Water-Worlds: How to Research Under the Umbrella of Sustainable Development Being Aware of Its Multiple Ambiguities?

Javier Taks

Abstract The United Nations definition of Agenda 2030 re-launched sustainable development as a planetary horizon for eradicating world poverty while at the same time preserving Earth life-support processes. Since the 90s many scholars, activists and politicians have critically assessed sustainable development and considered it an oxymoron in the context of current global capital accumulation. This paper takes the matter seriously and explores the limits and possibilities of researching water management towards Sustainable Development Goal 6: "Ensure availability and sustainable management of water and sanitation for all". The analysis will touch upon three main fields of enquiry, namely the creation of a world water crisis regime, the encounter of diverse water ontologies while dealing with water management, and the raising of the human right to water and sanitation as a counter-point to the privatization of water resources. Sustainable development requires a stronger inclusion of human rights principles to become a more inspiring narrative for theoretical analysis and transformative interventions. It is argued that embedding sustainable development together with the political and cultural struggles of the human rights idiom, as exemplified in the case of the human right to water and sanitation, could provide a better framework to make sustainable development a useful tensional concept to reflect upon for building more equalitarian societies, and thus to care for life and the environment, within and outside universities.

Keywords Human rights • Sustainability • Culture • Water • Global regime

J. Taks (⊠)

1 Re-Launching Global Sustainable Development

In 2015, countries adopted the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs). Paragraph 7 of the UN Declaration reads as follows:

In these Goals and targets, we are setting out a supremely ambitious and transformational vision. We envisage a world free of poverty, hunger, disease and want, where all life can thrive. We envisage a world free of fear and violence. A world with universal literacy. A world with equitable and universal access to quality education at all levels, to health care and social protection, where physical, mental and social well-being are assured. A world where we reaffirm our commitments regarding the human right to safe drinking water and sanitation and where there is improved hygiene; and where food is sufficient, safe, affordable and nutritious. A world where human habitats are safe, resilient and sustainable and where there is universal access to affordable, reliable and sustainable energy. (United Nations Organization 2015; the italics are mine)

Many believe that this declaration is just a list of good intentions, with the pasteurized idiom of sustainable development as coined and used in mainstream developmental discourse since the Bruntland Report in 1987 (Pierri 2005). Back in the early 90s, Sachs (1993) stated that the Bruntland Report of 1987 "incorporated concern for the environment into the concept of development by erecting 'sustainable development' as the conceptual roof for both violating and healing the environment". He pointed out that sustainable development was another example of a conceptual stretching strategy from those who promote unlimited economic growth as the only viable path to wellbeing: when the destructive effects of economic development were recognized, "the concept was stretched in such a way as to include both injury and therapy" as in the case of growth and poverty, or growth and gender equity, and so on. In sustainable development the aim is, he added, to continue boosting the GNP but at the same monitor and manage water, soils, air and energy utilization to warrant their availability to increase production and consumption and "contain the environmental disaster for the generations to come". This line of thought believes that sustainable development, and sustainable economic growth as one of its main dimensions, is actually an oxymoron (Guimaraes 2003).

More recently, anthropologist Jason Hickel from the London School of Economics, critically assessed Agenda 2030 in similar manner, indicating that it does not recognize the need for the substitution of the current global economic model, with its trend to unlimited growth and deep concentration of wealth, as part of the causes behind unsustainability, and thus the main constraint for achieving the SDGs (Hickel 2015). Moreover, in Latin America and elsewhere there are increasing numbers of scholars and activists who contest the Sustainable Development paradigm with other conceptualizations centred on *Buenvivir* (the Good Life), Degrowth Theory or Ecosocialism.

Nevertheless, the current UN special rapporteur on the human rights to safe drinking water and sanitation, hydrologist Leo Heller (Brown et al. 2016), and many other international water activists (see Joint Statement 2015) celebrated,

though with caution, the inclusion of the human right to water and the right to sanitation (HRtWS) as integral parts of the SDGs, as expressed in SDG 6 "Ensure availability and sustainable management of water and sanitation for all". Despite the many ambiguities they acknowledged, they also showed hopeful advances in Agenda 2030 as compared with the Millennium Development Goals (see also Unceta 2015).

In this article, I wish to explore the limits and potentialities of the relation between sustainable development and the HRtWS for a real betterment of life for all human and non-human becomings (Ingold 2012). In order to do it, I highlight three aspects of water management and governance that became an arena for epistemological and conceptual debate: namely, the water crisis, the different place allocated to water in diverse ontologies, and the increasing consideration of water as a fundamental human right. I suggest that these debates might shed light on the manner how we may still understand and use the concept of sustainable development, not only in our environmental research and teaching projects at University, but also in our more general awareness of modern science as both cause and solution of (un)sustainability. In other words, I want to demonstrate theoretically using the example of water—that sustainable development requires a stronger inclusion of human rights principles to become a more inspiring narrative. Yet, both, the definitions of sustainability and humanity need to be open-ended to be inclusive of all cases of current human-nature configurations preventing the risk of a one sided imposed hegemony.

My methodological approach is based on a critical review of recent UN documents on the SDGs and the HRtWS in the light of public debates mostly, although not exclusively, in Latin America among scholars and water justice activists concerning the management and governance of water mainly for human consumption. In other words, how the perspectives of sustainability and human rights might establish a dialogue regarding better educational and research practices aiming at a transformational vision and action in our common planetary home. It must be said, that this article does not contrast sustainable development against other already mentioned alternative currents in the region. Furthermore, to take into account only the Latin American debate might occlude other realities.

2 World Water Crisis Regime

The Agenda 2030 for SD is clear about the manifestation of a water crisis of planetary scale: "fresh water scarcity [exacerbated by climate change] is part of the most relevant challenges which humanity faces" (United Nations Organization 2015). In the new agenda, governments are therefore "determined to conserve and sustainably use freshwater resources" and "tackle water scarcity and water pollution" (United Nations Organization 2015). It is thus not just by chance that one of the targets to meet SDG 6 is "[b]y 2030, substantially increase water use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to

address water scarcity and substantially reduce the number of people suffering from water scarcity" (United Nations Organization 2015).

Freshwater sources are unevenly distributed in Earth, and for millennia humans have tried to counter this fact through social organization, technological ingenuity, resource investments and the use of power. Nevertheless, the idea of scarcity of water in a modern sense, according to Vandana Shiva, gradually developed together with a two-stage process of commoditization of natural resources. The first during colonial capitalism, when, faced with an abundance of resources, colonizers exploited natural resources in a predatory manner, appropriating as much as they could. This resulted in a physical limitation for production and consumption that led to the second stage: natural resource management to respond to the scarcity of fodder, water, minerals, and so on. In Shiva's words: "It was this violation of nature's limits that then brought forth the most recent phase in the ever-changing development recipe—the notions of 'sustainable development' and 'sustainable growth'. New limits are now to be imposed on nature's processes in order to sustain development and growth. The crisis of scarcity is now being formulated in the language of sustainability" (Shiya 1993). In the same year that sustainable development became hegemonic in the Rio Summit, the Dublin Statement on Water and Sustainable Development declared that "Fresh water is a finite and vulnerable resource" (Principle 1) and that "Water has an economic value in all its competing uses and should be recognized as an economic good" (Principle 4) (The Dublin Statement 1992). Following Polanyi (2001), there we can recognize a significant step in the establishment of water as a "fictitious commodity", a resource to fragment, manage and economically speculate with. Water scarcity might therefore be resolved with more technology, market mechanisms and better governance.

Against the idea of a global water scarcity crisis, researchers and activists involved in the Water Justice social movement have declared "that the principal form of the water crisis is not a shortage of water, nor failures of government, but the many injustices in access to, the allocation of, and the quality of water. The global water crisis is not likely to be resolved by the provision of more water. Redressing injustice is a more promising approach. That requires a critical rethinking and transformation in how water, water rights and authority are distributed" (Santa Cruz Declaration 2014).

These ideas according to which (in)equality and allocation of water rights are the basis of the current water crisis should be more seriously approach by research on sustainable development, and this means politicizing the debate on sustainability.

¹The other principles are, on the one hand, the need for a participatory approach to water management and, on the other, the need to recognize the central role of women in the provision, management and safeguarding of water.

3 The Encounter of Diverse Water Ontologies When Dealing with Water Management

The Agenda 2030 for SD envisages "a world of universal respect for human rights and human dignity, the rule of law, justice, equality and non-discrimination; of respect for race, ethnicity and cultural diversity; and of equal opportunity permitting the full realization of human potential and contributing to shared prosperity" (United Nations Organization 2015). Moreover, signatories acknowledged "the natural and cultural diversity of the world and recognize that all cultures and civilizations can contribute to, and are crucial enablers of, sustainable development" (United Nations Organizations 2015). Though the Agenda 2030 affirms the more traditional three dimensions of sustainable development, namely the economic, the social and the environmental, cultural diversity certainly appears in the literature as a fourth dimension of sustainable development (Guimaraes 2003; The Hangzhou Declaration 2013). Cultural diversity is a challenge for a paradigm with clear normative observations.

Anthropologists have shown that there are numerous collective attitudes to and representations of "nature" and "humanity". It is therefore problematic to define "people", "planet" and their relations in singular forms. On the other hand, how to walk together towards global sustainable development if different human groups might comprise diverse natures and multiverses (as opposed to a singular universe)? (Escobar 2016).

The water question cannot be excluded from this dilemma. There are different ontologies that place water in many diverse domains, sometimes contradictory. For many people, water is a live entity not just a natural physical and chemical resource that sustains human life and more. Even in modern contexts, a river can be considered as a relative, and is thus included as an extension of the social rather than the natural realm. Moreover, the idea of water as separated entity already denotes an ontologically fragmented realm of natural resources against a more holistic or integrated vision of life and the environment. Many water conflicts arose due to differing manners of appreciating water, particularly in its sacred or non-sacred substantiation (Hassan 2004), and the possibility of conceiving water as separate from the land, as expressed in the more neoliberal legal frameworks (Ávila-García 2016).

Research on sustainable development needs to consider the diverse ontologies based on human-nature co-evolution and promote space for negotiation between them, parting from the principle of general recognition and respect, but also facing the challenge of conflict transformation, which in turn acknowledges cultural and ethnic politics. The human right to water has, for example, been contested by Aymara and other South American indigenous scholars and activists, who see it as an anthropocentrically imposed perspective, whilst they consider water as a need, and sometimes a right, for all creatures and landscapes, according to a trans-human epistemology (Diego Quispe 2016, personal communication). While it is important to collect, register and compare different water ontologies, it could be argued that it

is equally important to reflect upon how to transcend the idea of non-commensurable world-views without imposing any particular local vision of what water is and how we should deal with its many challenges. The following debate about the need to overcome the Western liberal definition of human rights might shed light on how to find cosmopolitan answers to our current water dilemmas in the face of the various and diverse existing water-worlds.

4 The Raising of the Human Right to Water and Sanitation

In 2010 the General Assembly of the United Nations Organization 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" (UN General Assembly 2010). The adoption of this resolution was the output of a long process that lasted at least three decades when governments, social organizations and social movements, legal experts and scholars found the theoretical and legal bases to advance towards a more socially and environmentally just water management model, where each human person might realize his/her right to access clean and safe water and to live with water to be able to realize his/her other rights as individuals and communities, in agreement with the human rights paradigm.

The HRtWS is a bridge between the second generation of economic, social and cultural rights (*égalité*) aimed to satisfy the so called basic needs, and the third generation of solidarity or group rights (*fraternité*), more concerned with the right to peace, the right to a clean and healthy environment, and the right to humanitarian disaster relief (Weston 2014).

As in all other human rights' definitions, the HRtWS includes the guiding principles of non-discrimination and equality; free, active and relevant participation in social life; transparency (i.e. access to information), and the required progressive advancement in its realization. But the HRtWS also promotes normative contents, namely: (i) the universal right to water for personal and domestic uses; and (ii) the fact that water must be physically accessible, safe, culturally acceptable and affordable in all domains of a person's daily life (home, work and study spaces, public spaces and elsewhere).

According to Conka (2005) the HRtWS is the outcome of a global partnership between norm entrepreneurs and social movements. Undoubtedly, the HRtWS is part of a symbolic framework promoted by anti-commoditization forces and anti-privatization of water and sanitation utility networks since the 90s to date. In this regard, I suggest that while the HRtWS functions as a critique of neoliberal principles and policies, the SDGs generally remain neutral, when not in favour of private sector empowerment. This tension seems to be more present in SDC6 than in any other Goal.

Many Latin American governments, mainly Bolivia, Ecuador and Uruguay, were quite influential in relation to the General Assembly resolution regarding the HRtWS. Water conflicts and the transition to formal democracy at the beginning of the twenty-first century showed an articulation between the experience of civil society's defence of human rights during and after the military regimes, and environmental justice theories and insights regarding the importance of water to meet basic needs and for the continuation of human life. The above mentioned countries pioneered the inclusion of the HRtWS in their Constitutional Laws.

The region nevertheless shows hugely unequal progress towards the realization of the HRtWS. A recent study highlights that only half of the Latin American countries count with a legal framework recognizing these fundamental rights, and the right to sanitation is the most neglected. Furthermore, in most countries, the HRtWS dimensions, have actually been reduced solely to physical access to potable water, leaving aside the other intrinsic components (affordability, cultural acceptance, social participation, non-discrimination, and so on) (Portuguez and Dubois 2015).

Despite an increasingly consensual narrative of the obligations and benefits to states and citizens when pursuing the HRtWS, the Latin American experience introduces a relevant debate over the possibility of the HRtWS to contribute to address sustainable development. On the one hand, the HRtWS has been seen by many critical authors as part of a process that disembeds water from its immediate geographical, social and cultural relationships, as shown for instance in the current privatizing water law in Chile (Ávila-García 2016), in line with the current trend to create "modern water" (Linton 2010), an abstract entity known as H₂O, or a natural resource to be managed, as the only ways of conceiving this world wide fluid; this in turn brings up the discussion about the Western expansionist claim for a human rights paradigm and the relativist-universalist debate.

A possible derivation of this disembedding trend is the previously mentioned focus on the warrant for accessing potable water as equivalent to the whole human right to water which has allowed water corporations, mainly transnational, to present themselves as HRtWS promoters while stressing that states and local communities, mainly in poorer countries, are unable to comply with the need to expand utilities to meet the goal of water for all. Experts and activists contest this view, stating that the HRtWS is part of the definition of water as a common good, and that its defence is part and parcel of the protection of all other common goods (such as knowledge, land and labour, among others) from private property and profit-seeking organizations. The latter, they argue, would not guarantee a comprehensive vision of the HRtWS involving access to relevant information, accountability, participation, and so on (Portuguez and Dubois 2015). The question regarding the role of different agents (state, community, private corporations) in the realization of the HRtWS is part of the work towards the achievement of SDG 6. On the other hand, several states in Latin America have limited and even forbidden non-state water management systems such as customary indigenous systems (Dwinell and Olivera 2014) in the name of the HRtWS. According to state representatives, these non-statutory systems cannot meet quantity and quality standards

as stated by international organizations, for instance the World Health Organization; they therefore believe that a more centralized state intervention is needed, leaving aside the search for alternatives based on local knowledge, cultural heritage and the peoples' expertise developed when the state was oblivious of those territories. Once again, this contested arena will also arise with the advances in the implementation of SDG 6.

5 Binding Sustainability and Human Rights in Our University Practices

How can we at University help to continue with the necessary task of changing paradigms and meanings for SD while including the human rights perspective?

First, by avoiding the defence of cultural relativism in its extreme expression. In the case of the HRtWS we must recognize the values of cultural diversity, but at the same time take into account a universal intercultural definition of who is entitled to claim these rights: every human becoming, men and women, communities, future generations. We don't need an essentialist definition of humans, and must create an increasingly inclusive open-ended definition of human becomings, with their huge variations. Human rights should be defined through an exercise of what Santos calls diatopic hermeneutics towards an intercultural reconstruction of human rights (Santos 2010).

Second, by recognizing the contradictory nature of human engagement with other living and non-living entities, meaning that "sustainability" requires massive efforts to continue, and these may never end. Yet, this ambiguity, this consciousness that SD would not be achieved for once and for all, cannot veil the fact that some social groups work towards unsustainability while others do not accept that we will live forever in a degraded, unhealthy, ruined Nature.

Finally, we must consider the HRtWS as a means to impact on the SDGs with less expertocracy. The process of emergence of the human right to water in Latin America and elsewhere was democratic, from bottom up, linking indigenous people, urban inhabitants, workers unions, politicians and researchers. In this dialogue of knowledges, we should not view science as evil. We need to analyse scientific knowledge as situated as any other form of knowledge. As anthropologist Tim Ingold puts it:

Far from abandoning science (...) or opposing the knowledge of inhabitants to scientific knowledge, we need to find ways in which they can work together. This calls for both a revaluation of the environmental experience and creative interventions of lay practitioners and an acknowledgment that science and technology, too, are grounded in practices of habitation. (Ingold 2013)

In our University activity we should keep our feet on the ground without refusing the enjoyment of enskilled abstraction and universal thinking to contribute to sustainable futures.

6 Conclusion

Sustainable development has been re-launched into the international arena. It could have served to contest the more economicist Green Economy vision that disputed narrative centrality to deal with the environmental and social challenges of our time. Carbon bonus, the commoditization of water and financing nature, seem opposed to the necessary political and cultural motivation to create alternative models of production and consumption, a post Anthropocene era. By now it seems that there is no other "big enough story" (Haraway 2015) than Sustainable Development to lead diverse actors like "scientists, entrepreneurs, politicians, labourers for humanity... governments, institutions, the private sector, workers and societies" (United Nations Organization 2015) to work together towards a different earth for people "to live and die well" (Haraway 2015).

The SDGs must be understood as a moral imperative rather than, or at least not only, a rational guideline. In this way, the oxymoron can become productive in a transitional stage. People all over the world cannot stop production and consumption-as-usual from one day to another, but need to realize that they must work in this direction, while inventing new production and consumption relationships to generate different motivations to act in society and in the environment. I would suggest that this is the main reason why many of us, who have been teaching long years a critical approach to the hegemonic definition of sustainable development, are still hopeful that it is worth giving battle for the appropriation of meaning. A new lexicon should be used to talk about sustainability: sufficiency, responsibility, and care, instead of infinite growth, natural capital and competitiveness.

In this sense, the idiom of human rights, as exemplified in this chapter with the case of the HRtWS, provides "a normative basis and constitutes a source of authority and legitimacy for realizing universal and fair access to [water]" (The Pontificial Academy of Sciences 2017); a binding legal obligation for all, ranging from the state to private transnational corporations, in order to prevent water supply—and other socio environmental services—from falling under the influence of powerful and pro-profit minority groups.

Further theoretical and empirical research would be needed to see how the HRtWS are realized within SDG6. Moreover, an intercultural human rights perspective should be use to measure the advance of all other SDGs.

References

Ávila-García P (2016) Hacia una ecología política del agua en Latinoamérica. Revista de Estudios Sociales (Colombia) 55(18–31):2017. doi:10.7440/res55.2016.01 Accessed 27 March Brown C, Neves-Silva P, Heller L (2016) The human right to water and sanitation: a new perspective for public policies. Ciência & Saúde Coletiva 21(3):661–670

Conka K (2005) Governing water contentious transnational politics and global institution building. MIT Press, Cambridge

- Dwinell A, Olivera M (2014) ¡El agua es nuestra, carajo! Agua bien común en Bolivia. In Santos C et al (ed.) Las canillas abiertas de América Latina III. El agua como bien común y derecho humano. Luchas y desafíos a 10 años del Plebiscito del Agua en Uruguay. Casa Bertolt Brecht, Montevideo, pp 49–56
- Escobar A (2016) Desde abajo, por la izquierda y con la Tierra. http://blogs.elpais.com/contrapuntos/2016/01/desde-abajo-por-la-izquierda-y-con-la-tierra.html. Accessed 27 Mar 2017
- General Assembly of the United Nations Organization (2010) The human right to water and sanitation. Resolution 64/292. http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/64/292. Accessed 27 Mar 2017
- Guimaraes R (2003) Tierra de sombras: desafíos de la sustentabilidad y del desarrollo territorial y local ante la globalización corporativa. CEPAL, Santiago de Chile, Serie Medio Ambiente y Desarrollo Nº 67
- Haraway D (2015) Staying with the trouble: anthropocene, capitalocene, chthulucene. In: Moore JW (ed) Anthropocene or capitalocene? Nature, history, and the crisis of capitalism. PM Press, Oakland, pp 34–76
- Hassan FA (2004) Water and ethics: a historical perspective. UNESCO, Paris
- Hickel J (2015) Five reasons to think twice about the UN's sustainable development goals. http://blogs. lse.ac.uk/southasia/2015/09/23/five-reasons-to-think-twice-about-the-uns-sustainable-development-goals. Accessed 19 Feb 2017
- Ingold T (2012) Ambientes para la vida. Trilce, Montevideo
- Ingold T (2013) Designing environments for life. In: Hastrup K (ed) Anthropology and nature. Routledge, London
- Joint Statement (2015) Joint statement from amnesty international, human rights watch, and wash united on UN general assembly resolution 70/169 on the human rights to water and to sanitation. https://www.hrw.org/news/2015/12/17/joint-statement-amnesty-international-human-rights-watch-and-wash-united-un-general. Accessed 11 Mar 2016
- Linton J (2010) What is water? The history of a modern abstraction. UBC Press, Vancouver
- Pierri N (2005) Historia del concepto de desarrollo sustentable. In: Pierri N, Foladori G (eds) ¿Sustentabilidad? Desacuerdos sobre el desarrollo sustentable. Universidad de Zacatecas/ Porrúa, México, pp 60–81
- Polanyi K (2001) The great transformation. Beacon Press, Boston
- Portuguez JM, Dubois V (2015) Implementación del derecho humano al agua en América Latina. Buenos Aires: CAF. https://www.caf.com/media/2630071/implementacion-derecho-humano-agua-america-sur-caf.pdf. Accessed 22 Mar 2016
- Sachs W (1993) Environment. In: Sachs W (ed) The development dictionary: a guide to knowledge as power. Zed Books, London, pp 26–37
- Santa Cruz Declaration on the Global Water Crisis (2014) Water Int 39 (2):246-261
- Santos B (2010) Para descolonizar Occidente. Más allá del pensamiento abismal. CLACSO/ Prometeo, Buenos Aires
- Shiva V (1993) Resources. In: Sachs W (ed) The development dictionary: a guide to knowledge as power. Zed Books, London, pp 206–218
- The Dublin Statement on Water and Sustainable Development (1992) http://www.un-documents.net/h2o-dub.htm. Accessed 27 Mar 2017
- The Hangzhou Declaration (2013) Placing culture at the heart of sustainable development policies. http://www.unesco.org/new/en/culture/themes/culture-and-development/hangzhou-congress. Accessed 27 Mar 2017
- The Pontificial Academy of Sciences (2017) Final statement of the workshop on the human right to water. http://www.pas.va/content/accademia/en/events/2017/water/final_statement.html. Accessed 27 Mar 2017
- Unceta K (2015) De los ODM a los ODS. http://www.otromundoestaenmarcha.org/lanbroan/?p= 33. Accessed 25 Mar 2017

United Nations Organization (2015) Transforming our world: the 2030 agenda for sustainable development. https://sustainabledevelopment.un.org/post2015/transformingourworld. Accessed 27 Mar 2017

Weston BH (2014) Human rights. Encyclopaedia Britannica. https://www.britannica.com/topic/human-rights#ref742089. Accessed 27 Mar 2017