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The Fallacy of Water Governance: A Comparative Analysis of Predominant Approaches

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Introduction

When the well is dry, we know the worth of *water*.

(Benjamin Franklin, 1746).

It seems water has always been imbued with a spiritual and existential significance. However, global industrialization introduced political and economic significance to water, creating the water predicament's complex institutional, empirical, and physical reality. Despite technological advances, no sustainable global solution has successfully ascended to water's salvation. The regional water crisis quickly surpassed its borders, turning water into a pre-eminent global risk. Water, more than ever, has become the single detrimental component of sustaining existence as we know it. Although water is inherently scarce, as less than one percent of freshwater resources are tangible for consumption, the catastrophic water crisis is acknowledged to be men's creation, with agriculture being the largest consumer (75 percent), followed by industrial use (20 percent) (Loucks, 2005). However, these sectors are ultimately controlled by selected transnational corporations known as the agribusiness sector.

By the time water was recognized to be endangered, its convolution was proven to be formidable. Diverse management schemes, undefined value, problematic quantification, and ambiguous power relations among diversified groups created an unprecedented entanglement and urgency to resolve. Water entered the global debate, causing much emotional commotion over its conceptualization and value. Two approaches emerged as a pragmatic response to the crisis; the idealist approach that contends water is a Human Right, and the Neoliberal approach which supports the commodification of water. While these two approaches were passionately fought over, directly and indirectly, the crisis' locus was severely overlooked; *power*. Water, all the more so, had become the presentation of power relations dictating the livelihood and freedom of all living beings. Flyvbjerg's comparison of idealism versus realpolitik, in addition to Foucault's assumptions on power, knowledge, and conflict, offers an applicable framework to expose its hidden forces. This paper will explore the capacity of the Human Right to Water (HRW) to overcome the existing power relations across local, national, and international scales and to promote a more efficient water management that could increase waters availability and accessibility.

Water: Categories, Water Footprint and Virtual Water

Categories and Water Footprint.

The complexity of defining, quantifying, and tracing water along interlaced global economic and political streams has resulted in the introduction of water categories aiming to trace water flows and link consumption patterns to its global impact. Water is categorized into three distinct terms: firstly, blue water, which refers to all fresh surface and ground water resources (e.g., lakes, rivers, aquifers). Secondly, green water that stems from rain, soil moisture (e.g.,

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precipitation). Thirdly, grey water, that is contaminated water as a result of industrial or domestic processes (Grove, 2011). Whereas green waters value is embedded in its land cost, blue water requires investment in water infrastructure (Hoekstra & Chapagain, 2006). Trading of embedded water, otherwise known as Virtual Water (V.W.), in forms of land, crops, or goods, became a sought-after solution for water import and scarcity, indicating water market flows and their reflective relationships.

The water footprint, being the cumulative total of domestic water use and the net virtual water import, consumed by one individual or by the individuals of one country, was developed by Hoekstra and Hung to measure VW use over entire supply chains, including its consequential pollution (2002). Due to the lack of green water flows, the water footprint is limited to blue water. Nevertheless, Hoekstra et al. (2012) recognize that agriculture consumes 92 percent of the virtual market flows, with Bunge as its major flows' administrator (Sojamo & Larson, 2012). Because a product's virtual content indicates its environmental impact and raises awareness of its required water volumes production, VW clarifies water-exhausting goods and makes water conservation feasible (Hoekstra & Hung, 2002).

Virtual Water

Definition, Emergence, and Uses.

Economically invisible and politically silent.

(Allan, 2003, p. 110).

Introduced by Allan in the early nineties, Virtual Water (VW), otherwise known as 'embedded water' or 'exogenous water', is "the water embodied in a product, not in a real sense, in a virtual sense" (2003, p. 1). VW links water, food, and trade by presenting how the international trade in agricultural commodities influence global food and water security and governance. VW is defined in two ways; as the volume of water that was used in reality to produce a product, which's dependent on its production's conditions, duration and location, and as the amount of water that would have been required to produce it at his final consumption region, further questioning the value of importation vs. production (Hoekstra & Hung, 2002). Since goods transportation is easier than transporting water production, water is almost exclusively virtually rather than physically mobilized, and is nowadays embedded in agricultural and industrial production, as well as forestry and mining (D'Odorico & et al, 2019).

In 1992 the Dublin International Conference on Water and the Environment promoted new reforms of deliberative democracy, environmental governance and multilateralism, transforming the attitude of Water Management (WM) through the promotion of Dublin principles of the Integrated Water Resources Management (IWRM) (Muller, 2015). Dublin's IWRM prioritizes water as a finite resource, promotes stakeholder participation, and most distinctively treats water as an economically valuable good; "water has an economic value in

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all its competing uses and should be recognized as an economic" (Muller, 2015; ICWE, 1992). Following Dublin's reforms, 60 free-trade agreements were facilitated by the World Trade Organization (WTO), in addition to over 2500 bilateral trade and investment treaties signed globally (UNCTAD, 2007). Empowered by the World Water Partnership, the World Bank, and the Global Water Partnership (GWP), water systems were conjoined with profit mechanisms, promoting private sector investment over federal agencies, transforming global trade (Muller, 2015).

As the international food trade skyrocketed, so did the Virtual Water Trade (VWT) and the West's emerging water 'markets' (Colby, 2009). VWT acts as an economic and political instrument to achieve water security within water-scarce and population-rich nations, increasing the global efficient water use by producing water-intensive products in water-abundant regions (Hoekstra A. Y., 2003). The fluctuating nature of VWT demonstrates asymmetry among states; with the U.S., China, India, Australia, Argentina, and Brazil as the largest net exporters and Japan, Italy, Russia, and Sri Lanka as the largest net importer (D'Odorico & et al, 2019; Hoekstra A. Y., 2003). However, trans-national corporations, particularly those based in and empowered by Western governments, such as Budge and Nestlé, emerged as determinate actors of VW flows (Sojamo & et al, 2012). However, their implicit Western hegemony is seemingly challenged with the rise of corporations originating in Asia and the Middle-East (e.g., China and Saudi Arabia) (Sojamo & et al, 2012).

Problem statement

Academic and policy discussion of water management remains fragmented and often highly polarized. Water remains a crucial resource with significant international and transnational implications for its (mis)use. The purpose of this study is to evaluate the key polarities in this wider debate, examine its existing power relations and engage with- and chart a way through- the reality of current policy and praxis in light of normative imperatives.

Thesis Statement

The existing power relations dictating the water problem are heavily tilted towards corporate power, diminishing the capacity of the Human Right to Water to overcome contemporary barriers. The liberal theory of water availability ultimately proves to be a more fruitful point of departure for the configuration of a more effective global water management mechanism, including as it does the reality of current water management evolution in local and national contexts and accounting for the reality of non-state control of water resources.

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Research Question

Which approach improves water management more effectively and increases availability to populations in the face of existing power relations in the water predicament?

Research Objectives

To compare the two principle conceptual approaches to global water management through the prism of social power and existing power relations in local, regional, national and international scales by exploring the lenses of existing practices within a framework that challenges the normative hegemony of a rights-based approach.

Hypothesis

The Human Right to Water neglects the capacity to reform existing water realities and improve water availability.

Literature Review

The following section consists of a review of the existing literature on the water predicament, identifying its nature and challenges, the water governance gap, the role and power of the agribusiness, and the two emerging approaches to the water crisis; the idealist and the neoliberal. Water literature is often oriented towards actor-based or case study lenses, which risk enforcing the systematic disguise of power. While most literature reviews the crisis's historical roots or current state, this research will combine both and explore various sectors and scales in order to identify the origins of water's power relations and its prospects.

The Water Crisis: Human's transgression.

As the single integral component of development, change, and our very existence; the Water Crisis dictates global political economics and trading patterns. Due to the uneven geographical and economic distribution of freshwater resources, in addition to its varying values, and its conceptualization and quantification challenges; the current literature still struggles to promote a practical resolution to the water problem. Since most water is "abstracted, managed, and used at the regional to local scale" the crisis definition is argued and dependent upon "local socioeconomic, political, and hydrologic circumstances, the common global drivers of change, such as climate change, population growth, and globalization" (Srinivasan & et al, p. 1). Whereas Ritcher, Droogers, and Debaere target water scarcity caused by dietary norms, population, and industrial growth as its causes (2014; 2012; 2012), Ferreira and Júnior (2016)

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regard historical choices in the field of economics and of policy concerning access, use, and the quality of water as its basis.

Natural distributions of resources will always exist, yet how institutions deal with these natural inequality dictates whether it is just or unjust (Rawls, 2009). Leading scholarship had increasingly recognized it as a "Water Management Crisis" (Bakker K. , 2010; Hall & Rogers, 2003). The Global Corruption Report of 2008 insists the roots of the crisis lies in corruption, which leads to undrinkable, inaccessible, and unaffordable water (Transparency International , 2008). In contrast, the 2021 UN-Water report steps back to the fundamentals of the problem and firmly argues that the inconsistent and unreflective value placed on water in all its different uses led to water's political neglect and mismanagement (UN Water, 2021).

Although the crisis definition remains debated and periodically revised, Srinivasans identifies its six 'syndromes'; "groundwater depletion, ecological destruction, drought-driven conflicts, unmet subsistence needs, resource capture by elite, and water reallocation to nature", emphasizing unsustainability, vulnerability, and chronic scarcity as its underlining forces (2012, p. 1). A vast amount of scholarship has attempted to uncover the crisis locus of power; Bakker (2010) and Cernison (2019) stressed the capacity of communities and governmental interactions, while the Union of Concerned Scientists targets private agribusiness influence as the determinate actors within water issues (2018). However, an actor-based approach is limited due to the inextricable linkages of water critical domains, which requires both an integrated theoretical and operational framework to ensure water availability, food security, sustainable agriculture, and energy production worldwide. Practices such as Water diplomacy, the HRW, and VWT emerged as political and economic short-term resolutions among states and large corporations (Carr & D'Odorico, 2018). Moreover, the World Water Council and UN-Water apply a long-term approach through various strategies and programs (e.g., water security, global changes, water governance, transboundary waters) (2021; 2021).

Poor Water Governance: From the National to the International.

Since half of the global population lives within the world's 310 transboundary river basins shared by 150 countries, equitable water governance is arduous (Michel, 2020). Excluding climate change, all determinative elements of a successful water regime, both national or global, are attributed to human social activity rather than a lack of technology or complexity (Burbach & Floress, 2019). Primarily raised in the development-environment debate, the literature broadly recognizes that Water Management (WM) is produced by and embodies "cultural values, historical context, and political realities" (Srinivasan & et al, p. 2), that had been customized to answer local contemporary demands rather than distribute water conservatively or equitably (Muller, 2015; Zilberman & et al, 2017). Furthermore, waters' asymmetrical physical global distribution results in disparate systems across countries.

Frequently, extractions' prices, agricultural practices, food pricing, and precisely whether the final product reflects its VW govern WMs schemes (Chittaranjan, Mclnnes, & Sanderson, 2018). Rogers and Hall list nonpayment for water services, ill-defined property rights, perverse

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subsidies, inappropriate tax incentives, and special-interest effects as the dominant causes of WM failure in most countries (2003). McNabb insists that only diverse management models, designed under specific local needs and restrictions, will yield successful WM (2017). While Bakker underscores poor WM's socioeconomic, cultural, and ecological impacts, Molden highlights its power to propel environmental sustainability and social and economic development (2010; 2007).

Presently, the absence of a broader WM directive philosophy has resulted in ambiguous and exhausted systems that fail even the most water-abundant states (Colby, 2009). Jacobs et al. remark that once WM facilities are completed, the ability to modify them is severely limited (2016). Although Young notes that the traditional river-basin WM efficiently avoided continental mismanagement spillovers, it remained inadequate within the global context (Gordon J. Young, 1994). Moreover, as water-trade globalized and flourished, water production's location and uses expanded, transforming it into a global issue (Muller, 2015; Bernsen, 2011). Environmental protection and stakeholders' participation were appeased through the inclusion of Dublin's IWRM, as well as the Washington Consensus, supported by wealthy governments, the International Monetary Fund (IMF), and World Bank, which promoted privatization policies over state control (Muller, 2015; Bernsen, 2011). Nevertheless, by downplaying development and socio-cultural aspects, it neglected to satisfy all key actors (Muller, 2015). Its failure to achieve human development or environmental protection (Biswas, 2004; Suhardiman & et al, 2012), the global food and economic crisis (Benson & et al, 2015), and the interplay of actors and interests within the World Commission on Dams (WCD, 2000) led to the disappointing water policies of the 1990s and the rise of the Nexus approach as a pragmatic response (Muller, 2015).

Over the course of time a series of Nexus conceptualization had emerged from different sectors that places water in relation to different facets of its usage. Following are some of the dominant nexuses, although many others additionally emerged:

Nexus	Explanation	Definition	Authors
WFT	Water-Food-Trade	Derived from VW. Links water, food and trade policies.	(Allan, 2003), (McCalla, 1997).
WE	Water-energy	Emphasizes the reciprocal dynamic of water and energy.	(Scott & et al, 2011), (Perrone & et al, 2011).
WEF	Water-Energy- Food	Recognizes the links between water, energy and food in management, planning and implementation. Shifted WM from watersheds to problem-sheds.	World Economic Forum and the Bonn 2011 Conference. (Food and Agriculture Organization of the UN, 2014).
WEL	Water-Energy-Land	Evaluate land-use competition for agriculture, forests, human settlement and infrastructure, and biodiversity.	(Hatfield & et al, 2017), (OECD, 2021).
The Resources Nexus	---	Focuses on five essential resources: water, energy, minerals, food, and land.	(Andrews-Speed & et al, 2012), (Turton & Warner, 2002).

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Despite of the proliferation of these nexuses, no single one captured the totality of the WM problem. The recommendations made in the 1970s became even more pertinent in the recent decades, begging the question why they were not acted upon accordingly and resurfaced as priorities (Muller, 2015). Although Muller asserts that it proves useful by "offering a polite way to move past Dublin IWRM" (2015, p. 686), he nevertheless joins that assertation that the nexus paradigm is incomplete and requires a single consolidating water governance (Purwanto & et al, 2021; Albrecht & et al, 2018).

Water and Agribusiness – political, economic and development implications.

In contrast to the agricultural sector, the Union of Concerned Scientists describe agribusiness as "the collection of vast corporate entities that control agriculture and food production" utilizing farmers' commodities as raw materials for processed foods, and "driving the trend toward large-scale, specialized, capital-intensive, mechanized farms" (Union of Concerned Scientists, p. 6). Thus far, the literature struggled to fully evaluate their role within broader political and economic structures due to their lack of transparency (Sojamo & et al, 2012; Newell & Levy, 2006). However, as state power shifted to private actors absent from democratic accountability (Krahmann, 2008), their substantial dominion over transitional food trade, VWT, and Water Security was gradually investigated (Sojamo & Larson, 2012; Murphy & et al, 2012; Larson, 2011). As principally profit-driven and heavily resourced agents responsible for 92 percent of global water consumption (Hoekstra & Mekonnen, 2012), their power across these intertwined sectors demands a more comprehensive understanding (Sojamo & Larson, 2012; D'Odorico & et al, 2019).

Murphy (2012), identified the 'Key agents', a western elite corporation that had become the most prominent traders of VW; ADM, Bunge, Cargill, Louis Dreyfus (e.g., ABCD group) and Nestlé. Sojamo estimates that the 'ABCD' holds a combined share of 23% of the global VW flows (2010). Whereas the ABCD are non-brand, privately or publicly held commodity traders, Nestlé is a branded, publicly traded company and thus prominent to civil society and its criticism (Larson, 2011).

Nationally, as witnessed in the U.S., the agribusiness sector invests generously in lobbying budgets and relationships with policy makers, ensuring the federal policy serves their interests (Union of Concerned Scientists, 2018). Internationally, trade globalization allowed corporates to consolidate water and land by manipulating food trade and pursuing vast land investments (e.g., Land Grabbing) (Hinojosa & Vos, 2016; Sojamo & Larson, 2012). Mehta (2012) examined how indebted smallholders are often forced to sell their land under unfair sharecrop arrangements and permissive environmental regulations. Likewise, it enabled corporate expansion through high-tech water and equipment investment (e.g., drip irrigation, water decontamination) (Hinojosa & Vos, 2016).

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The agribusiness revels in the ungoverned and asymmetric global political economy by competing over market domination through political incentives and the coercive leverage of powerful lobby groups (e.g., U.S., EU, IMF), as well as mending direct positions at WTO and the World Economic Forum (D'Odorico, Carr, & et al, 2019; Sojamo & Larson, 2012). Free trade agreements, privatization of state-owned and community-held resources, and indirect federal subsidies allow to dictate trading norms and empower export production chains (Hinojosa & Vos, 2016). The Hydrosocial Territories introduced by Boelens et. al. as a theoretical tool contextualizes the multinational companies' power over natural resources (2016).

Sojamo and Larson (2012) distinguish their "instrumental power (e.g., influence via political lobbying and financing), structural power (bargaining position in value chains and in wider political agenda setting supported by material structures), and ideational and discursive power (ability to frame certain issues and debates)" (p. 623). Recognized as a regime actor in their own right (Okereke & et al, 2009) they can contest, resist, and build an inequitable transnational water governance regime (Levy & Newell, 2002). Ironically, Bunge and Cargill became the most prominent advocates for freer world trade while still receiving the most extensive agricultural subsidies and shares of food aid deals in the U.S. (Clapp, 2009).

The water problem is now recognized to be man-made, characterized by mismanagement rather than water scarcity, (mis)guided by poor national WM and absent global governance. Existing institutions are profoundly seized by the agribusiness sector, notably the ABCD and Nestlé. Yet, the literature remains fragmented in promoting a coherent crisis definition, a global governance paradigm, and a comprehensive analysis of the agribusiness public and hidden power. Consequently, two conceptual approaches emerged as a response. Evidently, none overpowered existing realities and ascended as a sufficient resolution. Although hidden data is argued to result in water's fragemented power analysis, the literature has fundamentally undertaken a case study and actor-based approach, which obscures broader critical assumptions. Nevertheless, water presently reflects global power relations; therefore, both approaches must be evaluated within the perceptual lenses of power, knowledge, and conflict.

Theoretical and Normative Perspectives: Power, Neoliberal and Idealist approach.

The following section explores the theoretical perspectives over power, knowledge, and conflict applied to the water predicament, followed by a comparison of its emerging approaches as reviewed by the literature.

Understanding how power works is the first prerequisite for action, *because action is the exercise of power*.

(Flyvbjerg, 1998 , p. 228).

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Since its genesis, the water predicament was inherently shaped by power relations. The power embedded in water evolved beyond its existential force and manifested into global institutions and laws. The indispensability of water shared by all living beings alike requires its power dynamic to be clarified. Flyvbjergs' critiques of the ideal and the real;" what should be done and what is actually done" (p. 210), accurately reflect the water approaches enigma, the idealist vs. neoliberal[1]. By comparing Habermas and Foucault, Flyvbjerg examines the efficiency of consensus and conflict as catalysts of change. Flyvbjerg embraces conflict as a privilege and views its suppression as repression of freedoms. He critiques Habermas's communicative rationality approach, which advocates for constitutional writing and institutional reforms based on social consensus, as poor for its disregard for power relations.

In contrast, he favors Foucault's "power is always present" (1987) assertation and his evaluation of existing reforms through the empirical and historical process as means to unpack their power relations. Habermas idealist approach correlates strongly to the HRW; it emerged upon consensus, is aspired to be enshrined in the Declaration of Human Rights as its 'constitutional' grounds, and it lacks concrete regulative framework. Correspondingly, Foucault's approach directly unpacks the existing power realities of water that are reinforced through direct and hidden political, economic, and social conflicts. Flyvbjerg argues Habermas' approach is optimistic, slightly naïve, largely utopic, and severely uncritical of its constitutive realities. In contrast, he regards Foucault's approach as a means to identify contemporary barriers and promote change avenues.

Flyvbjerg postulates on Putnam assertion that "two centuries of constitution-writing around the world warn us… that designers of new institutions are often writing on water" (Putman, 1993), and concludes the law, its institutions, policies, and plans provide no guarantee of freedom, equality or democracy. Furthermore, 'neutral' institutions established precisely to shield 'public interest' are presently acknowledged as execution platforms of embedded political violence. This is demonstrated in the limited success of the HRW to overpower institutions and the governmental and institutional subornation to corporate power. Foucault asserts these exact social systems turned freedom into theoretical formulas, which is too perceptible in the HRWs failure to suppress theoretical grounds and propose a practical reform.

Flyvbjerg seeks to reduce the gap between intentions and their implementation and embraces Francis Bacon's "Knowledge is Power," yet emphasizes "not only knowledge is power, but more importantly, power is knowledge" (Flyvbjerg, 1998, p. 319). Flyvbjerg contends knowledge and power exist in a communicative, yet asymmetrical, relationship; thus the more rationality, the better[2]. Through Flyvbjerg and Foucaults' examination over what counts as knowledge and what interpretations become our authoritative reality, the constructing reality of water could be understood.

[1] The following sections which present Flyvbjergs' comparison of Habermas and Foucault relies heavily on (Flyvbjerg, 1998).
[2] The following sections examining the power-rationality relationship and its deduced propositions, relies heavily on the insights of (Flyvbjerg, 1998).

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Flyvbjerg builds on Machiavelli, Nietzsche, Kant and Foucault, extending propositions that identify rationality and power construction; power is the dominating context of rationality, power defines reality, rationality often lives within contextual power, rationalization presented as rationality is a principal strategy of power exercise, the greater the power the less the rationality, stable power relations are more typical in policies than antagonistic confrontations, these are constantly being produced and reproduced, powers' rationality is historically profoundly rooted, rationality yield to power in open confrontations, and lastly he recognizes their relations are evident and embedded in stable power relations rather than confrontation. This paper offers an analysis of the conceptual approaches from the standpoint powers analytics is more effective in understanding reality than the Idealism of the rights-based approach.

A Comparison of the Literature

Various approaches emerged as a pragmatic response to the water predicament. As water reached numerous research fields, from law to economics, it fueled the fierce debate over the approaches, each prompting the other (Cernison, 2019). Amongst them, the idealist approach and the one generally understood as the neoliberal approach evolved as the two predominant and conflicting paradigms. The latter suffers from 'conceptual confusion' that arises due to "a lack of analytical precision about the wide range of ongoing reforms", notably privatization, marketization, and reregulation, which are often inaccurately labeled and over-simplified into a monolithic "neoliberalism" (2007, p. 433). Failure to adequately compare similar cases portrayed reforms as interchangeable and distinct practices were assumed to be synonymous (Castree, 2005). Biophysical properties, as well as governance framework, dictate the type of reforms; fisheries are amenable to marketization, while supply networks are better suited to privatization (Bakker K. J., 2004; 2005), although Cernison insists privatization is the extreme example of neoliberalism, rather than its norm (2019).

Consequently, anti-privatization campaigners problematically contrasted Human Rights as an antonym to 'commodities' instead of 'commons' (Bakker K. , 2007). Water activism, referendums, unilateral reduction of bills, and urban guerrilla activities shaped and accelerated the rise of the HRW and the growth of VWT alike (Cernison, 2019). As such, the Alter-globalization paradigm emerged, counterposing 'commons' models of resource management (Bakker K. , 2007).

Neoliberal Approach.

The commodity approach distinguishes private ownership and WM from water itself, deploying a market-oriented approach to water, treating it as an economic good that should be fully priced and requires utility services (ICWE, 1992). D'Odorico, Carr and Garcia-Ramon assert the nature of water difficulties is one of market with regulated trade as an appealing

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solution (2017; 2019). Following the 1980s 'Lost Water Decade,' Dublin's Principals and Kyotos Declaration, waters' integration into markets, industrialization, and private investments were eagerly received by intergovernmental institutions and states during the nineties (Cernison, 2019; Liotard & McGiffen, 2009; Bakker K. , 2007). 'Liberal Environmentalism' (Bernstein, 2001), 'Green Neoliberalism' (Goldman, 2005), and 'Market Environmentalism' (Bakker K. J., 2004) emerged as a corollary to this paradigm.

Its proponents, namely private companies and bilateral aid agencies assert that this approach first and foremost increases WM efficiency (Cernison, 2019; Hall & Rogers, 2003; Winpenny, 1994). Furthermore, it simultaneously addresses environmental degradation while embodying waters' value (Shirely, 2002; DFID, 1998). It holds public actors as politically motivated, financially restricted, and incapable of rectifying the unsustainable WM, and insist the private sector should be permitted to upgrade water system through lowering prices, increasing cost recovery, and improving systems performance (Savedoff & Spiller, 1999; Bakker K. , 2007; Cernison, 2019). Redefining citizens as users re-allocates the attenuated political accountability to the direct private accountability that is subordinate to both customers and shareholders alike and is able to bolster water conservation through pricing (Bakker K. , 2007; Hall & Rogers, 2003; Winpenny, 1994).

In contrast, its critics resist the market perspective to WM, arguing it diminishes the Human Right to Water (hereafter 'HRW') and lowers waters availability to citizens (Gleick, 1998; Trawick, 2003; Bond, 2002). Anti-dams' activists, international bank- watchers, and anti-globalization think-tanks argue that giant multinational corporations focus on accumulating profit and invest strictly in urban economically prosperous context, with the support of captured 'neutral' international organizations as the World Bank and the World Water Council (WWC) (Cernison, 2019; Taylor, 2005). Extended literature explores its multidimensional negative aspects caused by neoliberalism' "accumulation by dispossession" (Glassman, 2006). Concerns over their subordination to profit-motivated shareholders favor democratic accountability over corporates' self-regulation. They conclude this approach doesn't necessarily solve or even reduce water inefficiency or expenses but instead increases both in the case of unsuccessful privatization (Liotard & McGiffen, 2009; Public Citizen, 2003). Financially, water is seen as an 'uncooperative' commodity, nonexcludable yet rival in consumption, localized in nature, community-controlled, and thus associated with 'market failures' (Mehta, 2003; Bakker K. J., 2004). Furthermore, global concerns; power imbalance among states, arid countries dependency on trade, common knowledge distortion, and fear over 'a race to the bottom' became increasingly debated (Warner, 2003; Bernsen, 2011). Estache and Rossi (2002) finally asserted that the market approach is incompatible with the HRW, however, Bakker (2007) demonstrates that private sector provision is indeed compatible with the HRW if coupled with a universal requirement, price control, and quality standards.

Idealist Approach: The Human Right to Water (HRW).

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> The right to water entitles everyone to have access to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic use
>
> (UN-Water, 2021).

The Human Right to Water transforms the basic need for water into a rightful claim, legally enforcing its legitimacy, authority, and state compensation[3]. Its conceptual framing expands its universal reach and empowers individuals' agency and dignity as right holders, providing a compelling and coherent base to water claims. Being recognized as a basic need doesn't alone classify it as human right, but rather its legal acknowledgment which guarantees the state's legal obligation and accountability (Bourquain, 2008; Sultana & Loftus, 2015). The campaign for the HRW, which formalized upon growing water scarcity and the rise of the commodity's paradigm and privatization schemes, attempted to fill the existing gap within the human rights framework (Cernison, 2019). Relaying on research insights provided by Elinor Ostrom, activists proposed the commons approach, which "goes beyond the traditional, uncontrolled public management model" (Cernison, 2019, p. 77; 1990). The HRW legal basis is complicated; it is explicitly absent from the Declaration of Human Rights, as water was considered an infinite resource, like air, and thus wasn't considered in need of enshrinement. The right was partially recognized in the International Covenant on Economic, Social and Cultural Rights (Social Covenant/ ICESCR), as well as the International Covenant on Civil and Political Rights (Civil Covenant/ ICCPR), yet it wasn't done so explicitly, but rather as an underlying determinant of the right to health and housing (Sultana & Loftus, 2015).

However, in 2010 the UN General Assembly ultimately adopted a resolution that "recognized the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights" (General Assembly, 2012), further confirmed by the UN Human Rights Council which;

> Reaffirms that *States* have the *primary responsibility* to ensure the full realization of all human rights, and that the delegation of the delivery of safe drinking water and/or sanitation services to a third party does not exempt the State from its human rights obligations.
>
> (Human Rights Council, 2012).

Symbolically departing from the 1992 Dublin principles, the WHO, UNDP, and UN Economic and Social Council endorsed the right, which was further integrated into the SDGs (ICWE, 1992). Its integration into the Human Rights regime transformed international discourse, reflecting global societal power relations (Bielefeldt, 2006).

Its proponents, namely anti-privatization activists, indigenous communities, and global organizations as the UN value waters as essential for life. They argue that democratic accountability will increase citizen participation, open new legal avenues for water claims and

[3] The following section which reviews the Human Right to Water relies heavily on the insights provided by (Winkler, 2012).

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promote more efficient and green use of water (Estache & Rossi, 2002; Bond, 2002; Goldman, 2005). The World Water Forum in Kyoto and Mexico marked the rising support of senior water industry representatives, notably the World Bank and private corporations, who began advocating for the HRW publicly, signifying the civil, governmental and private sectors consensus (Salman & Mclnerney-Lankford , 2004). Bakker recognized it as a welcomed strategy for resolving the urban water crisis, as it acts as a transformative discursive tool and measure of standardization (2010). However, she points out that its inherent focus on vulnerable groups creates powerful means to combat the "elite capture" of water systems (2010). Whether motivated by global production or the sustainability of related rights motivated such, the HRW became an international stand on water.

However, its legal basis and lack of regulative conceptual clarity is heavily criticized. Firstly, it creates tensions when coupled with traditional (communal) water rights that are immensely important for indigenous populations (Bakker K. , 2010). Although the Human Rights Declaration omits binding coercion, it maintains symbolic power if not an intentional commitment. Because the HRW isn't explicitly stated, its legal premise is rendered inferior to other rights. Furthermore, given that its incorporation into the South-African post-apartheid constitution failed to achieve equitable water availability, the lack of clear responsibility and capacity for implementation was identified as its principal shortcoming (McDonlad & Ruiters, 2005; Bond, 2002). Absent a formulated regulative framework; the right remains merely an honorable moral statement rather than a solid solution to a management shortcoming. Other obstacles, such as "the possibility of causing conflict over transboundary waters; and potential abuse of the concept as governments could over-allocate water to privileged groups, at the expense of both people and the environment," further question its capacity to achieve change (Bakker K. , 2007, p. 438).

Furthermore, the HRW doesn't ultimately foreclose privatization schemes or assure free or equitable access and distribution of water in most liberal states. Its vivid support by private corporations indicates upon its inability to truly resist the global power imbalance (Dubreuil, 2005; Bakker K. , 2007). Supporters of alter-globalization condemn the "rights talk" as belonging to an individualistic, Eurocentric libertarian philosophy that excludes possibilities for collective action beyond corporatist models of service provision and reinforces the public-private binary of the water predicament (Olivera & Lewis, 2004; Shiva, 2002). Similarly, its anthropocentric nature fails to account for ecological actors that might further demolish hydrological systems (Bakker K. , 2007; Shiva, 2002). Thus, this approach can be both exclusive and regressive, along with inclusive and progressive (McCarthy, 2005). Lastly, the right inherently ignores communal power relations and instead romanticizes them as coherent and fair social structures (McCarthy, 2005; Mehta, 2001).

This directly supports Flyvbjergs' assertion over the shortcoming of idealism to match the power existing in reality. He cautions that Idealist notions of what reality should be like are a weak basis for evaluating the contemporary state of affairs, and more importantly, its modification outlets. Its inherent neglection of power relations renders it utopian and naïve rather than realistic and informative and thus constitutes a poor analytical basis for resolving

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real-life issues as the water predicament. The analysis demonstrates that the literature is not sufficiently inclusive of the reality of the current water management praxis, rendering the rights-based approach inert as an organizing principle. Thus, power analytics emerge as the most compatible avenue of exploring and resolving the predicament.

Research Design.

In this research, I will employ comparative analysis (AC) methodology within political science. This analysis explores political systems, institutions, and processes and through local, regional, national, and international scales through comparison of equivalent elements. For the present research, we explore two normative frameworks in the issue of water management in comparison. This methodology allows us to seek a better political understanding beyond the mere ideological or theoretical discourse. Because the nature of the water problem evinces various practical political concerns, this method proved the most sufficient. I will unpack the water problem by reviewing its dominant political institutions and processes, basing evaluation on both conceptual critique and empirical evidence derived from open-source data. I will perform a comparative conceptual analysis of the dominant frameworks for WM by illustrating through examples the successes and failures of the approaches to respond to the water problem. I will rely heavily on the theoretical insights provided by Flyvbjerg and Foucault as means to explain the power relations embedded within the issue. Essentially, the paper undertakes analytics of power in order to elaborate on the efficacy of both conceptual frameworks and draw a conclusion about which is more effective in achieving the goal of competent water management.

Analysis

The International Governance and the of the UN.

The water predicament is now understood to derive from governance shortcomings and absences. Schnurr defines global water governance as "the political, economic and social processes and institutions by which government institutions on all levels - international, national, regional and local, civil society, and the private sector make decisions about how best to use, develop and manage water resources in order to achieve internationally agreed-upon goals, thereby applying the principles of 'good governance'" (2008, p. 114). Officially introduced in 2004, the concept of Global Water System (GWS) attempted to bridge across water sectors and agents (C. Vörösmarty, 2004). However, the global water arena lacked the interests, pressures, and institutional consolidation that is foundational for an emerging water regime (Muller, 2015), making it prone to manipulation and "elites capture" (Sojamo & Larson, 2012).

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While some view Water Governance as an academic concept (Ünver, 2008; Bernsen, 2011), transnational corporate networks and leading agencies are nevertheless seen as an emerging regime (Sojamo & Larson, 2012). Regardless, their profit-driven nature and limitations over resolving critical human dimensions of WM are well-acknowledged (Burbach & Floress, 2019). Various authors suggested a range of global institutions promoting equity and resource efficiency; water pricing protocol for product, water footprint quotas, and labeling/taxing water-intensive (Hoekstra, Mekonnen, & et al, 2011; Hoekstra & Chapagain, 2006; Verkerk & Hoekstra, 2008; Hoff, 2009). McKay (2003) goes so far to propose a VW Trading Council within the WTO to redistribute water resources on ethical grounds.

The existing interplay of supposedly neutral international organizations (e.g., World Bank, UN-Water) and multi-stakeholder organizations (e.g., World Water Council) is criticized as ineffective, partisan, and obscure (Shiva, 2002; Public Citizen, 2003). The World Bank, recognized by activists as prime private-sector advocates, initiated short-termed engagements (e.g., loans, committees) that shaped WM indefinitely, yet neglected to institute the necessary regulative framework (Srinivasan & et al, 2012; Sojamo & Larson, 2012; Shiva, 2002). UN-Water, the Sustainable Development Goals, or the CEO Water Mandate, only encourage and recommend water regulation yet are unable to impose it (CEO Water Mandate, 2021; UN-Water, 2021). The World Water Council, an international umbrella organization composed of corporations, institutions, and organizations, attempted to unite water governance under the World Water Forum. However, its informal ministerial meetings of business-based NGOs and large corporations were seemingly controlled by the private sector who advocated for greater participation policies, namely the 'Bonn Keys' (IRC, 2001);

> The Forum's orientation is profoundly influenced by private water companies. This is evident by the fact that both the president of the World Water Council and the alternate president are deeply involved with provision of private, for-profit, water services
> (UN, 2009).

This displays Flyvbjergs assertation that in open confrontation, rationality yields to power (Flyvbjerg, 1998). Ironically, during the Forum, the code of conduct concerning corruption was proposed by nonetheless the private actors (IRC, 2001). Its failure to represent and consolidate key actors resulted in a parallel series of counter events known as the Alternative World Water Forum dominated by water activists (Cernison, 2019). Consequently, national and global water governance remains unbinding, unregulated, and easily manipulated. Flyvbjerg's proposition, that power is exercised by presenting a specific rationalization as rationality, questions whether the agribusiness hadn't deliberately 'sacrificed' themselves to scrutiny in the Forum as measures to conceal their remaining hidden power (Flyvbjerg, 1998). While privatization schemes were singularly battled upon, the private sector constantly shaped WM in to its current, weak legal form, incapable of supporting the HRW. Although these measures are unlikely to be ever disclosed, their success is nevertheless an impressive exhibition of power.

Despite the international nature of water, it is doubtful that the current international system, shepherded by the UN, could be its salvation. Although Human Rights emanated from the UN,

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a precedent for a successful 'rights'-based approach is not evident. The UN has never independently enforced rights but only executed and regulated its international affairs mandate. Its capacity to act as a catalyst for change is dictated by its member states. Unless the states endow the UN with the power to do so, the UN remains an ineffective catalyst for water issues. Furthermore, its increasing dependence on voluntary contributions for selected activities weakened its ability to execute its mandated programs (UNJIU, 2007). Harris and Mirosa (2012) stress that for any successful water governance, the challenges, opportunities of provision, end goals, and accountability, must be specified. Given the UN's empirical difficulties to adequately assess and conceptualize water's value, elementary individual quantity and suitable quality, its competency to resolve the existing regulative difficulties is arguable. Financially, the UN capacity is severely lacking; its budget for 2020 stands on $3 billion alone (UN Affairs , 2019), while the federal US budget dedicated solely to agriculture stands on $20 billion (U.S. Congress, 2019), and Nestlé Group's sales worldwide stand on $90 billion (Wunsch , 2021). Since "Knowledge is Power", the UNs empirical deficiency further adds on its financial limitation and renders it relatively powerless to private actors (Flyvbjerg, 1998).

Notwithstanding the value of the SDG goals and the Declaration of Human Rights as noble theoretical landmarks, their recurrent colossal violation questions the UNs efficiency to champion the HRW under legal coercion. Moreover, the rights static characteristic is incapable of responding to swift climate variations that transform the global water terrain overnight (Bakker K. J., 2004). Sangameswaran discerns the "international human rights regime as a relatively strong promotional regime [and] a relatively weak implementation regime" (2007, p. 9), emphasizing the UN's inherent regulative power limitation. This directly corresponds to Flyvbjergs' notions over the weakness of idealism in implementation schemes (Flyvbjerg, 1998). His critique asserts that the mere ideals represented within the HRW, as inspirational as may be, do not provide the conditions for its implementation, rendering the HRW powerless (Flyvbjerg, 1998).

Bakkers further expresses concern over the individualistic, Western, state-centric, anthropocentric, and universalistic basis of 'rights talk' (Parmar, 2008), to deal with critical ecological challenges faced by marginalized, indigenous, and non- Western populations (2007; 2010). Moreover, rights reinforce the very framework that reproduces water's unequal power relations (Sultana & Loftus, 2015). Flybvbjerg recognizes that rationalization presented as rationality creates an "untouchable" position that is later hard to penetrate (Flyvbjerg, 1998). Although the HRW recognizes the larger theoretical and holistic elements of water and supposedly facilitates various actors in the discussion, the UNs reliance upon the member states as responsible water agents omits their subordination to private corporations.

State Responsibility and Irresponsibility.

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The global indifferences that arise from the HRW are further challenged with the current complex reality of poor national WM. The HRW allocates responsibility over to the state, yet neglects to recognize the state as the de facto custodian that it is. It exclusively obtains from proposing a feasible implementation scheme capable of consolidating entangled policies, agencies and international treaties. While governmental water policies should reflect social factors as equity, water rights, attitudes, norms, and values, guided by scientific projections, they are often the results of economic and political imbalances (Burbach & Floress, 2019). Subsequently, federal water policies became administrative substitutes for marginal tinkering with the status-quo, further discrediting state capacity to administer water (Stakhiv, 2003). Moss and Newig further observe that "levels of government and administration typically do not fit the environmentally relevant scales, resulting in inefficiencies, spatial externalities and spillovers" (2010, p. 1). Financially, state agencies hardly possess the means to advise, much less implement, top-down institutional changes, providing insufficient solutions to an outdated system (Stakhiv, 2003; Cernison, 2019). Thus, the poor WM of states is unlikely to revolutionize abruptly. This once more correlates to Flyvbjerg's insights on the normative tendency to neglect what is actually the case in reality and instead favor what should be the case (Flyvbjerg, 1998).

The failure of contemporary WM stems from historical development, structural challenges, and a highly centralized decision-making platform. Modern policies developed over decades of historical agricultural necessities, institutionalizing the massive existing system of dams, reservoirs, and aquifers, which ultimately reshaped the natural water cycle (McNabb, 2017). Consequently, the existing infrastructure permits little room for modifications, turning water management to a temporary ‘patching’ system and increasing local political clout (Burbach & Floress, 2019; Floress & et al, 2015). Wider transnational strategic water management has become its main casualty. Savedoff and Spiller describe state moderation as an increase of workers and salaries while fixing prices at an unsustainably low level (1999), that fails to create an incentive for water conservation or investments and derogates the overall welfare (Lachman & et al, 2016). Lachman et al. show, for example, how farm irrigation water supply neglects to factor in cost associated with federal subsides infrastructure (2016). As WM infrastructure periodically expended, so did its legal complexity. Conflicting water rights accumulated into a complex legal ‘bundle rights’ reflecting the inconsistent legislation and its selective interpretation (Abukhater, 2013). Foucault cautions that selective promotion of a chosen interpretation favors power actors and reproduces knowledge and, in turn, reality (Flyvbjerg, 1998). Ribot and Peluso further argue that natural resources'' disproportionate benefits are rooted in access and poverty differences, where the former embodies ‘bundle of powers’ and the latter ‘bundle of rights’ (2003).

The centralized, elite-dominated, and intentionally ambiguous decision-making platform further diminished chances of its reconciliation or water conservation (Lewis & Benton, 2008). Favoring engineering factors over social and environmental elements meant citizens' engagement was systematically blocked and deprioritized (Burbach & Floress, 2019). The use of scientific and engineering discourse has had the dual effect of excluding non-specialist stakeholders and users from meaningful engagement in policy making and simultaneously

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enabling what are effectively political acts a veneer of scientific justification. Therefore, it could be argued that while political decision-making is scientifically informed, it is not sociologically informed. This systematic knowledge creation inherently dictates water power relations (Flyvbjerg, 1998).

Disconnect between national-level decision-making and local communities is exacerbated because local actors found the information to be inaccessible and difficult to comprehend, limiting their capacity to influence. Although Watershed Councils and River Basin Commissions were established precisely to bridge over the existing knowledge gap among the stakeholders, they fail to accommodate non- agricultural water users (Jacobs & et al, 2016). Vast amount of scholarship views unequal access to water as a cause of power imbalance within WM (van der Zaag , 2007). Thus, politicians' agendas easily overpowered scientific recommendations or economic interests, resulting in resources overallocation and rights maneuvering (Savedoff & Spiller, 1999). Presently, a single agency cannot independently pursue major water policy reform through its legislative channels. Consequently, institutional modifications are fought over indirectly through project planning processes (Stakhiv, 2003). Absent the necessary legislative authority to accommodate changes; large projects result in add-on features targeted to satisfy numerous interests with veto power (Stakhiv, 2003). This exhibits Flyvbjerg's assertion over the ability of power to shape reality through knowledge proliferation.

State water management in many nations has emerged for the most part in an ad hoc, organic, piecemeal, short-termist manner, which has not incorporated sufficient strategic foresight to allow for the alleviation of increased demand or ecological challenges. This has now been compounded by the neo-liberalization of water provision as a public good, where those with a claim to water 'rights' have become water 'consumers', and where a cost-benefit and exchange modality has further complicated effective water management (Ginsberg, 2004). Communities selectively engage agencies capable of offering them the best deal for their local water difficulties rather than conferring the regional management compact (Stakhiv, 2003). These patterns indicate the economization and politization of water from its holistic, abundant and common perspective to a marketized, rationed and private source, where government legitimizes water privatization. Thus, the present rationality of WM had been deeply rooted in power exercised in historical junctures (Flyvbjerg, 1998).

Federal WM privatization has been argued to increase the 'efficiency' of water system, however, efficiency's benefits don't necessarily imply reduced costs of provision or improved water quality (Bakker K. , 2007). Furthermore, private firms inherently prioritize profit as their end goal, often disregarding implications of actions for end-users by promoting diverse and often inconsistent goals (Sojamo, 2010). States such as Chile, which fully privatized their water resources, institutionalized theft by favoring extractive industries over the community's water rights (Civicus, 2020). Although the constitution preserves water ownership, its interconnectedness to privatized sanitation deepens the evident democratic deficit. Nowadays, Chiles' citizens pay the highest rates in Latin America for drinking water, commanded by western transnational corporations such as the Suez group and the Canadian Ontario teachers'

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pension fund (Civicus, 2020). Similarly, England and Wales invoked privatization transition during the 1970s as federal water systems were "starved of funding, failing to deliver a good service and damaging the environment" (Thomas, 2020). Drowned in pollution and poor-quality drinking water, the newly formed Regional Water Authority (RWA) reallocated responsibility from local water boards to a handful of private companies that indeed improved its poor quality (Hukka & Katko, 2003).

The rise of privatization schemes globally could be argued to indicate the incompetency of most states to institute WM, while simultaneously displaying the extension of corporate power through lobbying of executive control over water systems. Given the emergence of anti-privatization campaigns globally, as in Paris, Berlin, and Cochabamba (Cernison, 2019), one could hardly argue it's an appealing resolution to all actors, particularly local communities. The adoption of the HRW discourse by private companies further signifies its restraint as an anti-privatization strategy as it doesn't oblige subsidies to poor communities or equitable redistribution (Sultana & Loftus, 2015). Thus, the HRW is not only found to be inadequate to resist such schemes (Zilberman & et al, 2017), it is also found to be compatible with private-provision in neoliberal states (Bakker K. , 2007). Thereby, the HRW theoretically empowers state responsibility, but states had already attempted to be released from this responsibility, either by their own free will or through lobbyism that encouraged this transition. States had long recognized their failure to handle water issues, resulting in privatization. Thus, even 'purely' federal schemes might be very well the result of private interference in states policies.

The Non-State Sector: Corporate Interests and Policy Capture.

Power is *always* present.

(Foucault, 1987)

Local

Corporate agribusiness control is firstly transmitted from the international level to the local. Corporate's domination over water, food, and energy's global trade markets shapes local farmer patterns. Through their global market dominance, corporations determine local crop prices and purchasing restrictions that affect local competition, farming security, livelihood and diversity (Clapp & Fuchs, 2009; Hendrickson & Heffernan, 2002). Presently, structured overproduction, globalized competition and the external costs of industrial processes damned farmers to pitiful profits due to low crop prices (Graddy-Lovelace & Diamond, 2016). Corporations not only command crops prices but also set a precedent for farming trends. Through vertical integration of the various supply chain stages, they provide the farmers with specific seeds and fertilizers, guaranteeing supply to their trading operations and manufacturing facilities (Sojamo & et al, 2012).

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During the 90s, developing states increasingly welcomed foreign investment as means to advance their capital and trade (Garcia-Ramon, 2019). Surfacing as the Land Grabbing phenomenon, developed states and corporations enthusiastically indulged in acquiring vast agricultural and water-rich lands (Mehta & et al, 2012). Exacerbated by the 2008 Food Crisis, their swift entrance into small-scale agricultural production networks had expedited pesticides water pollution, resources exploitation, and animal waste, exaggerating local competition and driving local farmers to debt or displacement (Sojamo & Larson, 2012; Agrawal & et al, 2010; Mehta & et al, 2012). Small farmers unwillingly sold or leased their land to large corporates while others did similarly with their water rights (Zoomers, 2010; Garcia-Ramon, 2019). However, since many states exempt agricultural uses from permit requirements (Water Law: An Overview, n.d.), corporates freely exploited water resources in their countries of operation.

The development of the global agricultural trade stimulated transitional quality and safety standards. Corporate technological capacity increased the power imbalance between farmers and corporations, who reduced production costs to those who could financially qualify their standards (Garcia-Ramon, 2019). The corporates' accessibility to fast-developing bio-technologies overpowered indebted local farmers who were forced to turn over property rights to companies such as Cargill and Monsanto to pay for the expensive seed the companies' policies imposed to begin with (Garcia-Ramon, 2019). Furthermore, corporations capitalized on senior water rights, often exhausting their permits' consumption rates and operational duration (Lawrence, 2021; NBC News, 2018). By employing low-cost strategies, like donating to local youth groups or winning over small-town officials with attractive water rights, they cement investments and relationships that potentially could last a century (Bernsen, 2011). Ultimately, local actors, who are key actors for efficient WM, become defenseless to the top-down and direct pressures of giant corporations. Their power has carefully been rooted, systematically enforced and orientated towards long-term effects through mechanisms of knowledge and possession, molding the very tangible reality of disempowered local actors (Flyvbjerg, 1998). The agribusiness sector further ensures its supremacy through national channels.

National.

Nationally, agribusiness corporations possess immense bargaining power over political entities as the most profit-driven stakeholders in the water distribution systems. Ritcher (2014) recognizes that water corruption takes many forms, which are often more subtle than outright bribery. Through close interactions with national trade organizations and extensive federal lobbying, the agribusiness corporations successfully shape national export and import policies as well as indirect federal subsidies (Magdoff & et al, 2000). In the past, elected candidates were incentivized by voters' water demands, utilizing water as a vote catcher (Ritcher, 2014). Nowadays under agribusiness lobbying, water projects have become a political currency, rigorously traded in federal halls for favors and votes, advancing corporate interests (Rocky Mountain PBS, 2020; McCool, 2012). Thus, the idealist premise of the state's duty to serve and

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protect its citizen is severely tempered by the fact states' rationality yields to corporates' power (Flyvbjerg, 1998).

The seeds of the agribusiness lobby in the U.S. are traced back to Nixon's era when agricultural secretary Butz, who was heavily influenced by major corporations, urged farmers to either "get big or get out" of farming, increasing the industrialization of food production and consolidating control to a number of corporations (Philpott, 2008; Union of Concerned Scientists, 2018). The U.S. agricultural lobby exercises control by devoting generous lobbyist budgets and political contributions to Congress. In 2020 alone, 493 agribusiness entities employed 1144 lobbyists, of which nearly 60 percent were former governments employees, who invested a total of $142 million in agribusiness (OpenSecrets, 2021). The 'revolving door,' whereby former government employees went to work for lobbying and consulting firms while corporate lobbyists took government jobs, empowered the agribusiness to become a robust force within the political terrain through systematic massive investment mechanisms (Union of Concerned Scientists, 2018);

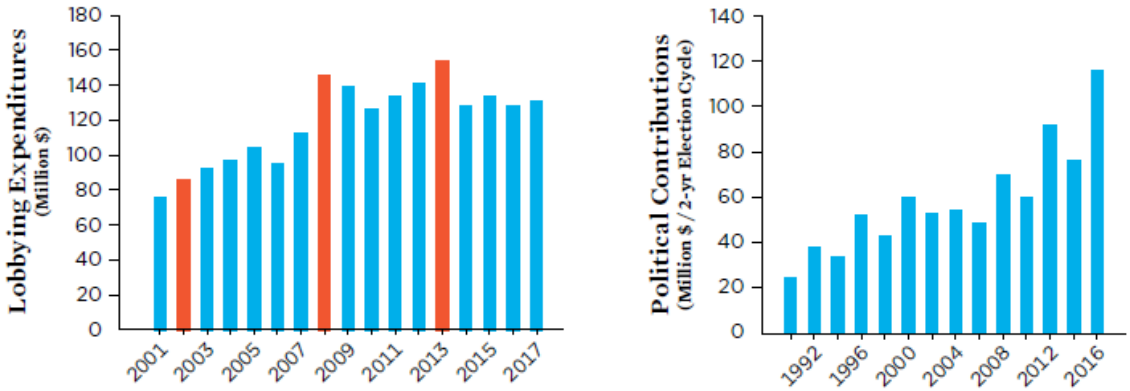

Figure 2 & 3. U.S. Agribusiness lobbying by expenditure and contributions, presented by (Union of Concerned Scientists, 2018).

Similarly, the United States Department of Agriculture (USDA), responsible for developing and executing farming, forestry, and rural economic development policies, has been systemically stocked by underqualified profit-driven individuals and a leadership exclusively composed of agribusiness officials[4]. Similar patterns are seen in other water-rich regions. In Peru, the National Water Authority (ANA) failed to monitor the overexploitation of the Ica region in the face of agribusiness elites' resistance, who successfully became the region's dominant economic and political actors (Damonte, 2019).

Another form of agribusiness power is indirect federal subsidies[5]. In the U.S., following the Great Depression, Congress applied the 'Doctrine of Parity', which standardized commodity prices and paid farmers to set aside land to constrain overproduction (Graddy-Lovelace &

[4] The following section, discussing the US agribusiness lobby, relies heavily on the insights provided by (Union of Concerned Scientists, 2018).
[5] The following section exploring US indirect agricultural subsidies relies heavily on (Carlisle & et al, 2019).

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Diamond, 2016). When aggressive agribusiness lobbying eroded supply systems, corporations such as ADM and Cargill replaced parity policies by mandating farmers to over-grow grain rather than vegetables or fruits. The federal government promised direct and emergency payments to assist the farmers, serving as indirect subsidy to agribusiness. This chronically altered US agriculture and entrenched federal funding to this day. Although fragmented data mainly hide corruption, its global premise is still prominent:

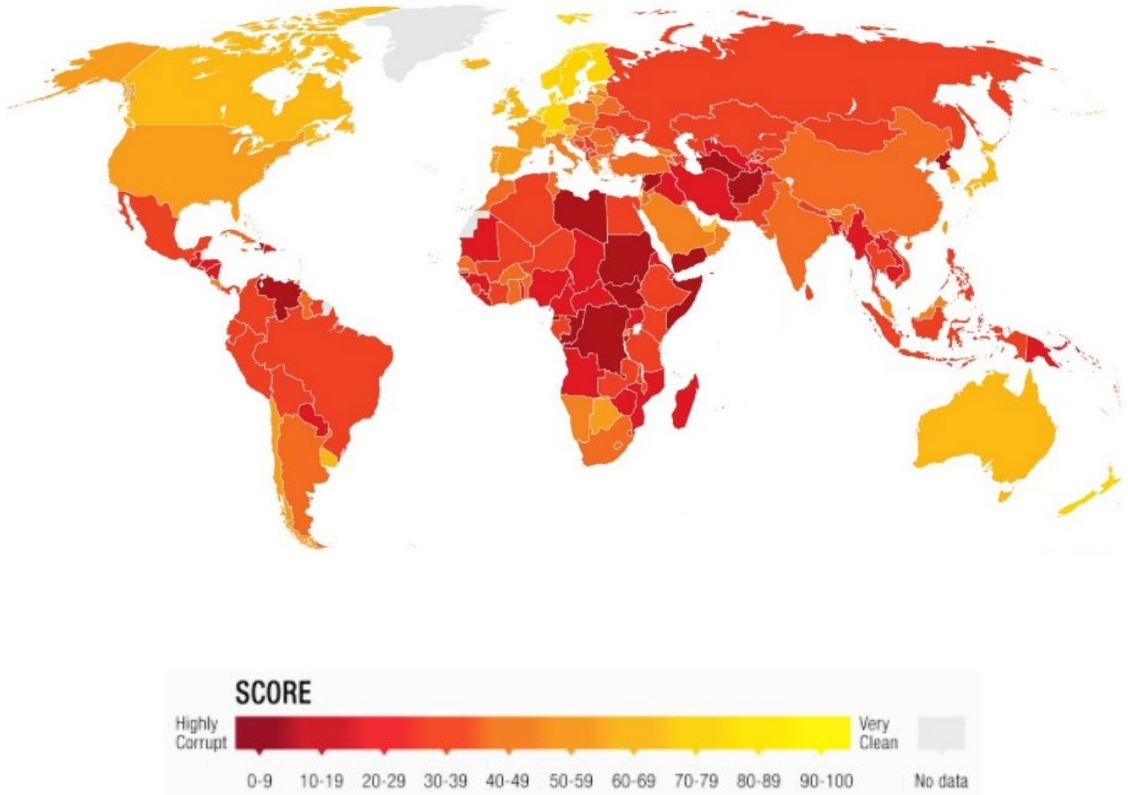

Image 1. Corruption Index 2020, as provided by (Transparency International, 2021).

Based on experts' and businesspeople's observations of levels of public sector corruption, governmental corruption is on average 43/100, with over two-thirds of the 180 researched countries scoring below 50/100 (Transparency International, 2021). Although this serves as a firm indicator for state capture, their full power will remain hidden until private corporates disclose their operations data. Flyvbjerg (1998) contends that 'A party's unwillingness to present rational argument or documentation may quite simply indicate its freedom to act and its freedom to define reality' (p. 321), as can be seen in the corporate's reality. He considers the absence of such as 'more important indicators of power' (1998, p. 321) than the actual arguments and documentation produced. Nevertheless, the existing data and the emerging democratic deficit questions state's capacity to act as a reliable agent to the HRW (Bekker & et al, 2007). Whether water systems are indirectly, yet 'legally,' influenced by powerful lobbyists, or federal WM is simply insufficient, entrusting contemporary governments with water responsibility is flawed. It is worth noting that, while it is easier to trace corporate power nationally, their power is even substantially unchecked internationally.

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International.

Internationally, corporations exercise their power relatively discreetly within the ungoverned global water arena. Although they're not forthcoming about their activities, their power over the international political economy is projected through VWT. Hoekstra and Mekonnen recognize that globally industrialized agriculture is accountable for 92% of water consumption, influencing water ownership and security, land investment, and the trade of food and VW (Arjen Y. Hoekstra, 2011). As the market globalized, corporations such as the ABCD group evolved to entities resembling banks, trading in commodity exchanges which increases concerns over the potential for a westernized oligopolistic abuse of market power (Murphy & Burch, 2012).

In almost every key sector of the food system, four firms alone control 40 percent or more of the market, and their concentrated power discourages sustainable agricultural initiatives unless these serve corporate interests (Howard, 2016). The fact that so much of the market is held in private hands also conceals critical water data that could advance contemporary assumptions about the water predicament (Oxfam Research Reports , 2013). Their institutional capacity of finance and hedging further empowers them to freely exercise market power (Kaufman, 2011). Since food politics remains primarily un-scrutinized in the international arena, western market hegemony isn't directly challenged (Sojamo & et al, 2012). Consequently, water resources transactions among nations, private actors and consumers ultimately became a marketplace issue. Evidently, corporate control is the rationalization of power. By promoting its supremacy with little or no justification, it transforms the nature of discussion away from the idealist perspective of the HRW to economic realities. This vindicates Flyvbjergs' argument over realpolitik and idealism; reason will never win against power in a fair fight, nor will it reach such conditions (Flyvbjerg, 1998). Foucault's notions about the reproduction of reality through power imbalances, further demonstrates the incapacity of the HRW idealism to ascend beyond its power relations (Flyvbjerg, 1998).

The precedent of this consolidated power was institutionalized through the globalization and liberalization of markets. Corporate dominance is traced back to the Cold War era where western corporate hegemony imposed an 'hour glass market', resulting in the current extensive grain growth (Friedmann, 1993). However, it was not until the nineties that agro-industrialization rapidly globalized due to urbanization and neoliberal ideologies (Barret & Reardon, 2000). Market-oriented economies and the liberalization of agricultural regulations in developing countries (e.g., Brazil) opened new markets (e.g. Middle East, North Africa), which increased demand for newly tradable agricultural products. Nowadays, Cargill operates in most countries, followed by Louis Dreyfus, Bunge, and ADM (Oxfam Research Reports , 2013).

As explained previously, globalization also meant the ABCD could legitimately expand its operations to all continents through land grabbing in Asia, Western Africa and Latin America. The 2008 food crisis exaggerated land grabbing globally, allowing corporations to systematically bypass the international trade of water, by obtaining water in a land form

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(Sojamo & et al, 2012). Evidently, 68 percent of the flow of agricultural and industrial VW trade products are recognized to be green water (e.g., precipitation) (Arjen Y. Hoekstra, 2011);

Cargill, the largest agricultural commodity trader in the world, purchased 52,576 hectares of Colombian land through 36 shell companies, escaping legal restrictions through fragmented purchases and surpassing Colombian land size permits per owner by more than 30 times (Oxfam Research Reports , 2013). Similarly, between 2005 and 2009, Louis Dreyfus (through subsidiaries Calyx Agro and Louis Dreyfus Company) acquired approximately 70,000 hectares of land in Argentina, Brazil, Paraguay and Uruguay, mainly devoted to food crops and cattle ranching, occasionally combined with nature conservation projects as a means of defeating deforestation and land use resistance (Oxfam Research Reports , 2013). However, not all acquisitions were directly engaged by the companies, as some was attained through various channels and entities, yet remained private in nature:

INVESTOR TYPE	AFRICA	AMERICAS	ASIA	EUROPE	OCEANIA
	AREA IN 1 000 HECTARES				
Private company	4 571	2 139	1 247	2 224	1 907
Stock exchange-listed company	1 683	1 334	3 152	2 257	60
Investment fund	1 254	809	6	452	0
State-owned entity	422	190	277	36	0
Individual entrepreneur	223	314	6	106	0
Other	67	0	0	7	0
No information	2 332	31	522	55	263

Table 2. Land acquisitions by investor type and target region (Oxfam Research Reports , 2013).

water consumption patterns, and their legality remain undisclosed under private firm policies (Oxfam Research Reports , 2013). The existing data over market share and non-location-specific aggregate operations data make it difficult to assess corporate water footprints and their corresponding power accurately. Because consumption habits remain hidden from end-consumers, individuals are often unaware of the explicit power of corporations within their value chains (Garcia-Ramon, 2019).

However, by multiplying the associated international crop trade volumes by their associated VW content (Hoekstra & Chapagain, 2006), one can make a strong assumption about water-power relations between corporations, states, and investment entities. Based on their global infrastructural capacity, from sourcing to storage and processing, to ports and transport fleet, their VW flows exhibit their substantial power (Sojamo & et al, 2012). The existing VW flow gap between eastern and western agricultural stakeholders emphasizes their hegemony as major global water managers (Sojamo & et al, 2012).

Contrary to the power corporations possess, they explicitly avoid assuming their natural role as water managers, becoming surprising yet vocal, supporters of the HRW (Sultana & Loftus, 2015). Based on discourse analysis of senior executives of water supply service firms and high-profile cancellations of water supply concession contracts (e.g., Manila, Buenos Aires,

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Atlanta), corporations evidently retreated from earlier commitments to pursue private sector participation globally when faced with its regional risks and low profits in supplying the poor (Robbins, 2003). Sustainable policies make it harder to conduct business and maintain market competition; thus, they're unlikely to be sustainably implemented by private firms as well as public ones. Public companies, like Nestlé, who face severe criticism by direct consumers, investors, and advocacy groups were forced to seek remedial measures and WM development (Sojamo & Larson, 2012).

Sustainable policies development, the Water Resources Group, the WASH pledge, and commitments towards Transnational Water Stewardship, are but a few measures Nestlé and other transitional companies undertook to demonstrate cooperative water management (Vousvouras, 2016). Corporate Social Responsibility (CSR) has also been aggressively engaged to counter their environmental effects, yet it is recognized promotional in nature rather than emerging water governance (Sojamo & Larson, 2012). Although these measures are perceived as a form of corporates leadership, they're mostly enacted to guarantee sufficient production, reduce reputational damage, and gain legitimacy and critical consumers' support (Waldman & Kerr, 2014; Vos & Boelens, 2014). Water Stewardship endows corporations with power to shape practices and norms (Vos & Hinojosa, 2016), and it maintains hidden power dressed up in honorable and humane declarations. A final point to consider is that in all these initiatives is the low transparency and democracy in formulating standards and monitoring procedures, which are set by dominant market players who own the negotiating table (Amekawa, 2009; Campbell, 2005).

Conclusion

It is now evident that grasping the reality of power-oriented management of water trumps its idealistic aspiration as manifested in the HRW. Flyvbjerg's comparison of the realpolitik versus the idealist calls to cease the infatuation with an idealistic future. Instead, he calls us to face, however grim and prodigious as it may be, the power that creates, reproduces and reinforces the prevailed interpretation of reality. Flyvbjerg offers various propositions that proved extremely useful in identifying the methods by which corporations exercise their power. Foucault's emphasis on the relations of power, knowledge, and conflict, as means of exercising freedom demands the reality of water to be fully exposed. Habermasian notions risks moving away from the locus of the crisis to meaningless discussion that deepen corporate supremacy. Thus, the HRW must be soberly viewed not for its desired ambitions, but for its manifestation in reality; being ethical grounding, a notable milestone and a symbolism of justice, yet not a solution to WM.

Only through concretely identifying the full extent of reality and acting accordingly, could the water predicament progress into regulative substantial discussions. Thus, it is incumbent on international organizations, particularly the UN family, to recognize the unavoidable role of corporate interests as participants in water management. Water, like energy, food, trade, and so much else, is now globalized as a commodity and subject to the pressures of supply and

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demand. What Flyvbjerg demonstrated is that the failure to incorporate all the stakeholders – and recognize the reality of the power that they wield – leads to a fundamental failure to recognize the dynamics at play in order to change these.

For water to be effectively managed globally, the clarion call of 'rights-based' policymaking will ultimately founder on the rocks of realpolitik. The idealist rights-based approach and the reality of the corporate-dominated neoliberal/commodification approach, are effectively talking passed one another. This failure of Habermasian discourse ethics (that all affected by a decision should participate in the making of a decision) is ultimately as much a responsibility of the rights-based advocates as it is of the self-interest of corporations. We have, in effect, two parallel systems effectively attempting to create policy and practice around the same issue. Aside from the somewhat incongruent support of the Right to Water by corporate interests, there is, effectively, a subdivision within the non-corporate rights-based approach: those advocating for a policy that accounts for some of the reality of corporate involvement; and a second segment that is wholly antithetical to any corporatization, privatization, or commodification, of water and water management.

However, beyond recognizing corporate power, the question remains: could it be harnessed to resolve the water predicament?. The methods by which their power is exercised could be reversed and channeled towards a shared water leadership. Cementing their power under a regulative title inherently binds it to global accountability and common WM end goals. Their emerging water governance (stewardship, CEO mandate, CSR), as well as its appeasing support to the HRW, is understood as a promotional façade that diverts from and conceals their power. Thus, mere regulatory oversight, bereft of direct consequences for corporate interests, is unlikely to provide sufficient leverage to ensure that private interests comply with the broader aims of good water governance. Regulatory oversight should be more integrated into consequential aspects of water management for communities. A far more viable scenario is the direct link between results and outcomes, with continued permission to operate in the market concerned. As such, licensing operations by corporations, based on key performance indicators linked directly to broader community-based goals, is necessary to ensure the proper functioning of the water market.

This does not mean that they alone would control water. The literature recognizers their inability to institute such leadership independently. It does however ensure that their power will be respectably acknowledged, titled, and harnessed, under global scrutiny; further limiting their capacity to exercise hidden power. Their financial capacity and economic motives might suggest that corporations are the most likely actor to invest, produce and utilizes technologies that could determine water scarcity and availability.

Given the explored nature of corporate power and its advertised calls to enshrine but only 1.5 percent of water under the HRW, one must acknowledge the probable truth that the future of water is already being formed behind closed doors. Capitalizing upon the fact that water became an unignorable business risk, other agents are encouraged to realize the primacy and urgency of exercising their power as a coherent force over the corporate dominion. As such,

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this paper seeks to face the existing forces of the predicament and its arising approaches, in the hope of inspiring all humans essentially to exercise their given freedom and challenge the current water paradigm. Lastly, one could argue that the decision to either reject or accept the fallacy of water is the ultimate, and perhaps the only, possible action of power within the water crisis.

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