25. Selling excellence: hydrohubs and policy mobility in a neo-liberal world order

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INTRODUCTION

Just as water does, policies flow. For decades, a wide variety of water policy models has been in circulation, traveling in ways and with impacts that have been assessed through various lenses (see Mukhtarov 2022; Varady et al. 2008). Policy models such as river basin management, integrated water resources management, and the European Union's Water Framework Directive have crossed physical and mental boundaries within and between nations (e.g., Allouche 2016). For their allegedly universally applicable and replicable designs, such models have become, and remain, influential reference points in water governance in different times and contexts (e.g., Organisation for Economic Co-operation and Development [OECD] 2018; Stockholm International Water Institute [SIWI] 2022).

The ascendancy of specific policy models is an outcome of carefully crafted initiatives in the form of mobilizing policy models for transfer to individual states and jurisdictions (Hasan et al. 2020). This mobility is achieved through the workings of inter-governmental organizations, global water initiatives and mega-events, international and local civil society groups, networks of experts and consultants, and influential individuals (see Allouche 2016; Varady et al. 2022). The mobility of water policy models in bi- and multi-lateral channels has become an indispensable feature of water governance worldwide, often indicating a hierarchical relationship between the 'haves' and the 'have-nots' of actors in terms of the necessary expertise, resources, and infrastructure to manage water resources and discourses around them (e.g., Hasan et al. 2021; Raev and Minkman 2020). Such relationships reflect and shape the power of actors and dictate economic and symbolic benefits that they derive from what may seem like a voluntary or equal exchange of ideas, expertise and goods (Mukhtarov 2022). Jessop (2004) coined the term 'cultural political economy' to mark this essential relationship between the cultural production of facts, hierarchies and knowledge and the material effects of how water is managed and water governance expertise is traded.

Distilling, spreading and adopting global water policy models is considered an effective means to ensure better water governance. In addition to successful application of certain models, particular states, city-states and cities have also sought to construct a positive image around their expertise in water governance by linking successful application of such models to their own water sector knowledge and expertise. Examples of such aspiring units include, but are not limited to, Israel, the Netherlands, Singapore, Switzerland, the United Kingdom and the United States (US). Far from neutral framings of water governance exclusively geared towards problem-solving, branding of actors and policy models have generated not only lucrative business opportunities, but also reputational gains. Potential clients have perceived, for example, the Dutch Delta Approach (e.g., Minkman and van Buuren 2019), the Singapore model in water treatment innovation (e.g., Dhalla 2017) and the Israeli model of irrigation

management (e.g., Feitelson 2013) as desirable for replication in their circumstances. This is significant in the context of the annual global water industry market, estimated at $800–1,000 billion (Ahlers and Merme 2016).

There is a large and diverse body of literature that interrogates water policy mobility through studying the processes of policy entrepreneurship, networking, branding and politics (see Hasan et al. 2019, 2020; Hyun Kang et al. 2022; Minkman 2021; Minkman et al. 2019). Commentators have noted hydrohubs (HH) as an emerging form of such mobility and some studies have already looked at individual states and their self-branding as HHs (see Joo and Heng 2017; Martinez 2023; Minkman et al. 2019). Nevertheless, methodological and systematic attempts to conceptualize HHs, map out their characteristics and locate them in grids of power have so far been missing from academic study. Also missing is an understanding of the broader conceptual significance of this new empirical phenomenon for global water governance. We seek to fill in these empirical and conceptual gaps.

To this end, we introduce the concept of HHs to conceptualize this small but influential group of water governance actors. We highlight the conceptual, analytical and practical value of this concept in the study and practice of water policy and governance. We introduce a typology of 'global hydrohubs' (GHHs), 'regional hydrohubs' (RHHs), and non-hydrohubs (NHHs) and further explain how these ideal types differ from each other. The typology of HHs as well as illustrations thereof help us to understand the variety of forms produced by a merger of state-led and market-based approaches to water governance. In the next section we explain how the concept of a HH differs from other modes of policy mobility but also builds upon them. We then present our typology and explain how and why a place may be classified at different scales as a GHH, RHH or a non-HH. In the following section, we examine the Netherlands and Turkey through the lens of our typology, and explain why the former is better considered a GHH while the latter is better seen as a RHH. We then present our conceptual critique of HHs and discuss the implications of the concept for broader issues in global water governance. Finally, we make our concluding remarks and present our suggestions for future research.

WATER POLICY BOOSTERISM AND WATER POLICY MOBILITIES

HHs can be conceptualized as a creation at the juncture of policy branding (Minkman and van Buuren 2019), policy mobility (McCann and Ward 2012; Peck and Theodore 2010) and policy boosterism (Affolderbach and Schulz 2017; Andersson and James 2018; McCann 2013). Widely held images of a place largely determine the attractiveness of its brand, consisted of the sum of beliefs and impressions about its products, services, people, investment opportunities and so forth (see Kotler and Gertner 2004; McCann 2013). As a strategic tool in this regard, place branding involves the development and marketing of a specific set of images and values about a locality, region or country to attract more visitors, residents and businesses in a competitive environment. An overarching goal is to secure a higher position in the global marketplace, attract investment and talent, and increase trade (Andersson and James, 2018, p. 3438; Hatuka et al. 2018). Globalization, as well as neo-liberalism, has led national and local public authorities and their partners in the private sector to increasingly consider public policy as a place branding strategy. In recent years, especially the policy of 'greening' has

been promoted as 'not only an environmental but also an economic and political necessity' (Affolderbach and Schulz 2017, p. 677), serving as a means both to adapt to environmental demands and to increase the competitiveness of a place. Cities have been increasingly branded as 'smart', 'eco', 'inclusive' and 'sustainable' (e.g., Boisen et al. 2018; Hatuka et al. 2018).

Relatedly, policy branding indicates a process through which a unique identity is founded for a concept, a strategy, a paradigm or a similar policy object; the brand becoming the created identity for this specific policy model (Minkman and van Buuren 2019, p. 115). Policy mobilities, on the other hand, refer to 'the sociospatially produced and power-laden inter-scalar process of circulating, mediating, (re)molding, and operationalizing policies, policy models, and policy knowledge' (McCann 2013, p. 6).

We put place branding into dialogue with policy branding and policy mobilities through the concept of policy boosterism. Since HHs represent the intersection of the local with transnational, wherein local places, policies, and experiences are framed and communicated globally (Martinez 2023; McCann 2013), they can be viewed as a particular case of policy (and place) boosterism. A widely used concept in human geography and urban planning, 'policy boosterism' is defined as 'a subset of traditional branding and marketing activities that involves the active promotion of locally developed and/or locally successful policies, programs, or practices across wider geographical fields as well as to broader communities of interested peers' (McCann 2013, p. 5). Policy boosterism is based on a neo-liberal logic where market-based explanations and solutions are internalized based on their efficiency (Peck and Tickell 2002, p. 394). It entails an 'extrospective, reflexive, and aggressive' approach through which cities, regions, or countries engage in various activities to actively promote themselves and, thereby, surpass their rivals in the competition to attract business, investment and human capital as well as build a reputation (ibid.).

Branding may also promote endogenous development, that is, incentivized policy processes to solve a particular problem, such as inclusion, diversity, or safety. For example, Amsterdam's branding as a circular city generates momentum for circular initiatives in the city and hence helps achieve the content of the brand – being less wasteful and more sustainable in supply chains and services (Heurkens and Dąbrowski 2020). However, the two do not always match as branding may pursue (often neo-liberal) objectives other than solving a given problem (Eshuis and Klijn 2012; Oliveira and Ashworth 2017). A particular mix of motivations needs to be researched in each individual case.

Strategies of place branding and policy boosterism have been increasingly integrated into water policies, constructing water infrastructures and water expertise as commodities to be marketed. Commodification of places, policies, or expertise is not an automatic process. Instead, it is enabled through intentional, political programmes that seek to construct and promote specific types of development models as both universally beneficial and without alternatives (McCann 2013, p. 8; Raev and Minkman 2020). HHs strategically design international development aid projects, engage with international organizations and their networks to advance certain models and practices as 'best practices', and use textual and audio-visual communication work to facilitate the commodification of expertise and technology that they possess (Andersson and James 2018, p. 3439; Büscher 2019).

In this context, HHs diverge from earlier attempts to package and spread a variety of 'best practices' in the water sector by (1) the active involvement of the state, (2) aggressive and multi-level branding activities with a focus on cultural production of places and policies, and (3) employment of development aid for promotion of trade. HHs compete and cooperate

with each other to brand themselves in similar terms to win over talent, tourists, investment and tenders. Overarching goals of HHs can be summed up as to (a) contribute to global sustainability/resilience efforts, (b) penetrate new markets and (c) increase their own prestige as dependable international development partners.

Activities of HHs are not without risks and contradictions. Active branding of policy models, specifically around large hydraulic infrastructure projects and water governance orthodoxies, such as integrated river basin management, reinforces the narratives of the 'hydraulic mission' and comprehensive rational planning – linear models of causality between policy interventions and policy outcomes (see Allan 2005). It also bolsters a 'neo-liberal mission' dominated by techno-managerial structures, market-based solutions and a 'there is no alternative' logic (see Wilson 2013). Another danger comes from potential contradictions between the triple goals outlined earlier; with overwhelming participation of the private sector in water projects around the world, the goals of economic profits may trump the goals of global water justice and sustainability. Thus, the key questions to ask are whether balancing multiple policy objectives is possible; how to negotiate possible trade-offs when such need to be made; how to reconcile a set of supply-driven solutions and soft-path and demand management approaches.

Indeed, HHs are not identical and display diverse characteristics that distinguish them from each other in both quantitative (e.g., gross domestic product, technological capability, water budgets) and qualitative (e.g., governance culture, soft power, water vision, fields of specialization) terms. We illustrate this through a typology based on several relevant criteria that apply to HHs.

SITUATING THE HHS ON THE GLOBAL STAGE: A TYPOLOGY

We created a typology that reflects 'the classification… of observations in terms of their attributes on two or more variables' (Babbie 2016, p. 179). Our typology is a 'conceptual' or 'descriptive' typology, which not only clarifies the essence of a concept by laying out its dimensions, but also describes the phenomena in focus (Collier et al. 2012, p. 218). We have created our categories as relational to allow space for overlaps, parallels and points of intersection (Schaffer 2015). Accordingly, an actor does not have to fulfil all the necessary criteria to be considered a GHH, RHH or non-HH; it is possible that an actor performs well in one area while performing less well in another. Based on the contrast theory of meaning that highlights the need for any term to have both a meaning and counter-meaning (see Scriven 1976), it is easier to argue for specific countries being a RHH or GHH as opposed to countries that are not. As illustrated in Table 25.1, we distinguish GHHs from RHHs and non-HHs based on four criteria or attributes: (1) the breadth of operations, (2) the depth of operations, (3) the complexity of operations and (4) the global profile.

The first criterion that distinguishes GHHs, RHHs and non-HHs is the breadth of their operations or the extent of their reach to geographical entities other than their own. This criterion concerns the geographical spread of their activities to encompass the water policies of other states. Therefore, a state is a GHH, RHH or non-HH depending on the range of states in which it has a presence and carries out operations in the water sector.

The Netherlands is a GHH for it actively seeks to export its water knowledge and expertise to clients located in locations that range from Latin America (e.g., Colombia) to Southeast Asia (e.g., Indonesia). Similarly, we consider France a GHH for it promotes regional cooper-

ation initiatives on shared waters in multiple locations, particularly in its former colonies, in Africa, the Middle East and Southeast Asia, as well as playing a leading role in the European water diplomacy initiative (French Ministry of Foreign Affairs and International Development 2015). Turkey, on the other hand, is a RHH because it offers its water know-how to other countries in the Balkans, the Caucasus and the Middle East where it maintains shared ethnic, religious and linguistic bonds. Likewise, the Russian Federation is a RHH because it mostly engages with post-Soviet republics such as Tajikistan and Kyrgyzstan, as well as provides technical and financial assistance on dams in the Middle East. Those states that lack the capacity or willingness to carry out water-related activities overseas and, thus, turn most of their resources and attention inwards to meet their domestic water demands can be considered non-HHs.

The second criterion that distinguishes GHHs, RHHs and non-HHs is the depth of their operations or the extent of their transformative power in places that they are actively involved with. Accordingly, a state can be located under the categories of GHHs, RHHs or non-HHs depending on the intensity of transformation they cause in the water governance-related institutions of places where they export water knowledge, expertise and policies.

The US is an epitome of a GHH because the river basin management models it has exported (e.g., the Tennessee Valley Authority), the water governance frameworks it has advocated (e.g., the public-private partnerships for water utilities) and the infrastructure development culture it has spread (e.g., the large dams for multi-purpose river development) have led to total and long-lasting transformations in the national water agendas of many states across the globe (e.g., Ekbladh 2002). From this viewpoint, Denmark is a RHH, not only because its largest export markets for water technologies and solutions are predominantly in Europe (Ministry of Foreign Affairs of Denmark 2021, p. 15), but also because these technologies and solutions, which are mostly related to wastewater, drinking water and digitalization (ibid., p. 22), have transformed a limited number of sectors in the political economy of clients rather than completely transforming their national water agendas. Those states that demand and receive water knowledge, expertise and policies can be considered non-HHs.

The third criterion that distinguishes GHHs, RHHs and non-HHs is the complexity of their operations or the degree of scientific and technological sophistication embedded in their water-related exports. Being a HH entails the possession of a high degree of scientific and technological prowess, a high amount of material capital and a high-quality human capital. Even when the states possess these capabilities and endowments, they may not always make strategic decisions aimed at investing in developing water-related technologies. Even if they do, they may develop different types of technology depending on their capabilities and needs. Therefore, the type of water-related exports, as well as their level of sophistication, plays a role in determining whether a state should be acknowledged among the global leaders in water science and technology or not.

Singapore is a GHH not just for hosting hundreds of local companies (e.g., HSL, Hyflux and Sembcorp) and foreign multinational water corporations (e.g., Evoqua, Veolia and Xylem), but also investing heavily in the research and development of state-of-the-art technologies and innovations, specifically in the fields of desalination and water treatment (Singapore Economic Development Board 2018). The Russian Federation, on the other hand, can again be considered a RHH not because it lacks technological capacity, but because it mainly exports mainstream water expertise, particularly in the field of large hydraulic infrastructure building.

Those states that lack the scientific and technological capacity to produce water knowledge and export water expertise can be considered non-HHs.

The fourth criterion that distinguishes GHHs RHHs and non-HHs is their global profile or the degree of their brand visibility and brand awareness as HHs. As discussed earlier, states instrumentalize water to reinforce their positions in the global water market. In order to achieve convincing messaging, they create their own unique HH identities, and disseminate them in international academic conferences, global water conventions, trade expos, and social and conventional media – in a complex network of governmental and non-governmental actors (Mukhtarov 2022; Varady et al. 2008).

Based on this criterion, Switzerland is considered a GHH as it not only retains a positive brand image and a strong reputation among those offering water solutions, but also fosters constructive dialogue among different actors to address water-related conflicts through research, policy and consultancy work (e.g., Geneva Water Hub 2018). South Korea, on the other hand, is a RHH because it is still in the phase of building up its brand recognition and reputation (see Martinez 2023). South Korea is also a site of many innovations that are transferred from GHHs, such as the Netherlands (Hyun Kang et al. 2022).

The following section will provide a more granular look at the characteristics of GHHs and RHHs based on the cases of the Netherlands and Turkey, respectively.

PUTTING THE TYPOLOGY AT WORK: THE CASES OF THE NETHERLANDS AND TURKEY

The Netherlands as a Global Hydrohub

The Netherlands has explicitly aspired to an international profile of excellence in water resources management. Since the early 2010s, numerous publications in major global media outlets repeated the messages of national technical excellence and openness for business (e.g., Kimmelman 2017; Ovink 2020; Shorto 2014). The government's strategy, the Netherlands International Water Ambition (Government of the Netherlands 2019), declared the aim of GHH-NL as to 'optimize contribution of the Netherlands to [water security] as well as … to profit from such efforts' (ibid., p. 3, authors' translation). As a result, the exports of water-related products, services, technology and governance advice have grown steadily since the early 2000s (Büscher 2019; Minkman and van Buuren 2019).

Branding is linked to creating and communicating identity and can often be visible through linkages to genesis narratives of a nation or a city (e.g., Boisen et al. 2018). Branding also requires integration of messaging to both external and internal audiences as identity needs to be consistent across these two publics. Furthermore, discourses must be validated by practices and outcomes that can be attributed to policies (e.g., Boisen et al. 2018; Eshuis and Klijn 2012). The Netherlands is a low-lying country in the delta of two major transboundary rivers, the Rhine and the Meuse. For centuries, the Dutch have been struggling with the sea in order to build and maintain dikes, reclaim land from the sea and lakes, and manage a network of sluices and canals (e.g., van der Ham 2018). The national narrative of the Netherlands is hardly separable from multiple stories of living and struggling with water (e.g., Knippenberg 1997).

Geographically, the Netherlands is active in various delta countries around the world, such as Colombia, Mozambique, Egypt, Bangladesh, Vietnam and Indonesia. Its water companies

Table 25.1 Global hydrohubs, regional hydrohubs and non-hydrohubs

		LEVEL OF INTENSITY		
		Low	Moderate	High
		⟷	⟷	⟷
ATTRIBUTES	Geographical spread (Breadth)	Lack the capacity to carry out water-related activities overseas For example, Iraq, Lebanon and Syria use their resources to meet domestic water demands	Offer water know-how mostly in neighbouring regions with historic ties For example, Turkey mostly pursues water-related goals in the Middle East, the Balkans and the South Caucasus – The 'Peace Pipeline Project'	Export water knowledge and expertise in multiple regions and continents For example, the Netherlands offer their expertise to clients all over the world, from Colombia to Indonesia – The Dutch Delta Approach
	Transformative power (Depth)	Lack the capacity to elicit change in another state's water policy For example, Vietnam, Indonesia and Bangladesh as the recipients of water knowledge, expertise and policies	Lead to ad hoc, sector-specific changes in national water agendas For example, Denmark transforms the way wastewater is treated, but not the way water is governed nationwide – Green and sustainable treatment solutions	Bring about radical and long-lasting changes in national water agendas For example, the United States change the way river basins are managed around the world – The Tennessee Valley Authority
	Scientific and technological sophistication (Complexity)	Lack the capacity to produce modern water technologies For example, sub-Saharan African countries use basic water infrastructures and inefficient water management techniques	Export mainstream, infrastructure-related water technologies For example, Russia provides technical and financial assistance on water engineering projects – Dam projects in Tajikistan and Kyrgyzstan	Export niche, state-of-the-art water technologies For example, Singapore strategically and heavily invests in R&D and manufacture of water innovations – Desalination, water treatment, NEWater
	Brand visibility and awareness (Profile)	No particular identity, modest reputation, low diplomatic engagement For example, Albania and Romania have no capacity or interest in self-branding activities globally	Emerging identity, limited reputation, rising actors in water diplomacy For example, South Korea builds a new image around water, branding Seoul's tap water as the cleanest and safest – 'Arisu'	Unique identity, strong reputation, active water diplomacy For example, Switzerland possesses a positive brand image, fostering dialogue to address water conflicts – The Geneva Water Hub
		Non-hydrohubs	Regional hydrohubs	Global hydrohubs
		⟷	⟷	⟷

also assist governments on a truly global scale, from Mozambique to Romania to Singapore. For example, the 'Blue Deal' initiative of the three Dutch ministries and regional water authorities aims at establishing projects and partnerships in a dozen countries across the globe (Dutch Water Authorities 2022b). At the same time, the nature of work that is promoted by the Dutch varies from capacity building in the 'Blue Deal' (Dutch Water Authorities 2018, 2022a) to a more transformational change of integrated spatial and economic planning in Bangladesh and Vietnam (Hasan et al. 2021; Minkman 2021).

The Netherlands is a GHH not only because of its activities, but also due to a well-constructed and globally popular brand. Perhaps the best-known brand of water management from the Netherlands is the Dutch Delta Approach, which has been constructed through an inter-ministerial process with resulting twelve blocks that characterize the Dutch approach to water management as formulated by the Dutch government in 2014 (Minkman and van Buuren 2019). The branding of the Dutch Delta Approach is based on claims that following an 'integrated approach' (block 1), 'anchoring in legislation and de-politization' (block 3) and targeting 'innovation' (block 11) the Netherlands attempts to distinguish itself from other successful agents in water management. This high-profile brand is therefore also based on the innovativeness and complexity of what is being exported.

The process of 'Dutching' delta management by assigning good water governance practices to a particular place where they have been practised, and subsequent 'un-Dutching' during adaptation in client countries is typical of this branding and has been studied extensively in the literature (e.g., Minkman and van Buuren 2019; van Buuren 2019; Zegwaard et al. 2019). The extant research on Dutch Delta Approach branding and implementation in Bangladesh, Vietnam, Indonesia and Mozambique indicate significant differences between branding messages and the reality of project management. Various authors, for example, indicate that branding depends on the 'soft skills' of managers, diplomats and communication experts and the intense and long-term work that they put into such projects (e.g., Hasan et al. 2019, 2020). The research also demonstrates that branding is fragile and dynamic, as it needs to be maintained and adjusted to on-going societal debates around it (Minkman and van Buuren 2019). Finally, Hasan and others (2021) claim that branding has created hierarchies in flows that prevent a meaningful dialogue in favour of the unidirectional flow of information.

Another branding initiative is Dutch water diplomacy. Mukhtarov and others (2021) conducted a discourse analysis of a commissioned policy report by a leading Netherlands think-tank that helped inform Dutch water diplomacy. The Netherlands has ambitions in the fields of global peace and justice, and this extends also to the field of water management; it is the leading funder of the Nile Basin Initiative and has been active in the Mekong River Commission and other river basins for decades (e.g., Ministry of Foreign Affairs of the Netherlands 2017). Branding in this area includes showcasing successful technical interventions for data sharing, early warning and benefit-sharing, as well as smaller-scale projects funded by embassies of the Netherlands in client countries for capacity building and dialogue. These initiatives contribute to the global brand of the Netherlands as a GHH, a superpower in water affairs, and allows for transformational participation in the economies of other countries, non-HHs. It also increases the clout of the Netherlands in influencing the global water governance agenda through gaining a seat at the table and often a leading role in major global initiatives. It is not coincidental that the Netherlands is a co-host of the United Nations 2023 Conference on Water – an agenda-setting event to determine the contours of activities related to achieving Sustainable Development Goal 6 in the coming decade (United Nations 2023).

Given the modest capacity of another co-host, Tajikistan, to wield soft power on the global stage, the Netherlands is likely to remain a leader of this important agenda-setting event (see Gasson 2023; Richter 2023).

An important caveat needs to be made, however. While there may appear to be one coherent image of a Dutch Water Sector and its policies, both in branding and implementation, under closer investigation it appears that multiple actors compete and collaborate for the right to frame debates, define interventions and claim credit. The unity of a HH is illusory and very much manufactured through branding. Closer investigation is needed when studying HHs such as the Netherlands to interrogate divisions and conflicts in order to understand the process and effects of their work (Büscher 2019; Mukhtarov et al. 2022).

Turkey as a Regional Hydrohub

Even though Turkey is largely known to be an importer of water knowledge, expertise and policies, it has also sought to use water as a foreign policy tool, export its water know-how and craft a unique identity around water. When these policies are evaluated against our typology, as well as the case of the Netherlands, however, Turkey displays the characteristics of a RHH rather than a GHH.

In contrast to a GHH, the geographical spread of Turkey's overseas water-related activities – most of them have been running by the State Hydraulic Works (Devlet Su İşleri, DSİ) – is mostly limited to its neighbouring regions. In the Middle East, for example, Turkey proposed, but failed to realise, 'the Peace Pipeline Project' as early as 1986 to transport up to 10 million m^3 of water per day to Syria, Jordan, Saudi Arabia and the Gulf states (Conker and Hussein 2019, p. 10). In the Balkans, Turkey has provided assistance to North Macedonia to build its own dams and irrigation and drinking water systems since 2013 (DSİ 2022a, pp. 35–37). In the Caucasus, Turkey and Azerbaijan have been in close cooperation, as recently concretized in the jointly prepared Karabakh Action Plan to revitalize agriculture in the region (ibid.). Since the 2000s, Turkey has also provided many African states with water and sanitation-related technical and financial assistance. In partnership with the Turkish Cooperation and Coordination Agency (Türk İşbirliği ve Koordinasyon Ajansı, TİKA), DSİ has carried out water well digging projects in Burkina Faso, Djibouti, Ethiopia, Mali, Mauritania, Niger, Somalia and Sudan, providing drinking and domestic water to approximately 2 million people since 2005 (ibid., p. 105).

Compared to a GHH, the transformative power of Turkey's initiatives has been limited. Since 2016, Turkey has called for the creation of a funding mechanism to address water problems in the least developed countries of the Organisation of Islamic Cooperation. This initiative, as well as the parallel initiative to create a separate International Water Fund, has not borne fruit yet (Türkiye Su Enstitüsü [SUEN] 2021, pp. 11–12). In 2020, TİKA built water tanks in Mongolia, installed water treatment plants in Pakistan and carried out the Water First Programme for displaced flood victims in Kenya (TİKA 2021, pp. 84–85). These projects, however, were carried out on an ad hoc basis and, therefore, had limited, sector-based impacts on how water was governed at a national scale.

As for the type of water-related exports, unlike a GHH, Turkey primarily exports its knowledge and expertise in infrastructure building rather than a specific water policy or a signature water innovation. In 2009, for instance, Turkey and Syria began the construction of a joint 'Friendship Dam' on the Orontes River, but the Syrian Civil War made it impossible to con-

tinue with this project. DSİ built another 'friendship' dam on the Ambouli River in Djibouti in 2017 (DSİ 2022b, pp. 104–107). Completed in 2015, the Turkish Republic of Northern Cyprus Water Supply Project was another important infrastructure-related export, transporting up to 75 million m^3 of water per year from Turkey to the Turkish Republic of Northern Cyprus (ibid., pp. 171–179). In addition, DSİ has built 143 boreholes across northern Syria, providing clean water for about 1.5 million people since 2017 (ibid., pp. 105–107).

Turkey has also become increasingly interested in exporting policy-related knowledge and expertise. In 2011, the Turkish Water Institute (SUEN) was founded as a think-tank operating under the Ministry of Agriculture and Forestry, primarily to 'develop national water policies, provide consultation to decision makers, and enhance scientific research and strategic ideas with a focus on creating a common platform for water management' (SUEN 2021, p. 6). SUEN has run capacity building programmes, under which it has trained more than 1,200 experts from 30 countries (ibid., p. 6) on topics such as 'planning in the water sector, basin management, design and operation of drinking water and wastewater treatment plants, management of underground waters, management of drinking water and wastewater networks' (TİKA 2021, p. 87). SUEN has also participated in the Blue Peace in the Middle East Initiative; the platform created in 2011 to transform water management as a means of supporting cooperation and peace between Iraq, Iran, Jordan, Lebanon, (partly) Syria and Turkey (ibid., p. 170).

Since the late 2000s, Turkey has worked towards branding itself, especially İstanbul, as an important hub that hosts global water events and, thereby, brings together academics, decision makers, diplomats, journalists, national and international water experts, and the private sector. The 1st İstanbul Water Forum was held in February 2009. When the 5th World Water Forum was held in İstanbul in March 2009, its theme was 'Bridging Divides for Water' to highlight how water, just as İstanbul, would bridge different cultural, economic and geographical entities (5th World Water Forum Secretariat 2010). All the final conference documents were given the label 'İstanbul', as in İstanbul Water Consensus, to distinguish them from previous agreements (ibid., p. 5). The forum was considered the proof of 'Turkey's pivotal role amongst the greatest nations of water' and the emergence of an 'İstanbul perspective' on water (ibid., p. 5). The scope of the following İstanbul International Water fora, convened triennially, was broadened to include the water issues in Central Asia, Eastern Europe and the Middle East and, thus, embraced both a regional and an international identity (2nd İstanbul International Water Forum Secretariat 2011, pp. iv–ix). In 2014, the President of SUEN expressed his motivation to turn these fora into a platform to find solutions to global water issues, a platform similar to 'the Stockholm World Water Week in the West or the Singapore International Water Week in the East' (SUEN 2014, p. 14). 'Water Expos' under the fora also provided a venue for international organizations, governmental institutions, civil society and the private sector to chase new business opportunities, meet new clients and build new networks (ibid., p. 63). Given its ambivalent performance, Turkey may remain a RHH or become a GHH depending on how it designs and puts into practice its water vision in the future.

DISCUSSION

The emergence of HHs as a novel form of policy mobility did not occur in a vacuum. Environmental scarcities, geophysical constraints and geostrategic imperatives have played significant roles in pushing HHs to excel in water resources development and governance and

to brand themselves internationally to attract capital and talent. The global spread of neo-liberal policies and the subsequent commodification of water have further encouraged these actors to engage in branding and promotion activities to grab a larger share in a highly competitive and dynamic market (Mukhtarov 2022). In the context of the transition from centralized to decentralized water management (Varady et al. 2022), they have incorporated elements of both state-led and private sector-led water policies in a hybridized manner, combining the important features of both the developmental state paradigm and neo-liberal governance in the same pot.

Considering the uneven distribution of resources across and within societies and space, only certain actors and places that possess material, cultural and symbolic resources can become globally known brands today (McCann 2013, p. 21). The majority of HHs, especially GHHs, are in the Global North, selling their expertise to clients based in the Global South. This structural divide is indeed problematic. For example, an indispensable element in the branding of HHs is the message that a place is excellent in water management but also implies that other places are not as good – a process that has been called 'discursive othering' (e.g., Hansen 2013). This creation of rigid hierarchies of places as such also conveys the message that only, or primarily, HHs are equipped with the expertise and knowledge to address the urgent and chronic water-related problems in non-HH contexts. Through such discourses, a rigid hierarchy of power that places HHs at the top and client countries at the bottom of therein is established.

This hierarchy manifests itself particularly in the direction of knowledge, expertise and information flows from HHs to non-HHs, as well as from GHHs to RHHs, in a unidirectional manner (e.g., Hasan et al. 2021). The funding and business opportunities flow in the opposite way. Despite increasing North–South and South–South development partnerships, the assumption is still that the 'periphery' has little or nothing to offer to the 'centre' or is unable to experiment and innovate in own context with guidance from international community (see Bilgen et al. 2021). Through their self-representation and self-branding activities that highlight how they are the best of their kinds, HHs, as well as the discourses around HHs, reinforce the hierarchies embedded in global water policy mobility and prevent rooting of a system that respects the plurality of governance models, voices and imaginaries about managing water. In many cases, such activity promotes the well-known 'unhelpful help' that is too directional, instead of 'helpful help' that facilitated experimentation, learning and adaptation by countries that receive help (Ellerman 2009).

HHs master techno-scientific imaginaries of expertise on water – of 'imagineering' such hierarchies through branding (Büscher 2019, pp. 816–817). This process is enabled through an adherence to technicism and, consequently, reliance on expert knowledge. This is indeed not without risks. The use of expert knowledge in a socio-environmental context entails the application of the principles of rationality, positivism and social engineering. Therefore, policies that are predominantly based on expert knowledge are often strong in technical terms, but weak in socio-political terms, as expert knowledge trumps other types of knowledge people use to navigate through the dynamism of natural and human environments, such as common or practical knowledge (see Scott 1998).

Technicism, then, may lead HHs to carry out branding activities that exclusively reflect the prospects of being and becoming a HH while concealing the costs and consequences of the same process. Branding activities that capitalize on desalination technologies provide a good example. Through the use of attractive tropes such as 'blue economy', the discourse on desalination highlights the role of innovation in increasing the supply of water in water-scarce

regions but neglects the role of the same technologies in increasing the carbon footprint with their energy-intensive character (Shrestha et al. 2011). Similarly, the discourse frames open seas as an unlimited source, but avoids the issue of how the by-product of the desalination process poses serious threats to sea life and marine ecosystems (McGrath 2019). In other words, technicism and depoliticization go hand in hand (see Ferguson 1994), by which HHs help to create hegemonies, that is, knowledge systems that are taken for granted and cannot be easily contested as they claim to represent the truth (Jessop 2004).

Relatedly, the branding activities of HHs, as well as their efforts to export water expertise, are built on the assumption that replicating the policies, approaches and structures of HHs would yield similar results elsewhere. As widely discussed in the literature (e.g., Ingram 2012), this technicist and universalist approach does not work; the borrowing and adaptation of international water ideas, discourses and policies yield different results at different levels, in most cases very different from envisaged. Human-water relations have a dynamic nature. Broad historical processes, structural factors and specific geophysical, political, economic and social context(s) play a crucial role in creating and shaping: (a) different imaginaries about water, (b) governmental and non-governmental institutions about water, (c) technologies and knowledge about water and (d) a suitable environment for a successful policy transfer and implementation, which is unique to every state, region and society. Therefore, the 'one-size-fits-all' tone that accompanies the 'extrospective, reflexive and aggressive' (Peck and Tickell 2002, p. 394) style that some HHs adopt may need to be thinned down for the sake of engaging in more robust bi- and multi-lateral relations with clients and securing long-term rather than short-term results (e.g., Ingram 2012; Mukhtarov et al. 2022).

The age of HHs qualitatively differs from the previous epochs of water governance and water policy mobility. HHs offer an alternative 'third way' policy mobility that accommodates the shortcomings of both developmentalist and neo-liberal modes of water governance, facilitating the transition from aid to trade, from dependency to self-sufficiency, and from government to governance. What is needed is a critical perspective on these actors, and a constant dialogue between the government, social, knowledge and private sector actors to monitor the internal contradictions that HHs possess.

CONCLUSION

In this chapter, we discussed the rise of an empirical and a conceptual phenomenon of HHs. Conceptually, the rise of HHs represents a shift from the state-centric and donor-dominated arena of collating and distributing water governance orthodoxies to more hybrid forms of state-sponsored, private sector-led forms of alliances that compete in a decentralized and multi-lateral water governance regime. Such a shift fits the phenomenon of place and policy boosterism – a combination of branding and policy mobility. Thus, we sketched the empirical phenomenon, presented a typology to think of it in conceptual terms, and interpreted the implications of HHs for conceptual debates on policy mobility and water governance at large.

HHs are among the key actors of the new period mentioned earlier. They have played the active role of agency in global water politics, shaping the set of political, economic and diplomatic relations constructed around water policies. Against the backdrop of increasing environmental and demographic pressures and, relatedly, soaring demand for water-related expertise, it is likely that a larger group of clienteles, particularly from the Global South, will

seek the knowledge, expertise and experience of HHs to apply in their own water development and governance trajectory.

We expect to see a growing academic and policy interest in HHs. Future works can focus on questions such as whether or how HHs benefit their clients, what kind of power relations shape the agent-client dynamics, and to what extent HHs provide solutions to the present and future water challenges and crises. The discursive constructions in branding HHs and policy implications of such narratives and rhetoric can also attract the attention of critical water scholars. Our contribution can be considered an initial step to highlight the importance of HHs in the current global water governance scene and to initiate further debates on the meanings, types, functions and implications of these unique and important entities in contemporary water politics.

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