ecology Law Quarterly* 975.

²⁴ Jaffee & Newman (n 21 above) 7.

²⁵ United Nations “General Assembly Adopts Resolution Recognizing Access to Clean Water, Sanitation as Human Right, by Recorded Vote of 122 in Favour, None against, 41 Abstentions” 28 July 2010 <http://www.un.org/press/en/2010/ga10967.doc.htm> (accessed 26 January 2016).

demands a “project of universal water access” where water infrastructure providing a sufficient and continuous supply of safe water that is accessible to everyone is in place.

5.4. Equal access to water

Article 2(2) of CESCRR establishes the principle of non-discrimination in the exercise of all socio-economic rights.²⁶ Similarly, General Comment No 15 stresses the issue of non-discrimination, stating in particular that:

States parties should ensure that the allocation of water resources, and investments in water, facilitate access to water for all members of society. Inappropriate resource allocation can lead to discrimination that may not be overt.²⁷

The Covenant thus proscribes any discrimination on the grounds of race, colour, sex, age, language, religion, political or other opinion, national or social origin, property, birth, physical or mental disability, health status (including HIV/AIDS), sexual orientation and civil, political, social or other status, which has the intention or effect of nullifying or impairing the equal enjoyment or exercise of the right to water.²⁸

Even though the project of universal access to water does not mandate any specific avenue to realising this right, a holistic interpretation that takes into consideration basic human rights principles determines that the best manner to guarantee the right to water is in a non-discriminatory fashion through integral collective supply systems within a local, regional or national grid; while simultaneously linking socio-economic development and environmental protection.²⁹

Given that all human rights are indivisible, interrelated and interdependent, the mechanisms employed by states to guarantee the realisation of the right to water should be compatible with the respect of other fundamental rights. It is noteworthy in this regard that the way in which the bottled water industry is currently configured collides with the right to

²⁶ T Winkler “*The Human Right to Water: Significance, Legal Status and Implications for Water Allocation*” (2012) 112.

²⁷ General Comment No 15 (n 9 above) para 14.

²⁸ General Comment No 15 (n 9 above) para 13.

²⁹ S Tully “A human right to access water? A critique of General Comment No. 15” (2005) 23(1) *Netherlands Quarterly of Human Rights* 56.

equality and non-discrimination, as it alters the prospects for water allocation to the detriment of low-income and poor people.

Indeed, while public supply systems have been designed to provide water to the masses for an affordable price, allowing for urban and rural development, the bottled water market's main driving force is profit. "As the priority shifts from meeting needs to making profit, equitable and affordable access to water is under threat".³⁰ As a result, the difference between equal and unequal water access can be framed in terms of a discussion between tap and bottled water.

Bluemel contends that the availability and price of water should not be exclusively determined by market forces, as it would occur in economic schemes based on full cost recovery models.³¹ This is because an individual's ability to pay should not be considered the "entry ticket" for the enjoyment of fundamental human rights.

Affordability has a substantial impact on water use and on the selection of water sources.³² Low-income households that are not connected to piped water systems normally pay, on average, twelve times more for their water than households that are part of such networks.³³

The recognition of a human right to water demands that the imperatives of affordability and equality of access are carefully balanced against economic considerations (in particular, the full cost recovery scheme and the "user pays" principle).³⁴

Furthermore, the obligation to progressively realise the human right to water, making maximum use of available resources, entails that governments take effective measures to

³⁰ Filmer-Wilson (n 17 above) 229.

³¹ Bluemel (n 23 above) 974.

³² World Health Organisation *Guidelines for drinking-water quality - Forth Edition* (2011) 101 http://www.who.int/water_sanitation_health/publications/dwq_guidelines/en/85.

³³ See *Guidelines for drinking-water quality* (n 32 above) 85; and J Scanlon; A Cassar & N Nemes "Water as a Human Right?" (2004) *IUCN Environmental Policy and Law Paper No. 51* <https://portals.iucn.org/library/efiles/documents/EPLP-051.pdf> (accessed 6 January 2016) 29.

³⁴ S Tully "A human right to access water? A critique of General Comment No. 15" (2005) 23(1) *Netherlands Quarterly of Human Rights* 56.

progressively improve water access.³⁵ Following this argument, it can be argued that the relinquishment of the management of a part of water resources in favour of corporate entities (whose actions do not aim at achieving equal access to water as it is the case of the bottled water industry) could be interpreted as a retrogressive measure that negatively impacts on the realisation of this right.

Barlow & Clarke contend in this regard that, by recognizing water as a human right, States expressly become responsible for ensuring that everyone has “equal access on a non-profit basis”.³⁶ Such equal access could never be guaranteed under a market-led scheme which provides this resource on a “for-profit basis”.³⁷

The mere fact that bottled water offers people the possibility to have access to safe drinking water does not mean that this water provision method satisfies the conditions under which a human right to water exists, because a market-based approach does not guarantee universal equal access, but is exactly the opposite. Such approach entails that access is determined by the economic possibilities of each individual. In a context of water scarcity such as the current *status quo*, the fact that States would allow for this situation to happen could be interpreted as an instance of discrimination based on economic status.

It is true that it is not the responsibility of a private corporation to provide water in a way that satisfies the human right to water (in other words, on a non-discriminatory basis), but it is also true that States are in charge of establishing the water policies that will determine how water is allocated, and they are obliged to do so following a human rights approach and setting people as the priority.

³⁵ Bluemel (n 23 above) 975, 1005.

³⁶ M Barlow & T Clarke “Blue gold: the battle against corporate theft of the world’s water” (2003) 80.

³⁷ Barlow & Clarke (n 36 above) 80.

5.5. Tap vs. bottled water

Given that the majority of modern societies establish collective water supply systems in order to guarantee the satisfaction of water-related needs on an equitable basis,³⁸ bottled water can be conceived either as an alternative to tap water, or, in cases of lack of water infrastructure, as the only option to access safe water.

In the second scenario, it is clear that bottled water makes a positive contribution to guaranteeing water access. This is particularly true in the event of natural and man-made disasters since, during these emergency situations, bottled water is a necessary and reliable option to deliver clean, safe drinking water.³⁹

Additionally, when municipal supplies are not available in a given region, bottled water may provide a temporary vital source of hydration. However, the key word in these cases is “temporary”, since bottled water should not be considered a permanent alternative to reliable municipal supply for many reasons, including cost, control, and equity.⁴⁰

In contrast, in contexts where safe drinking tap water is readily available within a specific community, bottled water threatens the provision of universal safe public drinking water by weakening these public systems, and therefore indirectly impacting on the possibility of the human right to water to be realised.⁴¹ Indeed, the current configuration of the bottled water market determines that bottled water grows at the expense of tap water.

To begin with, bottled water possess fewer barriers to capital accumulation in comparison with tap water, since it can defy water’s locality easily, has lower costs and investment requirements, and greater price elasticity.⁴² These circumstances allow private corporations to profit by using a resource that could otherwise be destined to benefit communities as a whole.

³⁸ D Hall & E Lobina “Water as a public service” (2006) *PSIRU Reports* 2-5.

³⁹ Guidelines for drinking-water quality (n 32 above).

⁴⁰ P Gleick “*The World’s Water 2004-2005: The Biennial Report on Freshwater Resources*” (2004) 22.

⁴¹ Jaffee & Newman (n 21 above) 22-25.

⁴² Jaffee & Newman (n 21 above) 24.

Moreover, when citizens choose private services over public ones, they are less willing to fund the latter, which causes their quality to decline.⁴³ As a result, a vicious circle is created where the quality of public goods deteriorates, which, in turn, corrodes the public trust in government services.⁴⁴ Disinvestment in public water supply systems renders water more susceptible to commodification, and simultaneously less accessible to the majority of people.⁴⁵

Gleick contends in this regard that the bottled water industry is successfully capitalising on the deterioration or complete absence of collective water provision systems.⁴⁶

5.6. Bottled water types and their impact on public water supply systems

Given that bottled water types are subjected to different industrial processes and use varied water sources,⁴⁷ the way in which each one of them relates to public water provision systems varies.

Of all bottled water types, probably the most paradoxical form is prepared/purified water sourced from already-treated municipal supplies. Indeed, this product is made of safe drinking water which is further altered with filtration and sometimes mineral additives, and then sold for hundreds of times its cost of production.⁴⁸ Additionally, given that the industry does not have the large sunk infrastructure costs and responsibilities of municipal water distribution systems,⁴⁹ profitability is enhanced, allowing companies to profit at the expense of public infrastructure and public investments.⁵⁰

⁴³ Jaffee & Newman (n 21 above) 10-11.

⁴⁴ Jaffee & Newman (n 21 above) 10-11.

⁴⁵ Jaffee & Newman (n 21 above) 24.

⁴⁶ P Gleick *"Bottled and sold: The Story behind Our Obsession with Bottled Water"* (2010) 176.

⁴⁷ See Chapter two.

⁴⁸ Jaffee & Newman (n 21 above) 22-23.

⁴⁹ Jaffee & Newman (n 21 above) 21.

⁵⁰ Jaffee & Newman (n 21 above) 22-23.

Jaffee & Newman describe this process as an instance of “primitive accumulation” (drawing from Marx’s general theory of capital accumulation), or as a form of “accumulation by dispossession” (to use Harvey’s terminology).⁵¹

The term “primitive accumulation” encompasses a wide range of processes including, but not limited to:

The commodification and privatization of land; conversion of various forms of property rights – common, collective, state, etc. – into private property rights; (...) colonial, neo-colonial and imperial processes of appropriation of assets, including natural resources (...).⁵²

These practices are described as a “cannibalistic” and “predatory” *modus operandi* with a clear negative impact on the project of universal equitable access to water for all peoples.⁵³

As for natural/mineral/spring water which originates from pure and unpolluted sources, the main criticism, in my opinion, is that it defies the locality of water.

Given its fluid nature, water is traditionally used and disposed of locally, near its point of extraction.⁵⁴ However, plastic containers enable water to overcome its natural constraints.

It has been estimated that over one quarter of the entire production of bottled water is exported, rendering it a truly international commodity.⁵⁵ This transboundary water market means that firms often take water from poor, underdeveloped communities to sell it to upscale markets in developed countries, raising issues of water distribution, allocation, and ownership of this natural resource.

5.7. Some ethical considerations regarding the bottled water market

Given the problem of unequal access to water and the contemporary economic polarisation on the basis of the poverty and wealth divide, questions inevitably arise as to

⁵¹ Jaffee & Newman (n 21 above) 4-5.

⁵² D Harvey “The ‘New’ Imperialism: accumulation by dispossession” (2009) 40 *Socialist Register* 74.

⁵³ Jaffee & Newman (n 21 above) 23.

⁵⁴ Jaffee & Newman (n 21 above) 22.

⁵⁵ Jaffee & Newman (n 21 above) 22-23.

whether it is socially acceptable and ethically correct to sell water in this global social context.

According to Holt, whether a market has a strong ethical component depends, to a large extent, on the efforts and work of social movements and subcultures to challenge the dominant market construction.⁵⁶

The two clashing discourses identified in the “human right/commodity dichotomy” regarding water represent different value systems, exposing a conflict over market and non-market values which has been a constant dispute in both western and non-western cultures ever since the origins of capitalism (and probably since the genesis of market and trade).⁵⁷

Markets are not static, but rather dynamic processes characterised by expansion and contraction periods. Positive and negative social outcomes are associated with these fluctuations. For instance, markets stimulate competitiveness and innovation, contributing positively to the improvement of people’s quality of life and the economic development of communities. By offering new and renewed services and products, markets increase the range of products offered, therefore expanding people’s possibility of choices. However, as reality has shown, market freedom can give place to unfair trade and lead to social inequalities.⁵⁸

Jaffee & Newman uphold that unregulated market economies can reach destructive tendencies when they expand to commodify non-market goods, resources and services.⁵⁹ This is true in cases where the expansion of the economic frontier results in a disempowerment of low-income and vulnerable groups.

The human right to water challenges the traditional “market paradigm” according to which basic life necessities can become profit-maximising enterprises⁶⁰ and where safe

⁵⁶ D Holt “Constructing Sustainable Consumption: From Ethical Values to the Cultural Transformation of Unsustainable Markets” (2012) 644 *The ANNALS of the American Academy of Political and Social Science* 243.

⁵⁷ R Wilk “Bottled water: the pure commodity in the age of branding” (2006) 6(3) *Journal of Consumer Culture* 307.

⁵⁸ D Harvey “Neoliberalism as Creative Destruction” (2007) 610 *The ANNALS of the American Academy of Political and Social Science* 42.

⁵⁹ Jaffee & Newman (n 21 above) 4-5.

⁶⁰ L White “‘If you don’t pay, you die’: On Death and Desire in the Postcolony” in D Barak-Erez & A Gross (eds) *Exploring Social Rights: Between Theory and Practice* (2007) 70.

drinking water is to be provided only to consumers that can afford it – the logic “if you don’t pay, you die”.⁶¹ Moreover, given that the rationale for the emerging conception that sees water as a human right stems from the global problem of unequal access to water,⁶² this water ideology can be interpreted as a way of contesting existing water allocation schemes.

Following from this, I contend that the process of water commodification, and its main manifestation, bottled water, raise an “ethical red flag” in relation to what are the acceptable boundaries of the market of water.

⁶¹ White (n 60 above) 66-70.

⁶² See the preambular clauses of the “The human right to water and sanitation” Resolution A/RES/64/292 by the UN General Assembly (July 2010); and Jayyousi (n 15 above) 330.

Chapter six: Conclusion

6. Conclusion

6.1. Summary

6.2. Recommendations

6.1. Summary

The purpose of this study was to attempt to determine the human rights implications of the bottled water industry, particularly in relation to the emerging concept of water as a human right.

To this end, classical anti-bottled water discourses which focus on the high environmental impacts associated to this industry were put in the background, and, alternatively, the emerging normative conception of a human right to water was used as the main tool to carry out a critical analysis of the bottled water industry.

The basis for the “human right/commodity dichotomy” regarding the status of water was illustrated. In this respect, I argued that the bottled water industry is not a neutral activity, but has several negative implications in relation to the human rights-based approach to water:

- i. To begin with, bottled water defies the traditional conceptual system that sees water as a collectively consumed good that is essentially non-apportionable, indivisible and non-exclusive. Through this fundamental change in perspective, water is perceived more as a product which can be freely bought and sold than as an essential natural resource with tremendous social and environmental implications.
- ii. The human right to water demands that water allocation decisions follow a human-centred approach where the priority is placed on the satisfaction of the

basic water needs of populations, and the economic interests of private corporations such as the bottled water industry are put in the background.

- iii. It is contrary to the essence of the human right to water to allow even a fragment of the total water resources in the world to be commodified and destined to the bottled water market while, simultaneously, millions of people lack access to this resource
- iv. The commodification of water resources results in a shift in the power dynamics, disempowering communities in relation to the use and enjoyment of their water resources.
- v. The bottled water industry is grounded on the notion of restricted access to water, while a human rights approach to water fosters universal and equitable access.
- vi. The bottled water industry capitalises on the deterioration or complete absence of collective water provision systems.
- vii. Many bottled water companies profit at the expense of public infrastructure and public investments.
- viii. Transboundary bottled water markets often mean that firms take water from poor, underdeveloped communities to sell it to upscale markets in developed countries, raising issues of water distribution, allocation, and ownership of this natural resource.
- ix. Bottled water is an environmentally unsustainable industry.
- x. Bottled water alters the prospects for water allocation to the detriment of low-income and poor people, therefore colliding with the principle of non-discrimination.

- xi. Bottled water reinforces people's mistrust in public water provision systems and consequently erodes the idea that water should be managed for the overall public good.

6.2. Recommendations

In conclusion, it is my opinion that the way in which the bottled water industry is currently shaped and configured should be re-interpreted and its magnitude and extension re-dimensioned so as not to interfere with the realisation of the human right to water. Allocation schemes should be redesigned so that the satisfaction of basic human needs stands out as the main priority, guaranteeing universal and equal access to at least the minimum amounts necessary to guarantee a dignified life.

The key relies in limiting the expansion of current water commodification trends, while simultaneously reaffirming and fostering the project of universal and equal access to water (which is currently represented in the project of publicly provided safe-drinking water)

The formal recognition of the emerging concept of the human right to water in binding legal documents would, in my opinion, be an effective and valuable mechanism to improve water governance in a way that people, and their basic water needs, are placed at the heart of the system. Such recognition would, in my opinion, be a meaningful way to:

- i) Establish a clear standard of implementation, developing a unified approach to the right to water (as opposed to a segmented approach that subordinates this right to others such as the rights to health, food, life, adequate standard of living, among others);
- ii) positively impact on water allocation models worldwide, bringing attention and relevance to the need to prioritise basic human needs over corporate private interests;
- iii) reaffirm the project of publicly-provided safe drinking water; and
- iv) limit the expansion of “unethical water markets”.

As for the bottled water industry and its current configuration, it is important to understand that this is a crucial and necessary alternative to deliver safe drinking water in certain contexts; mainly during emergency situations such as natural and man-made disasters, and, very importantly, when municipal public water supplies are not a reliable option to

deliver clean safe drinking water. Keeping this in mind, I contend that total bottled water bans seem as an inconvenient and even extreme approach that fails to understand the convenience and practicality of bottled water in certain contexts.

Notwithstanding, bottled water should be seen as a mere temporary solution to the problem of unequal access to water, and efforts should be intensified to tackle widespread water injustice through the adoption of environmentally and socially sound water distribution methods.

It is essential to build people's trust in the convenience of the project of universal and equitable access to water. The development of state policies which increase the availability of public water fountains, the implementation of objective and reliable periodic review systems which guarantee the monitoring of tap water quality (as a way of minimising people's fears for their health), and even the well-planned construction of cities and public infrastructure, are different tools that could be used to this effect.

Additionally, a legal framework should be developed that aims at minimising the terrible ecological impacts of the bottle water industry. One option in this regard is to encourage – or even impose – the use of refillable, instead of disposable plastic bottles.

Our society has a serious drinking problem that has nothing to do with alcoholic beverages. Instead, it has everything to do with the unnecessary waste generated by the bottled water industry; the irrational energy consumption used to commercialise bottled water; the corporate control of water resources; the disempowerment of people regarding the management of their natural resources; and finally, the social inequality arising from a system where only those with economic means can have access to safe-drinking water.

Bibliography

Ahmad, M & Bajahlan, A (2009) "Quality Comparison of Tap Water vs Bottled Water in the Industrial City of Yanbu (Saudi Arabia)" 159 *Environmental Monitoring and Assessment* 1.

Asbjorn, E "Economic, social and cultural rights as human rights" in Asbjorn E, Krause C & Rosas (2001) *Economic, social and cultural rights: a textbook* - Second Revised Ed. Martinus Nijhoff Publishers.

Barlow, M & Clarke, T (2003) *Blue gold: the battle against corporate theft of the world's water* Earthscan.

Barlow, M & Clarke, T (2002) "Who Owns Water?" *The Nation* September 2.

Bluemel, E (2005) "The implications of Formulating a Human Right to Water" 31 *Ecology Law Quarterly* 957.

Brei, V & Böhm, S (2014) "'1L=10L for Africa': Corporate Social Responsibility and the Transformation of Bottled Water into a 'Consumer Activist' Commodity" 25(1) *Discourse & Society* 3.

Boldt-Van Rooy, T (2002) "Bottling up our natural resources: the fight over bottled water extraction in the United States" 18(2) *Journal of Land Use & Environmental Law* 267.

Bond, P (2013) "Water Rights, Commons and Advocacy Narratives" 29 *South African Journal on Human Rights* 125.

Bond, P (2007) "When Commodification Annuls the Human Right to Water" <http://0-http://www2.ohchr.org/english/issues/water/contributions/universities/UniversityofKwaZulu-Natal.pdf> (accessed 23 November 2014).

Bond, P & Dugard, J (2007) "Water, Human Rights and Social Conflict: South African Experiences" 1 *Law, Social Justice & Global Development Journal*.

Booker, J; Howitt, R; Michelsen, A & Young, R (2012) "Economics and the Modelling of Water Resources and Policies" 25(1) *Natural Resource Modelling* 168.

Bulto, T (2011) "The Human Right to Water in the Corpus and Jurisprudence of the African Human Rights System" 11 *African Human Rights Law Journal* 341.

Caponera, DA "Possible contents of and reasons for water law" in Caponera, DA & Nanni, M (1992) *Principles of water law and administration: national and international* (2nd edition) CRC Press.

Cooley, H et al "Global water governance in the twenty-first century" in P Gleick (ed) (2014) *The World's Water Volume 8: the Biennial Report on Freshwater Resources* Island Press.

Danchin, P (2010) "A Human Right to Water? The South African Constitutional Court's Decision in the Mazibuko Case" <http://www.ejiltalk.org/a-human-right-to-water-the-south-african-constitutional-court%E2%80%99s-decision-in-the-mazibuko-case/> (accessed 21 May 2014).

Dicke, W & Albrow, M (2005) "Reconstituting the Public-Private Divide under Global Conditions: The Case of Dutch and British Water Management" 5(2) *Global Social Policy* 227.

Doria, M (2006) "Bottled water versus tap water: understanding consumers' preferences" 4(2) *Journal of Water and Health* 271.

Doria, M; Hunter, P & Pidgeon, N (2009) "Perceptions of drinking water quality and risk and its effect on behavior: a cross-national study" 407 *Science of the Total Environment* 5455.

Ferrier, C (2001) "Bottled water: understanding a social phenomenon" 30(2) *AMBIO: A journal of the Human Environment* 118.

Filmer-Wilson, E (2005) "The Human Rights-based Approach to Development: the Right to Water" 23(2) *Netherlands Quarterly of Human Rights* 213.

Francisco, J (2014) "Why Households Buy Bottled Water: a Survey of Household Perceptions in the Philippines" 38 *International Journal of Consumer Studies* 98.

Gleick, P (2010) "Bottled and Sold: The Story Behind Our Obsession With Bottled Water" Island Press.

Gleick, P (2004) "The World's Water 2004-2005: The Biennial Report on Freshwater Resources" Island Press.

Gottdiener, M (2000) "Approaches to Consumption: Classical and Contemporary Perspectives" in Gottdiener M (ed) *New Forms of Consumption: Consumers, Culture and Commodification* Rowman & Littlefield Publishers.

Hall, D & Lobina, E (2006) "Water as a public service" PSIRU Reports <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.454.8431&rep=rep1&type=pdf> (accessed 15 July 2015).

Harvey, D (2007) "Neoliberalism as Creative Destruction" 610 *The ANNALS of the American Academy of Political and Social Science* 22.

Harvey, D (2009) "The 'New' Imperialism: accumulation by dispossession" 40 *Socialist Register* 40.

Holt, D (2012) "Constructing Sustainable Consumption: From Ethical Values to the Cultural Transformation of Unsustainable Markets" 644 *The ANNALS of the American Academy of Political and Social Science* 263.

Inter-American Commission on Human Rights (2007) "The substance of the right to effective judicial protection against the violation of social rights" in Access to justice as a guarantee of economic, social, and cultural rights. A review of standards adopted by the Inter-American system of human rights <http://www.cidh.oas.org/pdf%20files/ACCESS%20TO%20JUSTICE%20DESC.pdf> (accessed 15 July 2015).

International Bottled Water Association "Bottled water sales and consumption projected to increase in 2014, expected to be the number one packaged drink by 2016" 4 December 2014 <http://www.bottledwater.org/bottled-water-sales-and-consumption-projected-increase-2014-expected-be-number-one-packaged-drink> (accessed 10 June 2015).

International Environmental Law Research Centre "Pani Haq Samiti & Ors. v Brihan Mumbai Municipal Corporation & Ors.," December 2014 <http://www.ielrc.org/content/e1407.pdf> (accessed 18 July 2015).

Jaffee, D & Newman, S (2013) "A More Perfect Commodity: Bottled Water, Global Accumulation, and Local Contestation" 78(1) *Rural Sociology* 1.

Jaffee, D & Newman, S (2012) "A bottle Half Empty: Bottled Water, Commodification, and Contestation" *Organization & Environment* 26(3) 318.

Jayyousi, O (2007) "Water as a Human Right: Towards Civil Society Globalization" 23(2) *International Journal of Water Resources Development* 329.

Jenks, E (1923) "The Function of Law in Society" 5(4) *Journal of Comparative Legislation and International Law* 169.

Johnson, J (2008) "Prior Appropriation" in *United States Water Law: an introduction* CRC Press.

Kok, A (2005) "Privatisation and the right to access to water" in K de Feyter & F Gómez Isa (eds) *Privatisation and human rights in the age of globalisation* 259 Antwerp: Intersentia.

Kok, A & Langford, M (2005) "The right to water" in D Brand & C Heyns (eds) *Socio-economic rights in South Africa* 191 PULP.

Linton, J (2013) "The human right to what?" in F Sultana & A Loftus (eds) *The Right to Water: Politics, Governance and Social Struggles* Routledge.

McGraw, G (2010) "Defining and defending the right to water and its minimum core: legal construction, and the role of national jurisprudence" 8(2) *Loyola University Chicago International Law Review* 127.

Opel, A (1999) "Constructing Purity: Bottled Water and the Commodification of Nature" 22(4) *Journal of American Culture* 67.

PSIRU Reports (2012) "Why water is a public service: exposing the myths of privatisation" <http://www.right2water.eu/sites/water/files/u/u4/20022012-epsuwater.pdf> (accessed 2 July 2015).

Rani, B; Maheshwari, R; Gark, A & Prasad, M (2012) "Bottled Water – A Global Market Overview" 1(6) Bulletin of Environment, Pharmacology and Life Sciences.

Saylor, A; Stlaker Prokopy, L & Amberg S (2011) "What's wrong with the tap? Examining perceptions of tap water and bottled water at Purdue University" 48 Environmental Management 588.

Savenije, H (2002) "Why water is not an ordinary economic good, or why the girl is special" 27 Physics and Chemistry of the Earth 741.

Scanlon, J; Cassar, A & Nemes, N (2004) "Water as a Human Right?" IUCN Environmental Policy and Law Paper No. 51 <https://portals.iucn.org/library/efiles/documents/EPLP-051.pdf> (accessed 6 January 2015).

Sementelli, A (2008) "Naming Water: Understanding How Nomenclature Influences Rights and Policy Choices" 13(1) Public Works Management & Policy 4.

Syme, G; Nancarrow, B & McCreddin, J (1999) "Defining the components of fairness in the allocation of water to environmental and human uses" 57 Journal of Environmental Management 51.

Smith, B (2009) "Water as a public good: the status of water under the general agreement on tariffs and trade" 17(291) Cardozo Journal of International and Comparative Law 291.

Smith, L (2004) "The murky waters of the second wave of neoliberalism: corporatization as a service delivery model in Cape Town" 35 Geoforum 375.

Snowball, J; Willis, K & Jeurissen C (2008) "Willingness to pay for water service improvements in middle-income urban households in South Africa: a stated choice analysis" 76(4) South African Journal of Economics 705.

Shiva, V (2006) "Resisting water privatisation, building water democracy. A paper on the occasion of the World Water Forum in Mexico City" (2006) <http://www.globalalternative.org/downloads/shiva-water.pdf> (accessed 21 January 2016).

Thompson, H (2006) "Water Law: a Practical Approach to Resource Management and the Provision of Services" Juta & Co: Pretoria.

Tully, S (2005) "A human right to access water? A critique of General Comment No. 15" 23(1) Netherlands Quarterly of Human Rights 35.

UNESCO "UNESCO Water e-newsletter No. 153: bottled water" 1 September 2006 <http://www.unesco.org/water/news/newsletter/153.shtml#know> (accessed 10 June 2015).

White, L “If you don’t pay, you die’: On Death and Desire in the Postcolony” in D Barak-Erez & A Gross (eds) *Exploring Social Rights: Between Theory and Practice* (2007) 56 Hart Publishing: Oxford and Portland, Oregon.

Wilk, R (2006) “Bottled water: the pure commodity in the age of branding” 6(3) *Journal of Consumer Culture* 303.

Winkler, I (2012) “The Human Right to Water: Significance, Legal Status and Implications for Water Allocation” Oxford, Portland: Hart Publishing.

Wolff, G & Palaniappan, M (2004) “Public or Private Water Management? Cutting the Gordian Knot” 130(1) *Journal of Water Resources Planning and Management* 1.

Websites

<http://blogs.worldbank.org/>

<http://www.bundyontap.com.au/>

<http://www.blingh2o.com/>

<http://www.bottledwater.org/>

<http://www.consumerreports.org/cro/index.htm>

<http://www.efbw.eu/>

<http://www.epa.gov/>

<http://www.fao.org/>

<http://www.finewaters.com/>

<http://www.hc-sc.gc.ca/>

<http://www.huffingtonpost.com/>

<http://www.nestle-watersna.com/en>

<http://www.ohchr.org/>

<http://www.nrdc.org/>

<http://www.righttowater.info/>

<http://www.sanbwa.org.za/>

<http://www.sfgov.org/>

<http://www.stopcorporateabuse.org/>

<http://www.un.org/waterforlifedecade/>