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WATER, FROM ONE STATE TO ANOTHER: THE WAVERING LEGAL
STATUS OF WATER AND ITS EXPORT IN BULK UNDER
INTERNATIONAL TRADE LAW

PAOLO TURRINI*

It is well known that water is one of the most precious resources of the planet, serving a number of fundamental purposes that range from addressing basic human needs (drinking water and sanitation), to supporting economic growth (agricultural and industrial uses), to preserving the environment (along with all the attached ecosystem services). It is equally known that water is not fairly distributed among countries, so that some of them may be defined as water-scarce and others as water-abundant. Many scholars from different academic backgrounds maintain that the former may overcome this problem by purchasing water from the latter, an option the legal contours of which are still surprisingly blurred. This article aims at shedding light on this issue and, in particular, it contributes to the existing legal literature in two respects. On the one hand, and more directly, it purports to bring forward the stalemated debate on the international legal framework applicable to bulk water transfers in order to understand which rules apply and to what extent. It is thus made clear that the multifaceted nature of water creates a complex legal entanglement with international trade law that rules out any plain answer. On the other hand, the article profits from the encounter between this highly technical field of law and an all-but-conventional good such as water in order to unearth some hidden deficiencies of the trade law system relating to oft-used concepts, especially the notions of 'resource', 'product', 'like product' and 'service'. This promotes a better understanding of its functioning.

* Post-doctoral research scholar, School of International Studies, University of Trento. The author is enormously grateful to Dishu Bhomawat and Anjali Menon for their thorough revision of the manuscript and their insightful comments thereto. It is not frequent to benefit from such a high-quality peer review. Of course, as always the responsibility for any errors that may have remained in the final text rests solely with its author. The article is up to date as of December 2015. The author can be contacted at [paolo.turrini\[at\]unitn.it](mailto:paolo.turrini[at]unitn.it).

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I. INTRODUCTION

It is almost commonplace to affirm that the problem of world water scarcity, in the near future, will be dealt with by waging ‘water wars’, that is, by means of armed conflicts for the control of the water sources of the planet. However, as the threat of water wars might turn out to be just a myth,¹ one can wonder whether, on the contrary, the (alleged) myth of legal disputes concerning trade in water² might threaten to come true. An answer in the negative is tempting, since in the last twenty years, more or less the life of the oldest specialized literature on the subject,

¹ Wendy Barnaby, *Do Nations Go to War Over Water?*, 458 NATURE 282 (2009), maintaining that “Countries (...) solve their water shortages through trade and international agreements” (however, ‘trade’ here refers to that in water-intensive products, i.e., trade in virtual water rather than ‘real’ water. *See infra* note 54).

² International Joint Commission, *Protection of the Waters of the Great Lakes: Final Report to the Governments of Canada and the United States*, app. 8, 65 (Feb. 22, 2000), <https://web.archive.org/web/20120312080113/http://www.cglg.org/projects/water/docs/IJC2000Report.pdf> [hereinafter INTERNATIONAL JOINT COMMISSION] (“[W]e consider it highly improbable that any government would seek to bring international water rights issues before the WTO. Even more extraordinary would be such a claim by a country that has no territorial nexus to the watercourse at issue. Over the past 50 years, there has been no shortage of disputes between governments around the world over water rights claims. Notwithstanding that fact, no government seeking access to water resources controlled by another nation has ever sought to bring the matter before the GATT or the WTO. We do not expect that situation to change”).

almost no dispute relating to water trade occurred,³ and more interestingly, transactions involving bulk water never skyrocketed. The instances of transnational bulk water transfers today are not many more in number than they were ten years ago,⁴ when studies on this topic peaked. Thus, one could be driven to conclude that no real change will happen in the future and that these legal waters are destined to lie still.

However, although soothsaying is obviously impossible, there are hints that taken altogether, draw nearer the eventuality that someday, bulk water transfers will no longer be *mare incognitum* for international trade law. The first of these elements is an objective fact: a worsening water scarcity.⁵ According to the United Nations, 1,200 million people are living in countries affected by this problem; and this figure might increase by 50% in the next ten years. To these numbers one should add those measuring the extent of water stress, which by 2025 could involve two thirds of the world population.⁶ As a result, it would be far from surprising if the governments of the states in distress tried to test the elasticity of the world trade

³ The only trade-related case remains *Sun Belt Water v. Canada*, UNCITRAL, Notice of Intent to Submit a Claim to Arbitration, ¶ 2 (Nov. 27, 1998), <http://www.international.gc.ca/trade-agreements-accords-commerciaux/assets/pdfs/disdiff/sunbelt-01.pdf>, which was initiated in 1998 under Chapter 11 ('Investment') of the North American Free Trade Agreement; although, after the notice of intent to start arbitration no valid claim has ever been filed. Of interest is also the *Bayview* case, which, even if decided by an ICSID arbitral tribunal, refers to some extent to issues discussed in this article. See *Bayview Irrigation District et al. v. United Mexican States*, Award, ICSID Case No. ARB(AF)/05/1 (June 19, 2007). This contribution will not take into account the ICSID cases regarding the operation of water services by multinational corporations – cases that, nonetheless, attest the sensibility of water-related matters.

⁴ For a lot of these cases, categorized in four classes, see EDITH BROWN WEISS, *INTERNATIONAL LAW FOR A WATER-SCARCE WORLD* 251-56 (2013) [hereinafter BROWN WEISS, *INTERNATIONAL LAW*]. See also David Shaw, *The Specter of Water Piracy: The World Trade Organization Threatening Water Security in Developing Nations*, 19 *COLO. J. INT'L ENVTL. L. & POL'Y* 129, 137-44 (2007). However, no exhaustive list exists; a case not cited in the two texts referenced above is the purchase, in 2008, of Marseille's water by the municipality of Barcelona; see Sophie Fabrégat, *Remous autour des livraisons d'eau potable par bateau entre le Sud de la France et l'Espagne*, *ACTU ENVIRONNEMENT* (MAY 23, 2008), http://www.actu-environnement.com/ae/news/barcelone_marseille_espagne_polemique_5122.php4.

⁵ The so-called 'Falkenmark indicator' set 1700 m³ of renewable water resources per capita per year as a threshold for determining the hydrological conditions of states: "Countries whose renewable water supplies cannot sustain this figure are said to experience water stress. When supply falls below 1000 m³ a country experiences water scarcity". Frank R. Rijsberman, *Water Scarcity: Fact or Fiction?*, 80 *AGRIC. WATER MGMT.* 5, 7 (2006).

⁶ See *International Decade for Action 'Water for Life' 2005-2015*, UN. ORG. (Nov. 24, 2014), <http://www.un.org/waterforlifedecade>.

system in order to understand whether it may work as an enabler of water trade. Second, an aggravating scarcity could support the battle for the recognition of the just economic value of water,⁷ which is now (sometimes greatly) under-priced. In this respect, too, being sceptical is absolutely sensible. In the course of the last two decades tons of grey literature, produced not only by private think tanks⁸ and corporations⁹ but also intergovernmental organizations¹⁰ (including environmental ones¹¹), has tried to convince policy-makers of different nationalities that the

⁷ A value that was underlined, as early as 1992, by the group of experts that wrote The Dublin Statement on Water and Sustainable Development. See *The Dublin Statement on Water and Sustainable Development*, International Conference on Water and the Environment: Development Issues for the 21st Century, Dublin, Ir., June 26-30, 1992, at 7 (Jan. 31, 1992) (Principle 4: “Water has an economic value in all its competing uses and should be recognized as an economic good”). What this means in terms of its actual price, however, cannot be determined univocally.

⁸ It would be impossible to write a complete list of all studies supporting this conclusion. As a ‘flavour text’, in order to understand how far the discourse could go, see *Full-Cost Water Pricing Guidebook for Sustainable Community Water Systems*, 8 (CMAP, IISG & U. Ill. Extension, 2012),

http://www.iisgcp.org/catalog/downloads_09/WaterFullCostPricingManual%20FINAL.pdf for a discussion on how the pricing for water, wastewater and stormwater fit together and send the proper signals about resource use. One only hopes that what the authors are referring to is stormwater captured and provided by the public distribution service!

⁹ These are disguised sometimes as scholarly contributions. See, e.g., Herbert Oberhansli, *Water Scarcity: How Trade Can Make a Difference*, in PEACE AND PROSPERITY THROUGH WORLD TRADE: ACHIEVING THE 2019 VISION (Jean-Pierre Lehmann & Fabrice Lehmann eds., 2010). The author is the Vice-President of Nestlé, which owns a large number of bottled water brands.

¹⁰ As is well known, the so-called ‘Washington Consensus’ (comprising also the World Bank and the International Monetary Fund) has been very active in promoting neoliberal water policies. See Joseph W. Dellapenna, *The Market Alternative*, in THE EVOLUTION OF THE LAW AND POLITICS OF WATER 375-77 (Joseph W. Dellapenna & Joyeeta Gupta eds., 2009) [hereinafter DELLAPENNA]. It is worth noting, however, that the World Bank itself is becoming more prudent. See 1 WATER AND DEVELOPMENT: AN EVALUATION OF WORLD BANK SUPPORT, 1997-2007 31 (2010) (“Pricing interventions may be effective in reducing water use for domestic water supply and energy generation but are less so for reducing agricultural water use, which responds less to changes in price”). Water use for agricultural purposes, it should be remembered, amounts for approximately 70% of the world water withdrawals. See, e.g., *Sustainable Management of Water Resources in Agriculture* 27, OECD (2010), <http://www.oecd.org/tad/sustainable-agriculture/49040929.pdf>.

¹¹ Even the United Nations Environmental Programme (UNEP) believes that “[T]he market can have positive implications for the management of freshwater resources [by reallocating] water rights from lower value priorities to higher value ones”. *The Greening of Water Law: Managing Freshwater Resources for People and the Environment*, UNITED NATIONS ENVIRONMENTAL PROGRAMME, 108 (2010),

efficient use of the limited hydrological resources of the Earth requires the attribution to water of its true market price. So far these views have met strong opposition from the public and have not brought a substantial change in the management of water worldwide. Should this change occur, however, and the real economic value of water be recognized, it would be a significant boost for the development of bulk water trade. This may be due to many causes. From a psychological point of view, it would sanction the full commodification of water, i.e., its allocation based on the idea that water is assigned to who pays for it the most rather than to who needs it the most or comes first,¹² and this would result in a powerful strike against those considering water a non-economic good, making more difficult for them to convincingly argue that water is something not to be traded. Moreover, from a material perspective, subjecting water to market competition would certainly make it more expensive. This on the one side would render it more costly for a state not to sell its surplus water resources, while on the other, it could contribute to the feasibility of long-distance water transfers now considered economically unviable.¹³ Notably, the current realization of large-scale intra-state water transfer projects points to this very end,¹⁴ since it could provide the technology needed to implement analogous inter-state projects.

The third factor is a legal one, hinging upon the possibility that modern water wars will not be waged by means of weapons but through legal claims: 'lawfare' rather than warfare. The first battles of this 'paper war' for natural resources have already been fought by means of a couple of claims recently submitted to the adjudicative bodies of the World Trade Organization ('WTO'). Both of them were won by the

http://www.unep.org/delc/Portals/119/UNEP_Greening_water_law.pdf [hereinafter UNEP].

¹² While international law, through the right to water, stresses the importance of fulfilling the basic human exigencies (as does the General Comment No. 15 of the United Nations Committee on Economic, Social and Cultural Rights), domestic law has devised a great number of ways to allot water rights. See STEPHEN C. MCCAFFREY, *THE LAW OF INTERNATIONAL WATERCOURSES*, (2nd ed., 2007) (for a thorough account of the doctrines adopted by the US states) [hereinafter McCaffrey]. See DELLAPENNA, *supra* note 10, at chs. 1-13 (for a historical and worldwide survey).

¹³ E.g., according to a study, the supply of bulk water by vessel is economically profitable only if the distance is less than 884 kilometres. Mohammed H.I. Dore, *Exporting Fresh Water: Is There an Economic Rationale?*, 7(3) *WATER POL'Y* 313 (2005).

¹⁴ The most significant ones are perhaps the South-to-North Water Diversion Project in China; South-to-North Water Diversion, *available at*: <http://www.nsb.gov.cn/zx/english> (last visited Jun. 15, 2016); and the National River Link Project in India: *National Perspective Plan*, NATIONAL WATER DEVELOPMENT AGENCY, *available at*: www.nwda.gov.in/index2.asp?slid=108&sublinkid=14&langid=1 (last visited Jun. 15, 2016).

countries opposing China and its determination to protect its own ‘rare earths’ and ‘raw materials’ from the greed of foreign companies.¹⁵ This victory might encourage some countries to test the consistency of the WTO case law with a view to seize ‘their own’ share of world natural resources including water. The episode also shows how powerful law can prove to be as a tool for determining the distribution of world resources. This is not the only example relevant for our purposes. Some argue or fear that the attribution of extraterritorial effects to the right to water, or the conceptualization of worldwide water resources as a common property of mankind, could grant everyone a right to access water located abroad, thus giving rise to a corresponding duty not to bar foreign right-holders from accessing it.¹⁶

Of course, all of the above is mere speculation, and many other elements could be taken into account in order to draw nearer or push farther the possibility that a controversy concerning water be brought in front of trade judges. However, it is a fact that, with the literature on this issue insistently raising concerns about the plausibility of bulk water transfers being subject to the international trade regime, states have more than once tried to bring water outside the scope of the treaties

¹⁵ *China – Measures Related to the Exportation of Various Raw Materials*, WT/DS394/AB/R, WT/DS395/AB/R, WT/DS398/AB/R, Appellate Body Report of Jan. 30, 2012; *China – Measures Related to the Exportation of Rare Earths, Tungsten and Molybdenum*, WT/DS431/AB/R, WT/DS432/AB/R, WT/DS433/AB/R, Appellate Body Report of Aug. 7, 2014.

¹⁶ See, e.g., Bruce Pardy, *The Dark Irony of International Water Rights*, 28 PACE ENVTL. L. REV. 907, 909-11 (2011). Indeed, the General Comment No. 15 affirms that “States should refrain at all times from imposing embargoes or similar measures, that prevent the supply of water”. *General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant)*, ¶ 32, E/C.12/2002/11, COMMITTEE ON ECONOMIC, SOCIAL AND CULTURAL RIGHTS (Jan. 20, 2003). There are those who think that, as a consequence, a State violating this precept can “be held liable for human rights violations in third States for its failure to take into consideration the enjoyment of the rights while taking decisions, sanctions, programmes and policies as a member of international organisations” such as the WTO. Takele Soboka Bulto, *Towards Rights-Duties Congruence: Extraterritorial Application of the Human Right to Water in the African Human Rights System*, 29 NETHERLANDS Q. HUM. RTS. 491, 521 (2011). Although different in content, cf. Agreement on Agriculture, art. 12(1)(a), Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organisation, Annex 1A, 1867 U.N.T.S. 410. Finally, on the relationship between water as a human right and water as a commodity, see Itzhak E. Kornfeld, *Water: A Public Good or a Commodity?*, 106 AM. SOC’Y INT’L L. PROC. 49 (2012); Marie Cuq, *Water: Human Right or Commodity? Reflections on the Effectiveness of a Human Right to Water* (2011), available at: <https://halshs.archives-ouvertes.fr/hal-00712821/document>.

they have negotiated.¹⁷ This is the case, for example, of a much-quoted interpretative declaration jointly issued by Canada, Mexico and the United States in order to exclude the application of the North American Free Trade Agreement ('NAFTA') to water.¹⁸ Although possibly misguided¹⁹ and with an uncertain legal value,²⁰ this document indicates the preoccupation of its drafters. This, in turn,

¹⁷ For a very recent example, see the newly drafted consolidated text of the COMPREHENSIVE ECONOMIC AND TRADE AGREEMENT BETWEEN THE EUROPEAN UNION AND CANADA, art. X.08 (2014), *available at*: http://trade.ec.europa.eu/doclib/docs/2014/september/tradoc_152806.pdf. The European Union ('EU') is very prudent on this issue. *See, e.g.*, Agreement on Government Procurement, Apr. 6, 2014, app. 1, Eur. Annex 3, Note 2(a), 1869 U.N.T.S. 508 ("This Agreement does not cover procurement (. . .) for the purchase of water" by contracting authorities and public undertakings as they are meant by the EU utilities directive). Albeit it is possible that the European negotiators had not bulk water transfers in mind, the possibility of this kind of transactions happening in Europe cannot be ruled out. *See supra* note 4.

¹⁸ *See* 1993 Statement by the Governments of Canada, Mexico and the United States, CANADIAN INTERGOVERNMENTAL CONFERENCE SECRETARIAT, *available at*: https://web.archive.org/web/20090324063144/http://www.scics.gc.ca/cinfo99/8306700_0_e.html#statement (last visited Nov. 20, 2015) [hereinafter CANADIAN INTERGOVERNMENTAL CONFERENCE SECRETARIAT]. For a sketchy contextualization of it, *see* Owen Saunders, *Trade Agreements and Environmental Sovereignty: Case Studies from Canada*, 35 SANTA CLARA L. REV. 1171, at 1180-84 (1995). The declaration has been quoted, with a view to support a similar stance, by the International Joint Commission set up by the United States and Canada under the 1909 Boundary Waters Treaty; Boundary Waters Treaty, INTERNATIONAL JOINT COMMISSION, *available at*: http://www.ijc.org/en_/BWT (last visited Jun. 15, 2016). *See* Leticia M. Diaz & Barry Hart Dubner, *The Necessity of Preventing Unilateral Responses to Water Scarcity – The Next Major Threat against Mankind this Century*, 1 CARDOZO J. INT'L COMP. L. 9, 33-38 (2001) [hereinafter DIAZ & DUBNER].

¹⁹ Indeed, its circularity deprives it of much of its explanatory power. An analysis of the terminology used in the declaration will be done in Part II.B.

²⁰ Article 201 of NAFTA defines the "goods of a Party" as "domestic products as (. . .) are understood in the General Agreement on Tariffs and Trade or such goods as the Parties may agree". It is not clear whether the latter element (the intention of the parties as expressed in the interpretative declaration) should trump the former in case of a conflict between the two. Moreover, as remarked also by Barutciski, the document is clearly ineffective to the extent that their authors want it to be applicable not only to NAFTA (of which they are the only parties) but also to any other international trade agreement. *See* Milos Barutciski, *Trade Regulation of Fresh Water Export: The Phantom Menace Revisited*, 28 CAN.-U.S. L.J. 145, 146 (2002) [hereinafter Barutciski]. Adding a further element of ambiguity, the United States government on the same day released a statement affirming that the declaration does not change in any way the law of NAFTA. *See* Scott Gordon, *Canada's Fresh Water and NAFTA: Clearing the Muddied Waters*, 15 DALHOUSIE J. LEGAL STUD. 69, 78 (2006) [hereinafter Gordon]; *see also infra* note 31.

mirrors a similar worry of many States – that where such a disclaimer is absent a presumption exists, or at least a doubt is there in favour of water transfers being governed by international trade rules. Thus, it may be possible that the current situation keeps stable only because of the widely shared reluctance to challenge the *status quo*. However, this peace could be short-lasting.

Many authors have already stressed the problems possibly implied by the application of trade norms to water, be it those of the WTO (in both its General Agreement on Tariffs and Trade (‘GATT’)²¹ and General Agreement on Trade in

²¹ A list includes, together with other bibliographical elements cited in this article, Esther J. De Haan, *Balancing Free Trade in Water and the Protection of Water Resources in GATT*, in THE SCARCITY OF WATER, EMERGING LEGAL AND POLICY RESPONSES, 253-58 (Edward H.P. Brans et al. eds., 1997) [hereinafter De Haan]; Robert J. Girouard, *Water Export Restrictions: A Case Study of WTO Dispute Settlement Strategies and Outcomes*, 15 GEO. ENVTL. L. REV. 247 (2003) [hereinafter Girouard]; ANTOINETTE HILDERING, INTERNATIONAL LAW, SUSTAINABLE DEVELOPMENT AND WATER MANAGEMENT, 113-18 (2004) [hereinafter HILDERING, INTERNATIONAL LAW]; Edith Brown Weiss, *Water Transfers in International Trade Law*, in FRESH WATER AND INTERNATIONAL ECONOMIC LAW (Edith Brown Weiss et al. eds., 2005) [hereinafter Brown Weiss, Water Transfers]; Mireille Cossy, *Le statut de l'eau en droit international économique. Principaux aspects au regard des règles de l'Organisation mondiale du commerce*, in LES RESSOURCES EN EAU ET LE DROIT INTERNATIONAL/WATER RESOURCES AND INTERNATIONAL LAW, 181-207 (Laurance Boisson de Chazournes & Salman M.A. Salman eds., 2005) [hereinafter Cossy(A)]; M. Tignino & D. Yared, *La commercialisation et la privatisation de l'eau dans le cadre de l'Organisation Mondiale du Commerce*, 19(2) REVUE QUÉBÉCOISE DE DROIT INTERNATIONAL 162, 178-91 (2006) [hereinafter TIGNINO & YARED]; Francesco Sindico, *Water Export Bans for Environmental Purposes Before the WTO: A Reflection on the Difficult Relationship Between Trade and Environment*, 60 REVUE HELLÉNIQUE DE DROIT INTERNATIONAL 153 (2007) [hereinafter SINDICO]; LAURANCE BOISSON DE CHAZOURNES, FRESH WATER IN INTERNATIONAL LAW, at 83-96 (2013) [hereinafter BOISSON DE CHAZOURNES]; Alix Gowlland-Gualtieri, *Legal Implications of Trade in "Real" and "Virtual" Water Resources*, in WATER LAW FOR THE TWENTY-FIRST CENTURY: NATIONAL AND INTERNATIONAL ASPECTS OF WATER LAW REFORM IN INDIA (Philippe Cullet et al. eds., 2010) [hereinafter GOWLLAND-GUALTIERI]; Francesco Costamagna & Francesco Sindico, *The Linkages between Access to Water and Water Scarcity with International Investment Law and the WTO Regime*, in WATER GOVERNANCE IN MOTION: TOWARDS SOCIALLY AND ENVIRONMENTALLY SUSTAINABLE WATER LAWS (Philippe Cullet et al. eds., 2010) [hereinafter COSTAMAGNA & SINDICO]; BROWN WEISS, INTERNATIONAL LAW, *supra* note 4, at 243-84 (this chapter is the updated version of the essay, of the same author, appearing above in this footnote); FRANCK DUHAUTOY, L'ACCÈS À LEAU, DROIT DE L'HOMME OU LOI DU MARCHÉ?, 556-65 (2015); MITSUO MATSUSHITA ET AL., THE WORLD TRADE ORGANIZATION: LAW, PRACTICE AND POLICY 745 (3rd ed. 2015); Julinda Beqiraj, *Water Resources' Exploitation and Trade Flows: The Impact of International Trade Law*, in NATURAL RESOURCES GRABBING: AN INTERNATIONAL LAW PERSPECTIVE (Francesca Romanin

Services ("GATS")²² branches) or of NAFTA.²³ Except for a few cases,²⁴ they have all expressed serious concerns about the encroachment that this possibility would

Jacur et al. eds., 2015). Some of these contributions also address the issue from the standpoint of NAFTA or the GATS.

²² Andrew Lang, *The GATS and Regulatory Autonomy: A Case Study of Social Regulation of the Water Industry*, 7 J. INT'L ECON. L. 801 (2004); Elisabeth Türk & Markus Krajewski, *Right to Water and Trade in Services: Assessing the Impact of GATS on Water Regulation*, in GATS UND GLOBALE POLITIK (Wolfgang Hein & Wolfgang Voegeli eds., 2004); Mireille Cossy, *Water Services at the WTO*, in FRESH WATER AND INTERNATIONAL ECONOMIC LAW (Edith Brown Weiss et al. eds., 2005) [hereinafter COSSY(B)]; Rebecca Bates, *The Trade in Water Services: How Does GATS Apply to the Water and Sanitation Sector?*, 31 SYDNEY L. REV. 121 (2009); BARNALI CHOUDHURY, PUBLIC SERVICES AND INTERNATIONAL TRADE LIBERALIZATION: HUMAN RIGHTS AND GENDER IMPLICATIONS, 136-41 (2012) [hereinafter CHOUDHURY].

²³ The literature of water trade under NAFTA is even more vast than that concerning the WTO because Canada has the lion's share of the world water resources and, perhaps for this reason, it has been so far the only country involved in an (aborted) legal dispute concerning trade in water, *Sun Belt Water v. Canada*, UNCITRAL, Notice of Intent to Submit a Claim to Arbitration (Nov. 27, 1998), available at: <https://perma.cc/FW5B-PE23?type=pdf>; this also explains the fact that the CETA expressly excludes water from being an object of international commerce. See Sophie Dufour, *The Legal Impact of the Canada-United States Free Trade Agreement on Canadian Water Exports*, 34(2) LES CAHIERS DE DROIT 705 (1993) [hereinafter DUFOUR]; Farah Khakee, *The North American Free Trade Agreement: The Need to Protect Transboundary Water Resources*, 16 FORDHAM INT'L L.J. 848 (1993); Scott Philip Little, *Canada's Capacity to Control the Flow: Water Export and the North American Free Trade Agreement*, 8 PACE INT'L L. REV. 127 (1996) [hereinafter LITTLE]; Brian D. Anderson, *Selling Great Lakes Water to a Thirsty World: Legal, Policy & Trade Considerations*, 6 BUFF. ENVTL. L.J. 215 (1999); Jamie W. Boyd, *Canada's Position Regarding an Emerging International Fresh Water Market with Respect to the North American Free Trade Agreement*, 5 NAFTA L. & BUS. REV. AM. 325 (1999) [hereinafter BOYD]; Cynthia Baumann, *Water Wars: Canada's Upstream Battle to Ban Bulk Water Exports*, 10 MINN. J. GLOBAL TRADE 109 (2001) [hereinafter BAUMANN]; Christine Elwell, *NAFTA Effects on Water: Testing for NAFTA Effects in the Great Lakes Basin*, TOL. J. GREAT LAKES' L. SCI. & POL'Y 151 (2001) [hereinafter ELWELL]; Christopher Scott Maravilla, *The Canadian Bulk Water Moratorium and its Implications for NAFTA*, 10 CURRENTS: INT'L TRADE L.J. 29 (2001) [hereinafter MARAVILLA]; Marcia Valiante, *Harmonization of Great Lakes Water Management in the Shadow of NAFTA*, 81 U. DETROIT MERCY L. REV. 525 (2004) [hereinafter VALIANTE]; Gregory F. Szydłowski, *The Commoditization of Water: A Look at Canadian Bulk Water Exports, the Texas Water Dispute, and the Ongoing Battle under NAFTA for Control of Water Resources*, 18 COLO. J. INT'L ENVTL. L. & POL'Y 665 (2007) [hereinafter SZYDŁOWSKY]; Joseph Cumming & Robert Froehlich, *NAFTA Chapter XI and Canada's Environmental Sovereignty: Investment Flows, Article 1110 and Alberta's Water Act*, 65 U. TORONTO FAC. L. REV. 107 (2007); Paul Stanton Kibel, *Grasp on Water: A Natural Resource That Eludes NAFTA's Notion of Investment*, 34 ECOLOGY L.Q. 655 (2007) [hereinafter KIBEL]; CHOUDHURY, *supra* note 22, at 141-49.

²⁴ E.g., Barutciski, *supra* note 20; and, in a more articulate manner, DUFOUR, *supra* note 23. See also, on water services, the GATS-sponsored leaflet, *GATS – Fact and Fiction*, 9,

involve on the sovereignty of a State over its natural resources. I share most if not all of these concerns, which are fed by doubts about the reaction of international trade law when it comes into contact with water and this in two respects. First, the still unclear circumstances under which water is captured by the provisions of trade law; and second, the possibilities for it to ‘break free’ by fulfilling the requirements set by some exceptions of uncertain scope (e.g., Articles XI(2) and XX GATT 1947). The latter topic has been addressed many times, and I think it is quite useless to further analyse it here;²⁵ after all, loopholes in trade law regimes are intentionally designed with hazy contours, so that a certain leeway be granted to both states and judges in concocting the solution that fits a given situation best.

The question regarding ‘if’ and ‘how’ water enters the scope of international trade law is, in my opinion, much more interesting, as I think it has been under-investigated so far. Both problems, that is whether water is covered by a legal system such as the WTO and what this means in practical terms, are tied to a more fundamental question, concerning how water is conceptualized in legal terms. In fact, just as water exists in nature in many physical states, it also appears in jurisprudence in diverse ‘legal states’. This contribution aims at discussing them. Thus, Part II will consider the forms water can take in order to see whether different forms entail different legal consequences as far as the application of international trade law is concerned; whereas, Part IV will briefly examine the possible classification of water once a trade regime has been deemed applicable. In the middle, Part III will try to shed light on the very idea of ‘applying international trade law’, an expression that is commonly found in literature but that, I believe, is often used without due clarity. Suffice to say that few authors, when speaking of ‘applying trade law’ to water, make a distinction among its provisions.

I am convinced that a discussion of these states of water, all of which are grounded in international trade law and corresponding to legal categories that are common in the trade law jargon, such as ‘resource’, ‘product’ and ‘service’, will not only demonstrate that the legal framework relating to water as an object of commerce is

https://www.wto.org/english/tratop_e/serv_e/gatsfacts1004_e.pdf (last visited Nov. 20, 2015).

²⁵ Some of the authors cited in footnotes 20 to 22 have dealt with this issue. Here, I would like to stress, with BOYD, *supra* note 23, at 347, that in some cases these exceptions cannot be easily raised, since countries with large endowments of water, such as Canada, could find it difficult to justify breaches of trade law on the basis of environmental concerns. However, the topic is far more complex than this, and it can be noted, for instance, that “Whether [water] is renewable or not is relevant to the strength of the environmental case to be made in (. . .) trade and investment disputes regarding bulk water export bans”; ELWELL, *supra* note 23, at 161.

much more complex than it might seem at first sight, but will also, and perhaps more importantly, reveal some notable contradictions and aporias embedded in international trade law. Although it is not my ambition to solve them, knowing them might prove useful for a better understanding of how this system works.

II. THE CLASSIFICATION OF WATER FOR THE PURPOSE OF DECIDING WHETHER TRADE LAW APPLIES

The significant importance of the application of international trade law to interstate water transfers, and the magnitude of its potential economic, social and environmental consequences, has brought all commentators to generally take a staunchly opposite stance on the matter. Most of them have focused on the features of water,²⁶ in order to understand whether it is *objectively* covered by international trade law. Their approach will be thoroughly studied in this Part. However, some other arguments have been advanced that may be roughly defined as *subjective* or *inferential*. Despite being far less in number, they are worth being mentioned in brief. These methods can be based, for example, on the nature of the institutional regime taken into account or the intent of its members.

To the former class belongs the conviction that whether or not, and the extent to which, trade in water falls under the rules of the WTO depends on the purposes that the organization is called upon to serve: that of merely protecting bound tariff schedules or, more ambitiously, promoting free trade.²⁷ The latter case being, of course, much more apt to prohibit limitations to water exports than the former.

The latter category comprises, instead, the methods drawing inferences from the will of the parties to a trade treaty. The fact that Canada added a water-related exception in the domestic legislation implementing NAFTA, but failed to include a parallel provision in the convention, would reveal that it did not seriously mean to, or lacked the sufficient leverage to, exclude water from the negotiations.²⁸ Thus, it

²⁶ The status of water generally under international law will not be dealt with here. For an account, see JULIA GUDEFIN, *LE STATUT JURIDIQUE DE L'EAU À L'ÉPREUVE DES EXIGENCES ENVIRONNEMENTALES* (2015). This study, as almost all others, see, e.g., *infra* note 124, is devoted to freshwater. Only few analyses can be found of the regime applicable to seawater; on this, see Sylvie Caudal, *L'eau de mer. Réflexions sur son statut juridique et sa protection*, in MELANGES OFFERTS A EMMANUEL LANGAVANT (Marie-Christine Rouault ed., 1999). One might wonder whether the status of seawater is relevant in the case of iceberg-towing, which is another means of appropriating water resources located abroad. BROWN WEISS, *INTERNATIONAL LAW*, *supra* note 4, at 256; see Jorge E. Vinuales, *Iced Freshwater Resources: A Legal Exploration*, 20 Y.B. INT'L ENVTL. L. 188 (2009).

²⁷ They are, respectively, the 'narrowly protective' and the 'broadly protective' approaches proposed by Girouard, *supra* note 21, at 254-58.

²⁸ Gordon, *supra* note 20, at 79.

can be argued that water is deemed to be within the scope of NAFTA because of the close temporal proximity between the drafting of the text of the treaty and the enactment of the domestic legislation transposing it in the municipal legal system.²⁹ It may also be conversely argued that water is said to be excluded from the application of the norms of NAFTA since the parties did not avail themselves of the possibility to include in Annex 104(1), whose contents trump the obligations deriving from the treaty according to Article 104, the transboundary water agreements to which they are also parties: according to such a view, this would be proof of their understanding that NAFTA does not cover water, as otherwise they would have thought it advisable or even necessary to 'fill in' the Annex with their water treaties.³⁰ Similarly, it has been submitted that the existence of conventions regulating the sharing of waters between two or more countries should work as a presumption in favour of the exclusion of a parallel application of international trade rules.³¹ This argument, ultimately based on the idea of *lex specialis*, vaguely resembles the ruling by the Supreme Court of the United States when it decided that water was not subject to federal mining laws and the appropriation regime thereof, since a presumption was due that the legislature did not want to override the previous water allocation systems in force at the state level with acts not specifically addressing this resource.³²

A different technique, still hinged on the intention of the parties, would be to use it as a barrier to the entrance of water into the trade commitments of the parties to a commercial agreement.³³ In other words, since states are the 'masters' of their treaties, if they all agree that water is not to be viewed as a tradable commodity, then it is not subject to the rules of the trade convention, irrespective of what might emerge from a plain reading of the treaty text. This is exactly what has happened in the case of oil, whose production is planned by a cartel (the Organization of Petroleum Exporting Countries) in potential disregard of WTO

²⁹ *Id.*

³⁰ Brown Weiss, *Water Transfers*, *supra* note 21, at 65. This line of reasoning is premised on the idea, which is actually true, that the parties to NAFTA do not want water to be covered by the agreement.

³¹ *Id.* at 70; COSTAMAGNA & SINDICO, *supra* note 21, at 276. Along the same lines, the International Joint Commission excluded in its statement, INTERNATIONAL JOINT COMMISSION, *supra* note 2, that trade law is applicable to the Great Lakes "[g]iven the web of bilateral, regional, and international treaties governing water rights and obligations between WTO member governments". However, it must be underlined that those WTO members that are not bound by water agreements cannot be presumed to consent to such an interpretation of the WTO regime.

³² See Lee Peters, *Recent Developments: Supreme Court Rejects Water as a Locatable Mineral for Federal Mining Claims*, 19 NAT. RESOURCES J. 183, 185 (1979).

³³ This is presented as the 'consensual approach' by Girouard, *supra* note 21, at 258-59.

norms: notwithstanding this, the proposals to test the legality of such a practice before the WTO adjudicative bodies have never led to a concrete action.³⁴ So far, a similar *de facto* moratorium has ‘spared’ water resources from the application of international trade law, but the provisional amity refraining states from suing one another in water-related claims could be shattered by private individuals whose investments have been undermined and who are entitled, by means of a treaty provision, to initiate a dispute with the allegedly culpable country.³⁵ Of course, the explicit manifestation by the parties to a trade agreement of their intention not to consider water as covered by the treaty, as with the above-mentioned joint declaration issued by Canada, Mexico and the United States, and authentically interpreting NAFTA, might bind the judges of the regime to a certain reading of its provision.³⁶ Other options are available, from explicit waivers to treaty amendments, which in multilateral trade agreements often follow institutionalized procedures and need only the consent of a majority of the parties.³⁷ What should be clear, however, is that apparent unanimity in preserving the *status quo* would not necessarily be enough. Within the WTO system, for instance, subsequent practice (including silence) has never been found to be determinative in deciding the precise boundaries of tariff-reduction commitments, and its importance, although recognized in principle, as a matter of fact has often been downplayed by the Appellate Body.³⁸ The WTO case law, however, is not conclusive on this issue, and statements may be found both in favour³⁹ and against⁴⁰ the possibility that a water-

³⁴ Stephen A. Broome, Note, *Conflicting Obligations for Oil Exporting Nations?: Satisfying Membership Requirements of Both OPEC and the WTO*, 38 GEO. WASH. INT’L L. REV. 409, 409-12 (2006) [hereinafter BROOME].

³⁵ Both *Sun Belt Water v. Canada*, UNCITRAL, Notice of Intent to Submit a Claim to Arbitration (Nov. 27, 1998), <https://perma.cc/FW5B-PE23?type=pdf>, and *Bayview Irrigation District et al. v. United Mexican States*, ICSID case no. ARB(AF)/05/1 (June 19, 2007), were started by individuals under the investment chapter of NAFTA.

³⁶ However, the joint statement is considered mere ‘soft law’; LITTLE *supra* note 23, at 140; Gordon, *supra* note 20, at 78; MARAVILLA, *supra* note 23, at 35.

³⁷ For a survey of the alternatives open to WTO members, see BROWN WEISS, INTERNATIONAL LAW, *supra* note 4, at 268-76.

³⁸ See generally, Isabelle Van Damme, TREATY INTERPRETATION BY THE WTO APPELLATE BODY 338-46 (2009); Georg Nolte, *Subsequent Practice as a Means of Interpretation in the Jurisprudence of the WTO Appellate Body*, in THE LAW OF TREATIES BEYOND THE VIENNA CONVENTION (Enzo Cannizzaro et al. eds., 2011) [hereinafter VAN DAMME].

³⁹ It has been affirmed that “if only some WTO Members have actually traded or classified products under a given heading, this circumstance may reduce the availability of such ‘acts and pronouncements’ for purposes of determining the existence of ‘subsequent practice’ within the meaning of Article 31(3)(b)” of the Vienna Convention on the Law of Treaties. *European Communities – Customs Classification of Frozen Boneless Chicken Cuts*, ¶ 259, WT/DS269/AB/R, WT/DS286/AB/R, Appellate Body Report (Sept. 12, 2005). It is undoubtedly so in the case of water, since no state has ever applied its WTO concession

related claim would be rejected by the Appellate Body based on the practice of the parties.

We can now turn to the objective approaches to the issue, that is, the arguments grounded in the nature of water. The following sub-Parts will be devoted to analysing the various qualifications of water as can be inferred from the writings of authors who have addressed the topic. This classification, however, also affords an opportunity to address more diverse trade-related issues that can be subsumed under each of these categories.

A. *Water as a Natural Resource*

Literature defining water as a natural resource uses this expression in an ambiguous fashion. On the one hand, a ‘resource’ is more or less explicitly contrasted with the notion of a ‘good’, the former being not, contrary to the latter, apt to be traded. According to this perspective, ‘natural resources’ stands for ‘resources in their natural state’.⁴¹ On the other hand, it is recognized as an indisputable fact that natural resources may be, and indeed are, exchanged between states, with water being no exception. The question is how these apparently conflicting views can be reconciled.

One way is to dispel the opposition by considering the two concepts as alternatives, but not fixed in time. In other words, a resource might become, under certain circumstances, a good, and thus enter the realm governed by international trade law. This is precisely the position of the 1993 joint declaration, as well as of most commentators and will be addressed more thoroughly in the next sub-Part.

schedule to its bulk water transfers. The problem of such an approach is that the states that have not traded or classified a certain good yet are likely to retain their right to ‘break the silence’ and act in a contrary way. The practice of states in tariff classification has been deemed relevant also in determining whether two products may be legitimately considered ‘like’ (on this, see *infra* Part II.A). *Spain – Tariff Treatment of Unroasted Coffee*, ¶¶ 4.8-4.9, L/5135 – 28S/102, Panel Report (Jun. 11, 1981).

⁴⁰ A prohibition of “the interpretation of a concession in the light of the ‘legitimate expectations’ of exporting Members, i.e., their *subjective* views as to what the agreement reached during tariff negotiations was” is found in *European Communities – Customs Classification of Certain Computer Equipment*, ¶ 82, WT/DS62/AB/R, WT/DS67/AB/R, WT/DS68/AB/R, Appellate Body Report (June 5, 1998).

⁴¹ The 1993 joint statement of the NAFTA parties uses the same language in the context of “natural water resources”, CANADIAN INTERGOVERNMENTAL CONFERENCE SECRETARIAT, *supra* note 18.

Another stance would be to maintain that the application of trade law rules to natural resources does not depend on the inherent characteristics of the resources themselves (which could in principle be the object of commerce) but, rather, on the features of the legal system concerned. For example, is the WTO suitable for regulating the transnational exchange of this kind of goods? Although seemingly provocative, this question is absolutely legitimate and moreover, there are hints that the answer might be in the negative. The World Trade Organization itself, in an official report entirely devoted to trade in natural resources, admits that “WTO rules were not drafted specifically to regulate international trade in natural resources”,⁴² and that this is the cause of many regulatory gaps in the regime. A similar view is also held by a celebrated expert in WTO law, according to whom the GATT 1947 was not meant to be a “comprehensive commercial policy instrument”.⁴³ Even if it is admitted that natural resources were considered during the long negotiations of the Organization, it cannot be denied that water was not taken into account when discussing trade in primary commodities.⁴⁴ The fact that trade in water was probably not even conceivable by those who drafted the WTO treaty (after all, the practice is still relatively undeveloped, to the point that the above-mentioned WTO report considers water a “non-traded” resource⁴⁵ as opposed to a non-tradable resource) is no justification. On the contrary, this makes more reasonable the idea that since the WTO regime was not devised bearing in mind the specificity of natural resources, the consequence is that it is unfit to govern their trade.⁴⁶ From this perspective, the fact that the Appellate Body has

⁴² *World Trade Report 2010: Trade in Natural Resources* 196 WORLD TRADE ORGANIZATION (2010) [hereinafter *World Trade Report*].

⁴³ JOHN H. JACKSON, *WORLD TRADE AND THE LAW OF GATT: A LEGAL ANALYSIS OF THE GENERAL AGREEMENT ON TARIFFS AND TRADE* 722 (1969) [hereinafter JACKSON].

⁴⁴ Federico Canuto & Todd C. Fineberg, *Natural Resource-based Products, in* 1 *THE GATT URUGUAY ROUND: A NEGOTIATING HISTORY* (1986-1992) at 471-89 (Terence P. Stewart ed., 1993); *See also* DUFOUR, *supra* note 23, at 742-43. One might note, as a peripheral consideration, that an objective characteristic differentiates water from many of the primary commodities discussed during the negotiations; whereas the latter are generally affected by significant price fluctuations, JACKSON, *supra* note 43, at 718, the price of water is highly inelastic, *see infra* note 50. One may wonder whether this difference, and others, push water towards or pull it away from the WTO.

⁴⁵ *World Trade Report, supra* note 42, at 47. But the report also defines it as “mostly non-traded” at 49.

⁴⁶ This position represents the ‘institutional approach’ described by Girouard, *supra* note 21, at 260. This belief is professed, more or less manifestly, by a great number of authors, although their approach can show different nuances. For example, some scholars stress the inadequacy of the dispute settlement system of the WTO to properly address sensitive questions such as those relating to water. *See* GOWLLAND-GUALTIERI, *supra* note 21, at 63; Rona Nardone, *Like Oil and Water: The WTO and the World’s Water Resources*, 19 *CONN. J. INT’L L.* 183, 203-05 (2003).

interpreted extensively the concept of ‘exhaustible natural resources’ under Article XX GATT 1947 so as to include air and turtles⁴⁷ in order to broaden the scope of the exceptions to the WTO provisions, is probably not a sufficient guarantee that water will be treated properly.

A third solution is to stress the special nature of water as a resource. While all others have features that make them similar to any other good, water is utterly peculiar, mostly because it is necessary for the survival of life, of both animals (humans included) and plants.⁴⁸ Thus, it should be kept outside the scope of international trade law even though other natural resources such as oil, to which water has been compared at times,⁴⁹ have been deemed to be covered by that legal regime. In brief, according to this perspective, water is to be governed by human rights law⁵⁰ and environmental law rather than trade law. Indeed, principles supporting these views have been drawn from those legal fields. Thus, states should address problems of regional water scarcity through ‘hydrosolidarity’, looking at water resources as interconnected environmental goods by taking an ‘ecosystem approach’,⁵¹ protect the right to water and the health of their citizens’ descendants in compliance with the principle of intergenerational equity,⁵² and

⁴⁷ See *United States – Standards for Reformulated and Conventional Gasoline*, WT/DS2/AB/R, Appellate Body Report (Apr. 29, 1996) (confirming the view of the panel in the same case, *United States – Standards for Reformulated and Conventional Gasoline*, ¶ 6.37, WT/DS2/R, Panel Report (Jan. 29, 1996), and the view in another case, *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, ¶¶ 130-31, WT/DS58/AB/R, Appellate Body Report (Oct. 12, 1998).

⁴⁸ See, e.g., Baumann, *supra* note 23, at 117-19; Gowland-Gualtieri, *supra* note 21, at 67. See generally Hubert H.G. Savenije, *Why water is not an ordinary economic good, or why the girl is special*, 27 PHYSICS & CHEMISTRY OF THE EARTH 741 (2002).

⁴⁹ Compare SINDICO, *supra* note 21, at 157-59, with William M. Turner, *The Commoditization and Marketing of Water*, available at: <http://www.waterbank.com/Newsletters/nws35.html> (last visited Aug. 12, 2015), who affirms that “[w]ater is like oil”. Actually, Turner admits that some differences exist, but... they are such that they render the marketing of water even more profitable! In fact, water is not fungible and its demand is far less elastic.

⁵⁰ Not a surprise, then, that someone tried to draw a parallel between the application of GATS to water and its application with regard to education, “another service that is fundamentally tied to the realisation of a plethora of human rights”. See Shawkat Alam et al., *The General Agreement on Trade in Services (GATS), Water, and Human Rights from the Perspective of Developing Countries*, 58 NETHERLANDS INT’L L. REV. 43, at 53 n. 56 (2011).

⁵¹ BAUMANN, *supra* note 23, at 125. On the notion of hydrosolidarity, see Andrea K. Gerlak et al., *Hydrosolidarity and International Water Governance*, 14 INT’L NEGOTIATION 311, 321-23 (2009).

⁵² Tara Boldt-Van Rooy, “Bottling Up” *Our Natural Resources: The Fight Over Bottled Water Extraction in the United States*, 18 J. LAND USE 267, 295-96 (2003).

promote the water-related interests of their communities at large by means of the public trust doctrine.⁵³ These principles – and others which could be added to the list – are characterized by different degrees of legal concreteness; nonetheless, it can hardly be contested that most of them are little more than expressions of good intentions (the public trust doctrine being a noteworthy exception). However, their importance lies in their highlighting the multiple grounds on which international trade agreements may be said to be inadequate in relation to the protection of non-trade values, in particular nature.⁵⁴

To sum up, we have seen that it is possible to take at least three positions concerning the problem of water as a natural resource under trade law: first, one may say that it does not matter whether water is a resource or not, since its unique features make it ‘untameable’ by international trade rules (which, however, may still apply to all other resources); second, one can argue that, irrespective of whether water was conceived as a resource by the negotiators of the WTO treaty, its resource-like characteristics protect it from being subjected to trade law, due to the (current) shortcomings of the trade system in dealing with this special class of goods; and third, water is covered by trade law only under certain circumstances which turn it into a good. The purpose of the next sub-Part is to shed light on such circumstances.

B. *Water as a Good*

Quite often, the distinction between a natural resource and a good is taken for granted by the relevant literature and, thus, not even discussed. After all, it mirrors

⁵³ On this concept, see *infra* note 139.

⁵⁴ Some scholars have rightly pointed out that the relationship between the WTO and the environment has significantly improved in the last two decades. See, e.g., Steve Charnovitz, *The WTO's Environmental Progress*, 10 J. INT'L ECON. L. 685 (2007); Aaron Cosbey & Petros C. Mavroidis, *Heavy Fuel: Trade and the Environment in the GATT/WTO Case Law*, 23 REV. EUR. COMP. & INT'L L. 288 (2014). However, in my view, if trade law does allow some leeway for the accommodation of environmental and social concerns, it still poses a heavy substantial and procedural burden on those willing to address them, in a setting that is dominated by the principle of non-discrimination. Expressions like “where the same conditions prevail”, “*de facto* discrimination” and “legitimate regulatory distinction” are complex notions with far-reaching consequences on what is allowed and what is not under WTO law. At the end of the day, the outcome of their application cannot be easily foreseen. For a water-related example, see Edith Brown Weiss & Lydia Slobodian, *Virtual Water, Water Scarcity, and International Trade Law*, 17 J. INT'L ECON. L. 717, 729-30 (2014) [hereinafter BROWN WEISS & SLOBODIAN].

a ‘real’ difference, since natural resources, similar to goods, are something both scarce and economically useful but unlike goods, may also be found “in the natural environment” “in their raw state”.⁵⁵ So far, no problem arises as this difference is merely descriptive. Troubles may emerge, however, when we move onto the normative plane, since we might wonder whether the cleavage between the two notions determines that trade rules are applicable to goods but not to natural resources. Three questions should be addressed in this respect. First, whether or not trade law admits the distinction between a good and a natural resource (hereinafter, simply referred to as ‘resource’); second, how the two of them can be distinguished; and third, what this difference would mean in terms of the (non-)application of international trade law.

It goes without saying that the express denial by international trade law or case law to differentiate between a good and a resource – the latter being ‘immune’ from international trade rules – would lead to water being treated similar to cars or apples.⁵⁶ Thus, the first step of our analysis is a brief inquiry into the terminology used by the WTO. In the lexicon of the GATT 1947, the dichotomy between resources and goods becomes a triad, with the addition of a reference to ‘products’. This is the term that has by far been resorted to most frequently in the text (almost one hundred occurrences), whereas ‘goods’ totals fifteen occurrences and ‘resources’ is quoted just a couple of times. In light of this, we should ask what the mutual relationship between these words is.

We can probably easily differentiate between a resource and a product. If we open a dictionary, as a surprisingly high number of commentators did,⁵⁷ in order to certify that a product is the outcome of a production process, we should be able to safely conclude that whenever a resource has undergone such a process, its natural state is brought to an end. I think that this assumption is confirmed by the fact that the very same term ‘production’ is remarkably used in Article XX GATT 1947 in connection with the issue of natural resources, as the GATT Secretariat had already done in an old note on export restrictions.⁵⁸ Such a reading would show

⁵⁵ *World Trade Report*, *supra* note 42, at 46.

⁵⁶ The example of apples is not a random one, since these fruits are without any doubts subject to trade law even if they, too, can be found in a natural state (that is, hanging on trees); *but cf.* CHOUDHURY, *supra* note 22, at 146-47.

⁵⁷ See, e.g., DUFOUR, *supra* note 23, at 742; Gordon, *supra* note 20, at 77; LITTLE, *supra* note 23, at 141; BOYD, *supra* note 23, at 335 (all of them using an English dictionary); TIGNINO & YARED, *supra* note 21, at 170 (using a French dictionary).

⁵⁸ *Background Note by the Secretariat: Export Restrictions and Charges*, ¶ 2(e), MTN.GNG/NG2/W/40, Group of Negotiations on Goods (GATT) (Aug. 8, 1989), https://www.wto.org/gatt_docs/English/SULPDF/92080023.pdf (last visited Nov. 20,

the production of a natural resource as the process that terminates its status as 'resource' or at least, the one that confers to the resource the prevailing status of 'product'.⁵⁹ As a consequence, our main dichotomy provisionally becomes the resource/product one.

What about the word 'good' as used in the GATT? Is it akin to or even overlapping with, one of the other two terms, or is it a general word with an open-ended meaning? This term, too, can be found in conjunction with the word 'production' (i.e., 'production of goods').⁶⁰ However, it is totally unconvincing that 'production' here is to be attributed the same role that it plays when read together with the term 'resource': whereas in the production of a resource the 'resource' is what we have in the pre-production stage (or the qualification that is overwritten by the 'product' status), in the production of a good, the good is most likely the outcome of the process. The GATT does not provide definitions, but it gives the impression that the words 'products' and 'goods' are used in a perfectly interchangeable fashion. As a further hint, one may notice that the NAFTA applies to goods and defines them as products⁶¹ as understood in the GATT but also as such goods on which the parties agree; the term 'good', here, has not been better clarified. Moreover, as we have seen above, the 1993 joint statement too uses both words, which are apparently considered as synonymous. As the NAFTA Agreement was concluded, and the declaration issued, during the final stage of the negotiations to establish the WTO (the Uruguay Round, spanning from 1986 to 1994) and since they were both co-authored by a country, the United States, that surely exerted a great influence on them, there is room to suspect that this terminological question and its possible consequences were not debated adequately by the prospective WTO members and that the statistical preference for the term 'product' in the GATT is not to be given weight. In sum, 'good' and 'product' should be treated as synonyms.

Apparently, this conclusion is barred by an explicit statement by the Appellate Body. Asked to confer a meaning to the word 'good' as it appears in Article 1 ('Definition of a Subsidy') of the Agreement on Subsidies and Countervailing Measures, the members of the Body affirmed that it does not necessarily bear the same meaning as the term 'product' appearing in the GATT because of "the

2015) ("restrictions on exports of exhaustible natural resource products will not be effective if they are not accompanied by limitations on their production").

⁵⁹ In this sense is to be read the expression 'natural resource products', *infra* note 72.

⁶⁰ In the Preamble and in both Article III(8)(a) and Article XVII(2).

⁶¹ Article 201 of the NAFTA. The same definition, conflating the idea of good with that of product, can be found elsewhere, for example in the 2014 Free Trade Agreement between Canada and the Republic of Korea, art. 2.15.

different contexts in which they are used”.⁶² This suggests that what is crucial in determining the meaning of the notions of ‘goods’ and ‘products’ are ultimately the needs of the relevant treaty or part of the treaty. Curiously, in that case the respondent state, Canada, tried to convince the Appellate Body that the implementation of stumpage programs to the advantage of its own nationals did not amount to providing a good under Article 1, as standing timber does not belong to the category of “tradable items with an actual or potential tariff classification”.⁶³ Eventually, the Appellate Body sided with the claimant and decided that standing trees are a good according to Article 1 of the Agreement on Subsidies. What is interesting, however, is that, few years before, Canada had maintained something at least partly different. Commenting upon WTO members’ obligations under the GATT 1947, it had excluded that the presence of water among the goods listed and categorized by the Harmonized System⁶⁴ means that it is covered by trade law irrespective of its state, natural or not. On the contrary, in its view, even if the System seems to define water as a good by putting it under Heading 2201 (relating to “waters, including natural or artificial mineral” ones),⁶⁵ this evidence can be countered by stating that this inclusion “does not tell us if and when water is a good; it only tells us that when water is classified as a good, it falls under a particular tariff heading”.⁶⁶

So, when is water a good subject to trade provisions? Two are the (complementary) strategies to answer this question. One is interrogating the WTO

⁶² *United States – Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada*, ¶ 63, WT/DS257/AB/R, Appellate Body Report (Jan. 19, 2004). On this judgement and, more generally, on WTO and natural resources, see Mireille Cossy, *Energy Trade and WTO Rules, Reflections on Sovereignty on Natural Resources, Export Restrictions and Freedom of Transit*, in EUR. Y.B. INT’L ECON. L. (Christoph Herrmann & Jörg Philipp Terhechte eds., 2012); see also Valerie Hughes & Gabrielle Marceau, *WTO and Trade in Natural Resources*, in INTERNATIONAL LAW AND FRESHWATER: THE MULTIPLE CHALLENGES (Laurence Boisson de Chazournes et al. eds., 2013).

⁶³ *United States – Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada*, ¶¶ 61, WT/DS257/AB/R, Appellate Body Report (Jan. 19, 2004)

⁶⁴ The System has contextual value in interpreting the schedules of concession of WTO members, according to what the Appellate Body affirmed in *European Communities – Customs Classification of Certain Computer Equipment*, ¶ 89, WT/DS62/AB/R, WT/DS67/AB/R, WT/DS68/AB/R, Appellate Body Report (June 5, 1998). See also VAN DAMME, *supra* note 38, at 254-56.

⁶⁵ The full heading reads: “waters, including natural or artificial mineral and aerated waters, not containing added sugar or other sweetening matter nor flavored; ice and snow”. The Harmonizing Commodity Description and Coding System of the World Customs Organization also includes sweetened or flavoured waters (Heading 2202) and sea water (Heading 2501).

⁶⁶ INTERNATIONAL JOINT COMMISSION, *supra* note 2, at 67.

and analyzing the logic underlying its rules; this will be done in Part III. The other is investigating into the ways to distinguish between a resource and a good and the conditions under which the former turns into the latter. The paragraphs below will undertake this task, which is definitely not an easy one, especially when water is taken into account.

Some have written about the “continuum between resource and commodity”,⁶⁷ rightly pointing out that it is difficult to detect the precise point where the change in status occurs.⁶⁸ Notwithstanding this, many authors have tried to draw a line between the two concepts. Almost all of them have adopted as the main criterion the place where water can be found.⁶⁹ Thus, according to the joint statement by the NAFTA parties, “[w]ater in its natural state in lakes, rivers, reservoirs, aquifers, water basins and the like is not a good or product”.⁷⁰ If extracted and put into bottles, it always is. If channelled and transported elsewhere, it may be, although the views of the commentators vary according to the means of transfer in consideration. Their choices depend on whether or not they think that the natural state has been ‘disturbed’ so much by human labour that water has become a product.

Far from being uncontroversial, the idea of ‘becoming a product’ is also not the only one that can be called into question. To quote again the joint statement, the application of international trade law is excluded “[u]nless water, in any form, has entered into commerce and become[s] a good or product”.⁷¹ The sentence thus adds to the concept of production of water its marketization. Both the concepts deserve greater attention and will be analysed in the next two sub-Parts, respectively devoted to water as a product and water as a valued commodity. Before addressing them, however, I briefly note that it is not even possible to establish the relationship that ties the two requirements set by the joint statement. Are they both necessary, or does the fulfilment of only one of them suffice? Is one included in the other, so that the compliance with one requisite is proof of the fulfilment of the other (for instance, the commercialization of water being tantamount to turning it into a product), without the contrary being true? I think that the answers to these questions require a principled approach,⁷² though what is

⁶⁷ VALIANTE, *supra* note 23, at 534.

⁶⁸ Indeed, “[t]he line of demarcation between natural resources and other goods will always be somewhat arbitrary”. *World Trade Report*, *supra* note 42, at 46.

⁶⁹ See, e.g., LITTLE, *supra* note 23, at 141. See also *infra* notes 73-75.

⁷⁰ See CANADIAN INTERGOVERNMENTAL CONFERENCE SECRETARIAT, *supra* note 18.

⁷¹ *Id.*

⁷² A contrary view could be put forth by quoting a line dropped by the panel in the *Rare Earths* case: *China – Measures Related to the Exportation of Rare Earths, Tungsten and Molybdenum*, ¶ 7.268, WT/DS431/R, WT/DS432/R, WT/DS433/R, Panel Report (Mar. 26, 2014), that

said in the following sub-Parts may perhaps provide useful elements to guide the choice.

i. Water as a Product

Assuming that water must be produced in order to be subjected to the GATT rules, when can it be considered a product? A certain number of authors adopted a rather straightforward approach to the issue,⁷³ by explaining the notion of ‘product’ as something that requires a degree of human labour to be applied to the resource in order to deprive it of its natural status. This is certainly the case when water has been treated, for example when it has undergone a desalination process. But, more interestingly, it may also be the case when the chemical composition of water is left unchanged and human labour is instead applied to the means of transporting it elsewhere; to use the word that can be found in the Final Report of the International Joint Commission for the Great Lakes, water must have been somehow ‘captured’.⁷⁴ Nobody doubts that when water is bottled, it becomes a

recalls the *Softwood Lumber* case: *United States – Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada*, WT/DS257/AB/R, Appellate Body Report (Jan. 19, 2004), and tells us that “natural resource products that will necessarily [sic] enter the market and are available for sale are subject to GATT disciplines in the same way as any other product”, where the markets are those “in which extracted products are bought and sold”. Since extraction is a form of production, *see infra* note 74, one can at least infer that the two requisites are both deemed as necessary in the WTO system.

⁷³ See, e.g., TIGNINO & YARED, *supra* note 21, at 170; BROWN WEISS, INTERNATIONAL LAW, *supra* note 4, at 261; Cossy(A), *supra* note 21, at 174; BOISSON DE CHAZOURNES, *supra* note 21, at 85; David Johansen, *Bulk Water Removals, Water Exports and the NAFTA (2001)*, available at: <http://publications.gc.ca/Collection-R/LoPBdP/BP/prb0041-e.htm> (last updated Jan. 31, 2002), quoting JOHN RAGNAR JOHNSON, THE NORTH AMERICAN FREE TRADE AGREEMENT: A COMPREHENSIVE GUIDE 109-10 (1994), in the paragraph “Water in its Natural State” [hereinafter JOHANSEN].

⁷⁴ See INTERNATIONAL JOINT COMMISSION, *supra* note 2, at 32. In the WTO lexicon the word ‘extracted’ is preferred, even though it is not used without ambiguity; for instance, in *China – Measures Related to the Exportation of Rare Earths, Tungsten and Molybdenum*, WT/DS431/R, WT/DS432/R, WT/DS433/R, Panel Report (Mar. 26, 2014), the expressions “extraction *and* production” and “mining *and* production” (emphasis added) are very frequent, and the reader may even stumble upon references to “extraction *and/or* production caps”, *id.* ¶ 7.447 (emphasis added). One is tempted to think that the WTO judges consider the two processes as distinct, and that the extraction of a mineral does not terminate its natural resource status. When facing the issue, however, the panel refuses to take a stance, *id.* ¶¶ 7.246-50. It is possible that ‘production’ is not used in this context to refer to the process turning a resource into a good. This would also explain why, for example, ‘rare earths’ and ‘tungsten’ are seen as raw materials and ‘rare earths metal ores’ and ‘tungsten ores’ (that is, unprocessed goods) are listed as products (*id.* at 27, 29, tbls.).

product; in that case, bottles and tanks are the vector for the movement of water. However, it might be arduous to establish whether water is produced or not whenever its transfer from one place to another is obtained by other means. One scholar believes that “[i]t would be difficult to contend that the creation of a large reservoir or the diversion of a river (where water remains in its natural state) is tantamount to the production of water. Water would have to be taken from its natural element and gathered in tanks, a pipeline or a vessel for it to become a ‘product’ under GATT and a ‘good’ under NAFTA”.⁷⁵ The same opinion is shared by other commentators, convinced that diversions, contrary to pipelines, cannot be made subject to trade law.⁷⁶

I tend to believe that this classification is, to some extent, simplistic and misleading, and presents a couple of flaws that undermine it. The first defect, perhaps less problematic, concerns the inner coherence of this approach. By constricting the discourse within broad, general categories – ultimately, only two, that is pipelines and diversions, if we exclude those that do not raise any problem like bottles, tanks and vessels – the complexity of reality is not adequately taken into account. The result is that the very few times when more specific engineering options are considered, the ensuing classification appear indisputably inconsistent. For example, dams, which may be used to divert the course of a river,⁷⁷ have been seen as human works and thus deemed to give rise to the commodification of water,⁷⁸ even though the diversion, in itself, is systematically subsumed under the notion of ‘resource’. Irrespective of the merits that the categorization illustrated above may have, it can be argued that it would probably benefit from refinement, in order to better reflect a larger number of available options.

⁷⁵ LITTLE, *supra* note 23, at 141. This sentence is reminiscent of the 1993 joint declaration, CANADIAN INTERGOVERNMENTAL CONFERENCE SECRETARIAT, *supra* note 18, which also speaks of reservoirs.

⁷⁶ BROWN WEISS, INTERNATIONAL LAW, *supra* note 4, at 247-49, 260-61; Cossy(A), *supra* note 21, at 175; SINDICO, *supra* note 21, at 158-59 (but he affirms that even in the case of pipelines the role of trade law should be subsidiary).

⁷⁷ They are coherently called ‘diversion dams’, one of the three existing types of dams, the other two being storage dams and detention dams. See *Dams - Classification of Dams*, SCIENCE ENCYCLOPEDIA – JRANK ARTICLES, <http://science.jrank.org/pages/1940/Dams-Classification-dams.html> (last visited Nov. 20, 2015).

⁷⁸ SINDICO, *supra* note 21, at 159 (who, however, puts “unnatural diversions” in the non-product category!). Compare *Bayview Irrigation District et al. v. United Mexican States*, Award, ICSID case no. ARB(AF)/05/1, ¶ 46 (June 19, 2007), for the position of the complainants (“where [water] is stored in (. . .) reservoirs, sold on the Water Market, and delivered through a complex of irrigation works, is clearly a good or product in commerce”).

The second flaw is more radical. In fact, it is clear that despite its apparently neutral premise, the described approach hinges on an inversion of cause and effect. Instead of checking whether water was disturbed by a human intervention in order to recognize its status as a product, the potential consequences of this recognition guide the attribution of the status. Thus, if water in its natural state is moved into an artificial reservoir, it is still a resource; if it is moved to another place through an artificial river, it is, again, a resource; if it is moved through a pipeline, it becomes a good. This outcome cannot be easily maintained on the basis of the quantity of work (i.e., the coefficient of production), and it probably has more to do with the fact that, among the examples cited, pipelines are the only man-made works that are thought to be used just for commercial purposes. In other words, pipelines are the only works that cannot be reasonably spared from the provisions of trade law. Although this attention paid to the practical effects of a theoretical classification is definitely appreciable and to some extent necessary, such an approach, if rigidly applied, could be legally untenable and, consequently, unable to withstand a judicial challenge. In fact, nothing precludes a river diversion from having a purely commercial purpose, or from including, among its multiple purposes, a trade-related one. In both cases, its preventive exclusion from the category of 'products' would create an unjustifiable disparity between those states exporting water through a pipeline and those doing it by means of an artificial river.⁷⁹

A possible objection would consist in affirming that a pipeline differs from an artificial river because the latter, notwithstanding its man-made nature, can materially function as a natural river while the former cannot. In fact, a true ecosystem may spring from the artificial diversion of a natural watercourse (or, more generally, a natural water source, i.e. a lake) and this might justify the extension of international water law to it and its application as *lex specialis*. Doubts can legitimately be cast on this hypothesis. A distinguished water law expert is explicit: "[a] manufactured river, in the form of canals or other man-made systems, would not fall within the rubric of international water law since, by definition, such

⁷⁹ These last lines imply, on the one hand, that a diversion having only a commercial purpose and a diversion having a commercial purpose, along with others, may be equated, and, on the other hand, that both these cases must be treated differently from that of a diversion having an exclusively non-commercial purpose. Both assertions may be questioned and, in my opinion, are approachable only from a principled point of view- that is, they are best sustained or rejected on the basis of rhetoric rather than strict legal logic. In any case, it is worth highlighting that the concept of 'commercial' cannot be given an indisputable meaning. If it entails the idea of an economic advantage, one may note that even treaties with environmental aims may assure a monetary gain. For example, the creation, preservation or restoration of an aquatic ecosystem might produce a profit from tourism.

water bodies are proprietary and subject to the agreements that created them”.⁸⁰ The International Law Commission of the United Nations, which wrote the text of the 1997 New York Convention on the Law of Non-Navigational Uses of International Watercourses, apparently includes in the concept of ‘watercourse’ also artificial canals, but some of its members expressed doubts about that.⁸¹ Moreover, the practice that it took into account often refers to old treaties negotiated mostly to regulate navigational uses. In any case the convention requires that all the branches of the watercourse finally flow into a common terminus – a condition that may or may not be fulfilled by a canal.⁸² Finally, although the analogy is to some extent improper due to the fact that, in national legal orders, this kind of rules are meant to set the rights and duties of individuals relating to water, one could try to draw some lessons from the domestic regulation of artificial rivers. For example, in the United States, a country with a significantly developed water law, artificial rivers cannot generally be assimilated to natural rivers, even if their regime is not always clear and the principle admits exceptions.⁸³

However, I believe that the most convincing objection against the hypothesis according to which water diversions are not covered by international trade law despite their similarity with natural rivers, lies in the fact that, although supported by some scholars,⁸⁴ the idea that the application of water law trumps that of trade law is all but solid. Let us assume that international water law, in its customary form, is a manifestation of the will of the international community to manage the shared utilization of transboundary water resources on the basis of fairness (the so-called ‘equitable and reasonable utilization of shared waters’⁸⁵). In other words,

⁸⁰ Gabriel Eckstein, *The Silala Basin: One of the Most Hydropolitically Vulnerable Basins in the World*, INTERNATIONAL WATER LAW PROJECT BLOG, available at: www.internationalwaterlaw.org/blog/2011/10/27/the-silala-basin-one-of-the-most-hydropolitically-vulnerable-basins-in-the-world (last visited Nov. 20, 2015).

⁸¹ *Report of the International Law Commission on the Work of its Forty-third Session, 29 April – 19 July 1991*, II(2) Y.B. INT’L L. COMMISSION 70 (1991).

⁸² *Id.* at 70-71.

⁸³ See, e.g., JOHN W. JOHNSON, UNITED STATES WATER LAW: AN INTRODUCTION 23, 38, 58, 137 (2009) [hereinafter JOHNSON]; STEVEN FERREY, ENVIRONMENTAL LAW: EXAMPLES & EXPLANATIONS 295 (5th ed. 2010) (where it is said that an artificial course may evolve into a natural one, and vice versa); DANTE A. CAPONERA, PRINCIPLES OF WATER LAW AND ADMINISTRATION: NATIONAL AND INTERNATIONAL 75 (Marcella Nanni ed., 2nd ed. 2007) (“The status of artificial watercourses is determined by their nature, the circumstances under which they are constructed and the use to which they are put”). See generally JOSEPH K. ANGELL, THE LAW OF WATERCOURSES (7th ed. 2000).

⁸⁴ See *supra* note 31.

⁸⁵ Its customary nature is generally accepted. See, e.g., Joseph W. Dellapenna, *The Customary International Law of Transboundary Fresh Waters*, 1 INT’L J. GLOBAL ENVTL. ISSUES 264 (2001).

water law more or less explicitly embodies the reluctance of all states to interpret the existing trade regimes so as to cover rivers, both natural and artificial. But such a presumption of reluctance is not always justified as there are cases when the principle of equitable and reasonable utilization has been put aside in favour of a more trade-oriented agreement. These cases are definitely not infrequent. A survey of historical and modern treaties concerning transnational river basins reveals that the allocation of waters among different countries has followed different paths, and that many of them implied both a 'non-equitable' apportionment and a payment for the resource by the state that got most of it.⁸⁶ Actually, the options available are so many that the American Society of Civil Engineers has even proposed some model provisions for the sharing of the water of transboundary aquifers, no one of them being based on the vague standard of an equitable partition.⁸⁷ In addition, there are other potential solutions that are not based on a more or less precise allocation of water between the states on whose territories the river flows but, rather, on a regional market whereby water is auctioned and allocated through a bidding procedure,⁸⁸ so that the outcome of the process might be ever-changing.

A further reference is *Convention on the Law of the Non-Navigational Uses of International Watercourses – Introductory Note*, AUDIOVISUAL LIBRARY OF INTERNATIONAL LAW, available at: <http://legal.un.org/avl/ha/clnuiw/clnuiw.html> (last visited March 27, 2016) (“[T]he Convention is widely viewed as a codification of customary international law with respect to at least three of the obligations it embodies, namely equitable and reasonable utilization, prevention of significant harm, and prior notification of planned measures”).

⁸⁶ Kristin M. Anderson & Lisa J. Gaines, *International Water Pricing: An Overview and Historic and Modern Case Studies*, in *MANAGING AND TRANSFORMING WATER CONFLICTS* 252-65 (Jerome Delli Priscoli & Aaron T. Wolf eds., 2009). However, many of these instances, quite obviously, entail human activities and works of some sort.

⁸⁷ MODEL WATER SHARING AGREEMENTS FOR THE TWENTY-FIRST CENTURY 72-78 (Stephen E. Draper ed., 2002) (the alternatives proposed are: ‘Percentage Allocation’, ‘Proportionate Allocation’, ‘Guaranteed Minimum Quantities Apportioned’, ‘Guaranteed Quantity; Vested Rights Protected’ and ‘Storage Allocations’); SHARING WATER IN TIME OF SCARCITY: GUIDELINES AND PROCEDURES IN THE DEVELOPMENT OF EFFECTIVE AGREEMENTS TO SHARE WATER ACROSS POLITICAL BOUNDARIES 98-101 (Stephen E. Draper ed., 2006) (where three models are set forth: ‘Coordination and Cooperation’, ‘Limited Purpose’ and ‘Comprehensive Management’); *id.* at 102-08 (analysing further water allocation strategies for different types of waters).

⁸⁸ Naomi Zeitouni et al., *Water Sharing Through Trade in Markets for Water Rights: An Illustrative Application to the Middle East*, in *WATER AND PEACE IN THE MIDDLE EAST* (Jad Isaac & Hillel Shuval eds., 1994). Two kinds of markets are imagined- for percentage rights and for priority rights. Of course, these markets could be open to only riparian countries, to all countries of the region (riparian or not) or, although it would be very unlikely, to the whole international community.

This should make clear that there are many alternatives for managing the water of a shared river, some of them more similar to international agreements setting a price for the consumption of the good, especially if the share is greater than that of the co-riparians. This perspective allows us to take our analysis forward in a couple of respects. In the first place, it should be evident that, from discussing the possibility of excluding diversions of rivers from the category of products due to their similarity with natural rivers, we almost inadvertently slid to the inclusion of the latter within the same category. If the water of natural rivers is sold abroad in bulk, one can at least speculate that international trade law may become applicable. This is so even if no production process is detectable, neither concerning the quality of water, nor as to the way it is transferred; after all, one may assume that the notion of ‘product’ is not to be given determinative weight.⁸⁹ Moreover, the line between a natural river and an artificial river is perhaps more blurred than expected. For instance, in the proceedings of the *Bayview* case,⁹⁰ the Rio Grande is said not to have a natural flow anymore, since it is under the complete control of the United States and Mexico.⁹¹

In the second place, it is worth noting that the two regimes of interest here (international water law and international trade law) are not necessarily mutually exclusive.⁹² On the contrary, water law standards could be needed in order to determine whether a commercial transaction happened and thus whether trade law comes into play. In practice, the principle of equitable and reasonable use of water dictated by customary law may be seen as a sort of neutral benchmark against which to measure the presence of a transaction, that is the bigger the deviation from the principle, the more difficult it is to hide that an instance of trade in water has occurred. This approach is based upon the following reasoning: if the above-mentioned principle is embedded in custom (as a benchmark for judging the presence of transactions), any state would be entitled to an amount of water calculated by allocating the available resource among the riparian countries on the

⁸⁹ See *supra* text accompanying note 72.

⁹⁰ See *supra* note 3.

⁹¹ See SZYDŁOWSKY, *supra* note 23, at 672, 681.

⁹² I say ‘not necessarily’ because the very existence of water law is deemed to be a proof of states’ intention not to manage the common use of transboundary waters by means of trade instruments. See *supra* note 28 and accompanying text. According to this point of view, an agreement establishing a water apportionment *of any kind* is, by virtue of its falling under the “water law” label, impervious to trade rules. The contrary perspective is that *any* transboundary water transfer is trade, irrespective of quantity. Here the intermediate stance is illustrated. Customary water law sets a (vague) threshold that may be trespassed by means of a treaty – which is to be considered a trade treaty rather than a water treaty.

basis of a multitude of factors.⁹³ As a consequence, if an agreement modifies this proportion, only the water in excess can be counted as traded, since the ‘equitable quantity’ could be obtained anyway.

This stance is affected by an evident and sizeable problem since the said principle does not allocate water in an exact manner. Indeed, in the light of its sometimes puzzling application,⁹⁴ the line it draws among the states’ shares of a common watercourse is a rather large stripe. This makes it absolutely impossible to calculate the precise amount of water that is the object of trade. However, one may wonder whether, irrespective of the impracticability of this calculation, the ‘equitable and reasonable use’ benchmark may be had recourse to just to see if the apportionment of water among riparian states is non-equitable, that is, it is not a mere specification according to the equity principle. For example, if a densely populated, industrialized country whose equitable and reasonable share of water should be greater than that of a smaller and less economically developed neighbour were to accept to allocate a disproportionately large amount of water to the latter (that is, a quantity not reflecting the actual needs of the respective populations and economies), we could be facing a commercial transfer of the good. This, too, cannot always be determined for sure, but in those cases where it can be, to establish the existence of a water transaction, even an unquantifiable one, would be enough to draw some consequences of legal nature.

The analysis of the notion of ‘product’ as applied to bulk water exports has led us to draw a comparison between various kinds of water transfers. This has led to the conclusion that the adoption of a differentiated regime for pipelines, trade-oriented

⁹³ See, e.g., New York Convention on the Law of Non-Navigational Uses of International Watercourses, G.A. Res. 51/229, art. 6, U.N. Doc A/RES/51/229 (Jul. 8 1997); If Article 6 of the Convention can be taken as a trustworthy mirror of the customary principle of equitable and reasonable usage of common water resources, we may list among these factors the “[g]eographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character”, the “social and economic needs of the watercourse States concerned”, the “population dependent on the watercourse in each watercourse State”, the “effects of the use or uses of the watercourses in one watercourse State on other watercourse States”, the “[e]xisting and potential uses of the watercourse”, the “[c]onservation, protection, development and economy of use of the water resources of the watercourse and the costs of measures taken to that effect”, and the “availability of alternatives, of comparable value, to a particular planned or existing use”. As of December 2015, the Convention (which came into force in August 2014) is binding upon 36 parties.

⁹⁴ For a thorough discussion, see McCaffrey, *supra* note 12, at ch. 10. On the relationship of the principle with the no-harm rule, see Stephen C. McCaffrey, *Some Developments in the Law of International Watercourses*, in PROMOTING JUSTICE, HUMAN RIGHTS AND CONFLICT RESOLUTION THROUGH INTERNATIONAL LAW 781-91 (Marcelo Kohen ed., 2007).

diversions and transnational watercourses agreements with commercial aspects would probably be considered as an unacceptable double standard and thus could not provide a sound legal basis for the (non-)application of trade law to a certain type of water transfer. I think that the law of the WTO confirms this idea, by not making the concept of ‘production’ determinative in all cases. In fact, the focus on the features that water must possess to be deemed a product moves to the background the fact that the physical nature of the substance is always more or less the same.⁹⁵ Since the non-discriminatory treatment of goods under the WTO law is premised on their classification as ‘like’ or ‘non-like’ products – a discrimination being permitted only against the latter – these categories must be taken into account when trying to categorize water.

Actually, the classification may even be a little more complex, as the Ad Note to Article III(2) GATT 1947 (‘National treatment’) further distinguishes between like products and “directly competitive or substitutable products”, the former being a subset of the latter in all cases where a tax is levied on domestic and foreign products that compete on the same market.⁹⁶ In the words of the Appellate Body members, for the purpose of applying Article III(2) “all like products are, by definition, directly competitive or substitutable products, whereas not all directly competitive or substitutable products are necessarily like products”.⁹⁷ Even if this distinction has legal consequences that are subject to speculation,⁹⁸ it is worth wondering where we should draw the dividing line between ‘like’ and ‘competitive’.

⁹⁵ It is true that the chemical composition of water may differ from case to case, but this has a limited bearing on the arguments that are exposed in the following lines.

⁹⁶ The text of the Ad Note reads: “A tax conforming to the requirements of the first sentence of paragraph 2 [making reference to “like products”, ed.] would be considered to be inconsistent with the provisions of the second sentence only in cases where competition was involved between, on the one hand, the taxed product and, on the other hand, a directly competitive or substitutable product which was not similarly taxed”. The very same expression (“directly competitive products”) appears also in Article XIX GATT 1947 on emergency actions on imports of particular products.

⁹⁷ *Japan – Taxes on Alcoholic Beverages*, ¶ 6.22, WT/DS8/R, WT/DS10/R, WT/DS11/R, Panel Report (Jul. 11, 1996). This view was confirmed by the Appellate Body in *Korea – Taxes on Alcoholic Beverages*, ¶ 118, WT/DS75/AB/R, WT/DS84/AB/R (Jan. 18, 1999), and with reference to another WTO-covered agreement using the same language, in *United States – Transitional Safeguard Measure on Combed Cotton Yarn from Pakistan*, ¶ 97, WT/DS192/AB/R (Oct. 8, 2001).

⁹⁸ According to an author, when dealing with the narrower class of ‘like products’ under Article III(2) of GATT 1947, which are classified so by virtue of their physical properties only, no specific proof of (potential) competition between them is required. See Robert E. Hudec, “Like Products”: *The Differences in Meaning in GATT Articles 1 and III*, in REGULATORY BARRIERS AND THE PRINCIPLE OF NON-DISCRIMINATION IN WORLD TRADE LAW 106 (Thomas Cottier & Petros C. Mavroidis eds., 2000) [hereinafter HUDEC].

From the Seventies onward, the WTO case law has consistently identified some criteria that could be used to assess the likeness of two products. Two of them are the physical characteristics of the goods and the extent to which they can perform the same function (so-called end use).⁹⁹ When the notion of competitive products came into play in relation to Article III(2), the concept of like products therein was narrowly construed so that the former would not be deprived of its meaning. However, the point where one category ends and the other begins has never been made clear by the WTO judges.¹⁰⁰ The question is complex and cannot be properly dealt with here. Notwithstanding this, it is worth noting that, in a landmark decision, a Panel defined the relationship between the two categories as follows: whereas the main parameter for establishing competitiveness is commonality of end uses, this feature is necessary but not sufficient to detect likeness, which also requires that the products compared are identical as to their physical properties.¹⁰¹ That is, it is presumed that two identical products will also have identical purposes: physical likeness goes hand in hand with common end uses.¹⁰²

⁹⁹ See *Report by the Working Party on Border Tax Adjustments*, ¶ 18, BISD/18, 97-109, GATT Working Party (Dec. 2, 1970), which also includes the consumers' habits. Subsequently, also tariff classification was added to the list, which remains a non-exhaustive one. See, e.g., *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products*, ¶¶ 102, 111, WT/DS135/AB/R, Appellate Body Report (Mar. 12, 2001).

¹⁰⁰ Perhaps significantly, the Panel in *Japan – Taxes on Alcoholic Beverages*, ¶ 6.22, WT/DS8/R, WT/DS10/R, WT/DS11/R (Jul. 11, 1996), noted that a series of criteria had previously been used “in order to define likeness or substitutability”. Actually, the cases quoted by the Panel use those criteria only to assess likeness, and its words seem an admission as to the difficulty of separating the grounds of likeness and those of competitiveness.

¹⁰¹ *Id.* As to the other parameters quoted above, *supra* note 98, an author has noted, with regard to the whole GATT 1947 and not only Article III(2), that “the ambience of many cases in the '80s and '90s could be read as implicitly suggesting that criteria related to the *functionality* of a product (for example physical or end use characteristics) are either *more important* than non-functional criteria (such as consumer taste and habit) or perhaps even *sufficient* for determining product likeness”. JASON POTTS, *THE LEGALITY OF PPMs UNDER THE GATT: CHALLENGES AND OPPORTUNITIES FOR SUSTAINABLE TRADE POLICY* 15 (IISD, 2008).

¹⁰² A somewhat similar conclusion may be observed in the Panel's decision in *United States – Standards for Reformulated and Conventional Gasoline*, ¶ 6.9, WT/DS2/R (Jan. 29, 1996), where it is stated that “chemically-identical imported and domestic gasoline *by definition* have exactly the same (. . .) end-uses” (emphasis added). This is a plausible reason why, when pronounced physical differences are present, “a higher burden is placed on complaining Members to establish that (. . .) there is a competitive relationship between the products”; *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products*, ¶ 118, WT/DS135/AB/R, Appellate Body Report (Mar. 12, 2001).

Although panels and the Appellate Body have repeatedly stressed that the likeness or competitiveness of products must be evaluated against criteria whose relative weight changes on a case by case basis, I think that the above-mentioned presumption is a further proof that strengthens the thesis that the case of water was not taken into account when the WTO was given life and that the organization cannot easily accommodate it.¹⁰³ Indeed, water seems to walk this presumption in the opposite direction. Even if a certain amount of water is 'like' another one as far as their physical properties are concerned, they may still not be directly competitive. The reason for this is to be found in the different amounts of water that are taken into consideration. One of the criteria that can be used to assess the substitutability of two goods is the fact that they serve the same, or at least a similar, purpose. Even though identical as to their material structure, different amounts of water are not necessarily capable of fulfilling the same functions.¹⁰⁴ In particular, bulk quantities are generally over-inclusive as to their end-uses as compared to smaller quantities since recourse to the former may be had in order to irrigate crops or cool down industrial machines – something that cannot be done by means of bottled water. On the contrary, the only practical purpose of bottled water (i.e., domestic use) is also covered, in principle, by bulk water. It is of course impossible to spot a precise threshold where a small quantity becomes a bulk

¹⁰³ See *supra* Part II (introductory part).

¹⁰⁴ One could relate this to the fact that “the physical properties of a product shape and limit the end-uses to which the products can be devoted”. *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products*, ¶ 102, WT/DS135/AB/R, Appellate Body Report (Mar. 12, 2001). This would entail that the quantity of water is a physical characteristic of the product and, in turn, that two different amounts of water are not like. Indeed, it is true that “[s]uch ‘characteristics’ might relate, *inter alia*, to a product’s composition, size, shape, colour, texture, hardness, tensile strength, flammability, conductivity, density, or viscosity”; *id.* ¶ 67 (the sentence refers to the notion of product characteristics under the Agreement on Technical Barriers to Trade, though “composition, size, shape, texture, and possibly taste and smell” are also listed by the Appellate Body as applicable to the idea of likeness; *id.* ¶ 92). The feature of size, in particular, seems to be relevant here. It played a major role in *Argentina – Definitive Anti-Dumping Measures on Carton-Board Imports from Germany and Definitive Anti-Dumping Measures on Imports of Ceramic Tiles from Italy*, WT/DS189/R, Panel Report (Sep. 28, 2001), where the Panel discussed it at length with regard to physical properties potentially useful for price comparability under Article 2(4) of the Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade 1994 (Anti-dumping Agreement). However, the case of water does not clearly fit this scheme, since the two characteristics of size (relevant to the likeness determination) and quantity (not relevant) cannot be discerned one from the other. In specific cases, other hypothetical properties of water could be used in order to assess the likeness of two different (or even identical!) amounts of water, such as the pressure needed to power a hydroelectric plant, although this blends with a ‘water as a service’ scenario, see *infra* Part IV.

quantity. It is likely that the position of this line changes according to the end-use considered. Whereas agricultural purposes may be served by moderate amounts of water, so that big tanks of water may compete with rivers in growing food, industrial uses are generally more water-consuming, and as a result the water transferred through big tanks cannot probably be deemed as ‘directly competitive’ with respect to the water of a river used to cool down a nuclear reactor.

These are only tentative examples, but they are of some relevance in our analysis. The objective likeness of two products, in fact (and contrary to the above quotation from the Appellate Body report), is probably not enough to establish the existence of a competitive relationship between them. Since it is also likely that the criteria of competitiveness and substitutability take precedence over likeness,¹⁰⁵ and in the light of the fact that the “maintenance of equality of competitive conditions” among products is the aim of the WTO regime,¹⁰⁶ we can conclude that two non-competing water transfers are not likely to be covered by its law even if they are ‘like’,¹⁰⁷ and possibly that... two competing water transfers are both covered irrespective of whether one of them is a product while the other is not.¹⁰⁸ In fact, if

¹⁰⁵ “Many of the criteria of likeness that have been offered in GATT legal discussions of the “like products” concept can be viewed as overlapping variations on the idea of competitiveness”. HUDEC, *supra* note 98, at 104.

¹⁰⁶ An aim that must be taken into account when interpreting the expression ‘directly competitive or substitutable product’. *Korea – Taxes on Alcoholic Beverages*, ¶ 127, WT/DS75/AB/R, WT/DS84/AB/R, Appellate Body Report (Jan. 18, 1999). This ‘object and purpose’ can be used to elide the requisite of production in the case of a peculiar substance – water – that can be transferred even if it has not been captured by man.

¹⁰⁷ One could object that autonomous legal consequences follow from a declaration of likeness, irrespective of whether the products at hand are also declared competitive: “if it were established that a foreign and domestic product were “like”, then any taxation of foreign products in excess of that on domestic products would breach Article III; if, however, foreign and domestic products were not “like,” but only “directly competitive or substitutable,” then difference of treatment would not be sufficient to constitute a violation; it would also need to be proved that internal taxes were being applied so as to afford protection”; Aaditya Matoo & Arvind Subramanian, *Regulatory Autonomy and Multilateral Disciplines: The Dilemma and a Possible Solution*, 2 (WTO Staff Working Paper, TISD9802.WPF, 1998), https://www.wto.org/english/res_e/reser_e/ptis9802.pdf. My counter-objection is that this is true only under the presumption that all like products are also competitive, which is not always the case when water is considered.

¹⁰⁸ For this reason, this view is not contradicted by the fact that one of the elements that can be taken into account when ascertaining the likeness between products, along with their end uses and the habits of consumers, is their tariff classification. The argument is based on the difficulty to demonstrate that non-products have such a classification, although in Part III I argue that tariffs may be applied to non-products too, provided they

the main and logical purpose of the WTO is to prevent unequal treatment of equal (and competitive) situations, then it is not unreasonable to argue that fairness requires that two water transfers are subject to the trade rules even if just one of them – and provided that at least one of them – is deemed to be a product.¹⁰⁹ This issue, however, is not easily resolved, in consideration of both the multi-purpose nature of bulk water (a feature that makes it competitive almost by definition with lesser amounts of water) and the one-way character of this relationship (i.e., the fact that a larger water transfer can compete with a smaller one that, in turn, does not compete with the former).

The provisional conclusions that we have reached so far suggest that the idea that water requires to be produced in order for it to be within the scope of the WTO might be wrong. This does not mean, however, that the ‘production factor’ cannot show up elsewhere in our analysis, for example as an element to be taken into account in the assessment of likeness among goods. Under this perspective, the fact that identical drops of water result from different ‘process and production methods’ (as they are usually called in WTO jargon) might render them non-like for the purpose of Articles I and III GATT 1947,¹¹⁰ though one of them might still compete with the other. This topic shall be further considered in Part III below. Now we can turn to the other requirement identified above for water to be covered by the WTO, that of its commercialization.

ii. *Water as a Valued Commodity*

“Unless water, in any form, is entered into commerce (. . .)”. This is the second condition set by Canada, Mexico and the United States in their joint declaration¹¹¹ – one that finds an echo in a recent WTO panel report.¹¹² The inclusion of this requirement should not be a surprise; after all it is almost common sense that trade rules apply to something that is traded and this explains why the same formula has

compete with a product. See *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products*, ¶ 101, WT/DS135/AB/R, Appellate Body Report (Mar. 12, 2001).

¹⁰⁹ This point is briefly addressed below, too; see *infra* note 153 and accompanying text.

¹¹⁰ On the uncertain status of process and production methods in the WTO case law see Robert Read, *Process and Production Methods and the Regulation of International Trade*, in *THE WTO AND THE REGULATION OF INTERNATIONAL TRADE: RECENT TRADE DISPUTES BETWEEN THE EUROPEAN UNION AND THE UNITED STATES* (Nicholas Perdakis & Robert Read eds., 2005).

¹¹¹ CANADIAN INTERGOVERNMENTAL CONFERENCE SECRETARIAT, *supra* note 18. I think that the expression ‘in any form’ which is always overlooked in literature acquires a potentially interesting meaning after our discussion of the thin (and discontinuous) lines separating the different ‘water products’ (rivers, diversions and pipelines).

¹¹² See *supra* note 72.

also been used by scholars in relation with other natural resources that, like water, are strategic and cannot be easily considered as regulated by international trade law under any circumstances.¹¹³ But what does the expression ‘entrance into commerce’ mean? After all, the very notion of ‘commerce’ has been found to be dynamic, with no fixed and pre-determined content by some important international courts,¹¹⁴ and the question is all but specious.

The attribution of a price to water is sometimes indicated as a potential or necessary factor. In the previous sub-Part, the idea of monetary compensation provided for in international water agreements establishing particular apportionment of the resource has been used to oppose the preventive exclusion of rivers from the application of trade law. It is evident that the existence of a price and the positioning on a market are strictly connected phenomena, so that the former may be thought of as a very good approximation of the latter. In the words of the European Court of Justice, “goods” covered by the European Union treaties include those “products which can be valued in money and which are capable, *as such*, of forming the subject of commercial transactions”.¹¹⁵ However, several aspects remain obscure. One that has been briefly touched upon above, concerns the relationship between the requirement of pricing (witnessing an entrance into the market) and that of production: are both necessary to make water an object of trade rules? Although the question has never been discussed openly and at length, a survey of literature reveals the absence of agreement, with both a positive¹¹⁶ and a negative¹¹⁷ answer having been given. Another problem is related to the fact that it is not clear whether the price is to be meant a payment for the good, the human intervention relating to it, or both.¹¹⁸ This should be made

¹¹³ Such as gas and oil; see Vitaliy Pogoretsky, *Energy Dual Pricing in International Trade: Subsidies and Anti-Dumping Perspectives*, in REGULATION OF ENERGY IN INTERNATIONAL TRADE LAW: WTO, NAFTA AND ENERGY CHARTER 192 (Julia Selivanova ed., 2011).

¹¹⁴ The notion of commerce has been defined as ‘evolving’ by the International Court of Justice in *Dispute Regarding Navigational and Related Rights (Costa Rica v. Nicar.)*, 2009 I.C.J. 213, ¶¶ 64-67 (Jul. 13). Similarly, although based on a different legal reasoning, see *Opinion 1/94*, [1994] ECR I-5267 (including trade in services within the common commercial policy of the European Union).

¹¹⁵ Case 7-68, *Comm’n of the European Cmty. v Italian Republic*, 1968 E.C.R 423 (emphasis added in order to highlight what is likely to be a causal nexus).

¹¹⁶ See TIGNINO & YARED, *supra* note 21, at 170; BOISSON DE CHAZOURNES, *supra* note 21, at 85. In both articles the two requisites of price and labour applied to water are seen as constitutive of the very notion of ‘product’.

¹¹⁷ For instance, De Haan, *supra* note 21, at 249, lists the price paid for water as only one of the possible pieces of evidence for qualifying large-scale water transfers as trade in water.

¹¹⁸ A similar comment (but looking at domestic water markets) is made by Cossy(A), *supra* note 21, at 177.

explicit as the answer could discriminate between commercial and non-commercial transactions (the latter being a possibility, should the payment be meant to cover only the costs relating to the building and/or the maintenance of the infrastructure) or more likely, between the selling of a good and the provision of a service.¹¹⁹ This second aspect addresses the question of ‘what’ the payment is for. We can, however, go further and raise another important question concerning the same topic. Most commentators implicitly assume that it is the outward-looking water transfers that are the object of the requirement of marketing and, thus, it is these that must be attributed a price. However, neither the joint statement nor the scientific literature identifying pricing as a requisite explicitly specify that the underlying transaction must be international in character. As a consequence, there is room to speculate that an entrance into commerce happens also when water is sold in the domestic market, e.g. to a country's own nationals through its water distribution network. It is immediately clear that a similar interpretation would have the inescapable effect of transforming all water resources of a state into marketed products, given the pervasiveness of water supply systems in almost all countries in the world – unless a threshold for price were set. Indeed, an intermediate stance between the straightforward rejection of this perspective and its unconditioned acceptance lies in construing the notion of ‘entrance into commerce’ as the requirement for a for-profit management of water. Simply put, only the setting of a market price (as suggested by many guidelines and policy papers¹²⁰) would transform water into a good, while simply charging a fee covering the production and other costs just to break even would not. However, to draw a firm line between the two options is very difficult, since the recovery of the ‘full cost’ of water might legitimately comprise a number of externalities that are seldom taken into account,¹²¹ and that are likely to make up for a large part of the price of the good.

¹¹⁹ As stated by HILDERING, *INTERNATIONAL LAW*, *supra* note 21, at 111. On this, see also *infra* Part IV.

¹²⁰ See *supra* notes 7-11 and related text. This approach is now slowly making its way to hard law instruments; for example, under the Protocol on Spatial Planning and Sustainable Development of the 2001 Alpine Convention, water “should be charged market prices which reflect the real cost of [its] supply and use”; *Water and Water Management Issues. Reports on the State of the Alps*, 205, Permanent Secretariat of the Alpine Convention (2009). This hypothesis is mildly rejected by Canada, which states that “probablement” municipal water services are not included in the notion of a product. For the full statement see Cossy(A), *supra* note 21, at 180.

¹²¹ The issue is raised in Antoinette Hilderling, *Water as an Economic Good*, in LES RESSOURCES EN EAU ET LE DROIT INTERNATIONAL/WATER RESOURCES AND INTERNATIONAL LAW 221 (Laurance Boisson de Chazournes & Salman M.A. Salman eds., 2005) [hereinafter Hilderling, *Water as an Economic Good*]. See also ELWELL, *supra* note 23, at 195. The awareness of policy-makers regarding this problem is growing. For instance,

The pricing of water is but one of the possible factors to decide whether it has entered into commerce or not. Others can be found in the domestic legislation of a country, or the treaty commitments it undertakes towards other countries. In fact, it may be that, irrespective of the question of pricing, a state or one of its organs (for example, its judicial branch) chooses to categorize water or a particular water source as an object of commerce. The most famous instance here is probably the *Sporbase* case, where the US Supreme Court declared unconstitutional a Nebraska statute forbidding commercial transfers of water.¹²² In such a scenario, it may be argued that the water resources of a state would turn into tradable products even in the absence of any actual international export. However, it must be noted that the task of assessing how a given legal order deals with water issues may not be an easy one. As a scholar has rightly pointed out, “there are several factors involved in determining whether or not a state has decided to make water a ‘good’ or part of commerce, including weak or ambiguous statements, silence, and action or inaction”.¹²³ This warns us that this approach should be handled with great caution.

Finally, a second option not involving the attribution of an unequivocal economic value to water (in the guise of a price) resides in its being sold against a payment in kind, or by means of any other system not implying a direct monetary payment. The United Nations itself, through one of its agencies, tells us that “[t]he trading of water entitlements involves the use of market forces to buy and sell, trade, or *barter* entitlements to freshwater resources that have previously been issued by the government”.¹²⁴ Thus, even barter may be considered as an outcome of the play between ‘market forces’. For example, water could be exported to a country free of

the European Union, while demanding that “where there are currently no tariffs, they need to be put in place”, remarks that water charges have “to be expanded so that the environmental and resource costs are internalized into the water users decisions”. *EU Report on the Review of the European Water Scarcity and Droughts Policy*, ¶ 4.3, EUR. PARL. DOC. (COM 672) (2012).

¹²² See *Sporbase v. Nebraska ex rel. Douglas*, 458 U.S. 941 (1982), which declared the Nebraska statute in breach of the ‘dormant Commerce Clause’ contained in Article I of the US Constitution.

¹²³ James M. Olson, *Navigating the Great Lakes Compact: Water, Public Trust, and International Trade Agreements*, MICH. ST. L. REV. (SPECIAL ISSUE) 1103, 1124 (2006) [hereinafter OLSON]. This is the reason why the author advocates a prudent approach whereby a State clearly expresses its intention not to put water as a good into commerce.

¹²⁴ UNEP, *supra* note 11, at 108 (emphasis added). The quotation goes on as follows: “Although such trades typically involve transfers of water rights in exchange for direct monetary compensation, there is nothing to indicate that other payment mechanisms may be any less effective”.

charge, by virtue of the co-financing on part of its government of the dam needed to divert the river from which the water is taken.¹²⁵ Alternatively, water could be exchanged against the hydroelectric power generated in the country towards which a river is diverted.¹²⁶ Of course, many other solutions can be figured out, and many different options assembled to form new ones, but they all share a common feature: whereas under other circumstances the unitary cost of water may well be subject to fluctuations depending on the conditions set by the accord and still be unambiguously identifiable, here the economic value of each unit of the good is difficult (or, sometimes, impossible) to calculate because water is sold against other goods (or services). It is worth noting that, in practice, this situation is similar to that where the terms of the transaction are inverted, that is, when a monetary payment happens within a lump-sum agreement providing for the transfer of a non-fixed amount of water.¹²⁷ Even more extreme cases can be exposed, where the economic value of the water that is the object of a transaction is not only indeterminate, but outright immaterial. We can think of a water export that is part of a bargain of political character, with the relevant provision... 'watered down' in a vast cooperation agreement between two or more countries, covering plenty of issues.

Although barter-like transactions and other commercial means collectively dubbed as 'countertrade' are not the standard scenario for the application of international trade law,¹²⁸ they can still be accommodated within its frame and entail some legal consequences. These will be discussed in detail in Part III. Here, it suffices to say that if the limitations to export restrictions apply whenever water is transferred for lucrative purposes (whether in a barter-like transaction or not), then the marketing of water, conceived as an action witnessing the will of a country to use water as something out of which to make an economic profit, is relevant. If these limitations apply to every bulk water transfer (thought to be *ipso facto* a proof of the availability of a state to admit water exports), including those that cannot be

¹²⁵ This example may be found, again, in De Haan, *supra* note 21, at 249.

¹²⁶ These conditions are akin to those pursued by the Treaty on the Lesotho Highlands Water Project, Lesotho-S.Afr., Oct. 24, 1986, available at: <http://www.fao.org/docrep/w7414b/w7414b0w.htm> (see, in particular, Article 4).

¹²⁷ The two conditions may realize simultaneously: e.g., the purchase of a continuous flow of water with a transaction in kind and in one single instalment.

¹²⁸ Murat Sumer & Jason Chuah, *Emerging Legal Challenges for Countertrade Techniques in International Trade*, 13 INT'L TRADE L. & REG. 111, 114 (2007). See also Nagla Nassar, *Alternatives to Cash in International Law and Practice*, in THE INTERNATIONAL LEGAL SYSTEM IN QUEST OF EQUITY AND UNIVERSALITY: LIBER AMICORUM GEORGES ABI-SAAB (Laurence Boisson de Chazournes & Vera Gowlland-Debbas eds., 2001). It is no surprise that neither article addresses the issue from the standpoint of international trade law, rather preferring a commercial law perspective.

labelled as commercial transactions, then the requirement relating to the ‘entrance into commerce’ can be put aside. This said, we can now turn our attention to one of the most neglected (at least by international lawyers) aspects of our topic, which has been summarized in the formula ‘water as an entitlement’.

iii. Water as an Entitlement

Many (and perhaps most) scholars commenting on bulk water transfers from the standpoint of international law focus on the functioning of supranational trade regimes, leaving aside all questions relating to the property of water. Inversely, a number of authors from different legal backgrounds have addressed this crucial issue,¹²⁹ which is likely to have significant repercussions for the legal feasibility of transboundary water sales.

For most commodities subject to trade provisions like those of the WTO, the question of ownership is not a concern. The status of water, however, is more problematic. Of course, each sovereign country can design the legal regime governing its purely domestic waters. In the United States, for instance, “[w]ater law does not treat the water as real property in the same sense as land is considered. It grants rights to use the water for a particular purpose”.¹³⁰ On the other side of the Great Lakes, “Canadian law generally recognizes water as a public resource but allows the establishment of private property rights to the use of

¹²⁹ See, together with other writings referenced in this article, JOSHUA GETZLER, *A HISTORY OF WATER RIGHTS AT COMMON LAW* (2004); DAVID SCHORR, *THE COLORADO DOCTRINE: WATER RIGHTS, CORPORATIONS, AND DISTRIBUTIVE JUSTICE ON THE AMERICAN FRONTIER* (2012). In relation to the trade in water, see also *WATER TRADING AND GLOBAL WATER SCARCITY* (Josefina Maestu ed., 2013).

¹³⁰ JOHNSON, *supra* note 83, at 29-30. On the US case, see also Elise L. Larson, *In Deep Water: A Common Law Solution to the Bulk Water Export Problem*, 96 MINN. L. REV. 739, 745 (2011) [hereinafter LARSON]; ANDREAS N. CHARALAMBOUS, *TRANSFERABLE GROUNDWATER RIGHTS: INTEGRATING HYDROGEOLOGY, LAW AND ECONOMICS* 93-94 (2013). It is worth noting that water laws in the United States differ from state to state. For example, the holder of a water right in Idaho is considered to have established a real property right to that water, much like property rights for land, whereas in California water rights are considered real property (they can be owned separately from the land on which the water is used or diverted) and can be transferred from one owner to another, both temporarily or permanently; *id.* at 324, 337. Water can be detached from land also in some parts of Australia. Francine Rochford, *Water Sovereignty and Food Sovereignty*, in *FOOD SECURITY IN AUSTRALIA: CHALLENGES AND PROSPECTS FOR THE FUTURE* 241 (Quentin Farmar-Bowers et al. eds., 2013).

water” that, yet, do not amount to full ownership.¹³¹ This situation is not peculiar to this water-abundant area, as it mirrors the legal discipline applicable to water in a large number of countries. In many common law and civil law States the ownership of this resource “lies with the public”,¹³² to the point that “public ownership of water has gradually emerged as the rule worldwide”.¹³³ The same view is held by another commentator, who even expands it to the international realm by writing that there are several reasons for which “States might conclude that international law requires or invites them to assert public control of water”.¹³⁴

It is hard to share such a point of view, and it is safer to assume that questions relating to the ownership and control of water are still a matter of domestic law only. If each State is entitled to decide to whom the ownership of water is to be attributed, whether other kinds of rights are to be recognized to non-owners, and under which conditions these rights are to be exercised, a fragmented legal landscape emerges as an unavoidable outcome. By way of example, we can note that “[a]lthough in most countries water belongs to the public domain, water use rights granted to private individuals or corporations [may be] protected under the property provisions of national and, in the case of federal countries, state or provincial constitutions”.¹³⁵ In addition, in case of the privatization of water services, it can be argued that a transfer of ownership to the companies that run them is not necessarily to be implied, as this possibility will depend on national law.¹³⁶ There is virtually no limit to the legal solutions that States can devise in order to set up the most just or efficient system for managing their own waters.

¹³¹ Randy Christensen & Anastasia M. Lintner, *Trading Our Common Heritage? The Debate Over Water Rights Transfers in Canada*, in EAU CANADA: THE FUTURE OF CANADA’S WATER 221 (Karen Bakker ed., 2007) [hereinafter CHRISTENSEN & LINTNER]. For a (perhaps non-crystal-clear) application of the concepts of ‘property’ and ‘entitlement’ to trade in water in the Canadian context, see Professor Shafer’s statements in DIAZ & DUBNER, *supra* note 18, at 32-33.

¹³² HILDERING, INTERNATIONAL LAW, *supra* note 21, at 97.

¹³³ And this involves groundwater too; SALMAN M.A. SALMAN & DANIEL D. BRADLOW, REGULATORY FRAMEWORK FOR WATER RESOURCES MANAGEMENT: A COMPARATIVE STUDY 144-45 (2006).

¹³⁴ Bryant Walker Smith, *Water as a Public Good: The Status of Water under the General Agreement on Tariffs and Trade*, 17 CARDOZO J. INT’L & COMP. L. 291, 306 (2009) [hereinafter WALKER SMITH].

¹³⁵ Miguel Solanes, *Water, Water Services and International Investment Agreements*, in GLOBAL CHANGE: IMPACT ON WATER AND FOOD SECURITY 221 (Claudia Ringler et al. eds., 2010). See, eg., Political Constitution of the Republic of Chile, art. 24. It goes without saying that this reinforced protection may strike a different balance between water rights and competing rights than that that we find in those countries where the threshold of the guarantees is set at a lower level.

¹³⁶ COSSY(B), *supra* note 22, at 136.

The manifold possibilities resulting from this freedom of action bring with them three problems. The first one is of a practical nature and is tied to the fact that a lawyer, and an international lawyer even more so, might find it difficult to orient herself in the thick forest of diverse laws, case law and interpretations concerning the rules governing the status of water across the world. In fact, countries may develop quite peculiar legal concepts, such as the curious difference between ‘wet water’ and ‘paper water’ developed by some US states.¹³⁷ In other cases, the uncertainties about the legal framework stem not from the inability of the lawyer to draw a reliable map of a given legal order, but, rather, from the fact that the order itself is, to some extent, blurred. For example, it might be arduous to assess the scope of water ownership and water rights where indigenous people are also asserting their sovereignty on the same water source¹³⁸ or where an evolving idea like that of public trust limits the power of the government to dispose of its natural resources.¹³⁹

A second problem lies in the possibly undefined nature of water rights. In this case, it is not the lawyer who has troubles in identifying the precise reach of the applicable rules, but it is the rules themselves that do not always allow for the allocation of certain and definite amounts of water (the emerging water futures market is, perhaps, an interesting exception to this¹⁴⁰). For instance, in the United

¹³⁷ See KIBEL, *supra* note 23, at 660. I borrow the qualification of “curious” from Peter W. Culp et al., *Shopping for Water: How the Market Can Mitigate Water Shortages in the American West*, THE HAMILTON PROJECT, 15, http://www.hamiltonproject.org/assets/files/how_the_market_can_mitigate_water_shortage_in_west.pdf (last visited Nov. 20, 2015).

¹³⁸ See, e.g., CHRISTENSEN & LINTNER, *supra* note 131, at 225; ALINE BAILLAT, INTERNATIONAL TRADE IN WATER RIGHTS: THE NEXT STEP 153 (2010) [hereinafter BAILLAT]. Even though most academic writings connecting indigenous peoples and water focus on the right of the former to the latter, it may be of some interest, here, to inform that some tribes do sell their waters. Justin Nyberg, *The Promise of Indian Water Leasing: An Examination of One Tribe’s Success at Brokering Its Surplus Water Rights*, 55 NAT. RESOURCES J. 181 (2014).

¹³⁹ On the concept of public trust, see OLSON, *supra* note 123, at 1113-16; LARSON, *supra* note 130, at 749-59; HILDERING, INTERNATIONAL LAW, *supra* note 21, at 97; KIBEL, *supra* note 23, at 670-72. See also Joseph W. Dellapenna, *Changing Legal Regimes: Changing State Water Allocation Laws to Protect the Great Lakes*, 24 IND. INT’L & COMP. L. REV. 9 (2014).

¹⁴⁰ In such markets, traders can buy water for delivery at a given date. One already exists in Australia. Rob Curran, *How to Bet on the Price of Water*, FORTUNE (June 25, 2014), available at www.fortune.com/2014/06/25/water-futures-markets. For an overview of various typologies of markets, see NILANJAN GHOSH & ANANDAJIT GOSWAMI, SUSTAINABILITY SCIENCE FOR SOCIAL, ECONOMIC AND ENVIRONMENTAL DEVELOPMENT 147-73 (2014).

States, under the theory of riparian rights, water rights are inchoate and their transfer from one holder to another may always be challenged by third parties.¹⁴¹ Moreover, before being adjudicated a riparian does not have the right to a fixed quantity of water.¹⁴² Thus, if water rights are unstable (i.e., they can be terminated more easily than it is possible for the ownership of most goods) and vague (that is, they can involve an unspecified and unspecifiable amount of water), can they be equated to other products, when traded abroad, for the purpose of applying the provisions of international trade law?

Finally, the third and last problem is inherent in the question just formulated: can the selling of water rights amount to the selling of a product (including water)? In fact, when a state transfers abroad part of its waters, it is most probably exporting a product. On the other hand, when one of its citizen is ceding water rights to a foreigner, he is giving up a mere permit to use the resource: even if those rights enjoyed the maximum degree of certainty and enforceability, and referred to a well-defined quantity of water, they would entail just a possibility to extract and consume the product, rather than representing the product itself. The WTO Appellate Body has affirmed that granting an exclusive right to a good is tantamount to providing that good,¹⁴³ but it did so in the context of a claim on subsidies and this equation might not stand under different circumstances.¹⁴⁴ After all, as seen above, the term ‘goods’ under the Agreement on Subsidies and Countervailing Measures does not necessarily bear the same meaning as the word “products” used elsewhere, e.g. in the GATT.¹⁴⁵

As said, the case of a state selling a part of the waters of one of its rivers is apparently simpler, since it is likely that it owns them. Legal theories like the public trust doctrine may, to some extent, hinder this decision and water rights overlapping with ownership rights may as well be an obstacle, depending on the

¹⁴¹ A. Dan Tarlock, *Water Transfers: A Means to Achieve Sustainable Water Use*, in FRESH WATER AND INTERNATIONAL ECONOMIC LAW 46 (Edith Brown Weiss et al. eds., 2005).

¹⁴² *Id.*

¹⁴³ In *United States – Final Countervailing Duty Determination with Respect to Certain Softwood Lumber from Canada*, ¶ 75, WT/DS257/AB/R, Appellate Body Report (Jan. 19, 2004) the Appellate Body “disagree[d] with Canada’s submission that the granting of an intangible right to harvest standing timber cannot be equated with the act of providing that standing timber” and, on the contrary, said to “believe that, by granting a right to harvest standing timber, governments provide that standing timber to timber harvesters”.

¹⁴⁴ The issue of international transfers of water rights has not been studied thoroughly enough yet. Even those authors who address the topic of trade in water rights from an international perspective mostly focus on the practice as it is regulated between the different states of a federal country. See, e.g., BAILLAT, *supra* note 138.

¹⁴⁵ See *supra* note 62.

legal order considered. Beyond this, however, the transaction seems to be less problematic than a cession of water rights – unless it involves a shared river. In fact, as seen above (Part II.B.i), the actions of riparian states that concern international watercourses are governed by the principle of equitable and reasonable use, that represents a flexible standard for the utilization of the waters of a river. However, it says nothing about the ownership of those waters. According to some scholars, “[a]bsolute sovereignty over natural resources is not appropriate for determining water rights or responsibilities”, and thus “[t]hey argue for the fundamental importance of dealing with utilization rather than possession of water”.¹⁴⁶ In this perspective, the equitable and reasonable use standard “does not assign property rights in water shares, but, rather, rights subject to re-evaluation based on an assessment of concrete criteria”.¹⁴⁷ A similar view is expressed by another author, who is convinced that, in the absence of any express indication on this matter in international water treaties, the applicable regime is meant to be the common owners of the international watercourse.¹⁴⁸ The language here is slightly ambiguous, since it is not clear which rights and duties the idea of ‘common property’ should entail under international law and in particular whether one state is entitled to sell to other countries waters that are ‘shared’.¹⁴⁹ Notwithstanding this, it appears that each riparian state is sovereign enough in

¹⁴⁶ BAUMANN, *supra* note 23, at 125.

¹⁴⁷ EYAL BENVENISTI, SHARING TRANSBOUNDARY RESOURCES: INTERNATIONAL LAW AND OPTIMAL RESOURCE USE 189 (2002).

¹⁴⁸ BAILLAT, *supra* note 138, at 73-74.

¹⁴⁹ The solution to this problem mostly depends on how common waters are conceptualized under international law. Although this does not provide a complete answer, we may say that, in general, “tout État a incontestablement le droit d'utiliser l'eau d'un cours d'eau international, mais n'a pas une souveraineté illimitée sur elle”, “[c]e n'est donc pas tant la ressource que doit être partagée que son utilisation par les États qui exercent leur souveraineté sur une partie de la ressource” (“undoubtedly each state has a right to use the water of an international watercourse, but it has not an unlimited sovereignty over it”, “thus, it is not the resource itself that must be shared, but its usage by the states that exercise their sovereignty on a part of the resource”); Fabienne Quilleré-Majzoub, *La question de la nature juridique de l'eau des cours d'eau internationaux: essai d'épistémologie*, 6 EUR. J. LEGAL STUD. 51, 67-68 (2013). See also Fabienne Quilleré-Majzoub & Tarek Majzoub, *Le cours d'eau international est-il une “ressource partagée”?*, 42 REVUE BELGE DE DROIT INTERNATIONAL 499 (2009). The whole issue is just a facet of that concerning the status of water: “[l]e droit international n'a toujours pas conféré un statut satisfaisant à l'eau du cours d'eau international”, since “les critères pour [la] définir sont considérablement moins développés que celles relatives au partage des eaux” (“international law has yet to recognize a satisfactory status to the water of international watercourses” since “the criteria for defining it are far less developed than those relating to the sharing of waters”). Fabienne Quilleré-Majzoub & Tarek Majzoub, *L'eau des cours d'eau internationaux comme “ressource naturelle”: imprécisions et paradoxes*, 58 ANNU. FR. DROIT INT. 395, 412-13 (2012).

relation to the international waters located in its own territory to be able to legitimately decide upon the conditions under which property rights or other water rights are granted to individuals, even if they are foreign nationals.¹⁵⁰

This concludes the survey of the three states of water (natural resource, good, or entitlement) for the purpose of deciding whether international trade law applies. This branch of law, however, is composed of many diverse provisions, and the idea of the application of trade law, which is often taken for granted, deserves to be further analysed. This will be done briefly in the next Part, with reference to the WTO system.

III. THE APPLICATION OF TRADE LAW TO BULK WATER TRANSFERS

During our examination of the legal states of water we have seen how different qualifications entail different consequences under international trade law. The fact that water is considered a resource rather than a good, or the fact of its transfer across state boundaries in the form of a good or in the guise of a water right, has a direct bearing on the application of international trade law. However, some further considerations need to be looked into, and to this end the WTO regime will be taken as the touchstone. Here I will discuss the functioning of a few key-provisions of the GATT 1947, while in Part IV other possible categories of water will be taken into account in order to understand how it can be framed under WTO law.

I will address three types of rules: the imposition of tariffs under Article II of the GATT 1947, the application of the non-discrimination principle under both Article I and Article III of the GATT 1947, and the ban on quantitative limitations to export according to Article XI of the GATT 1947. The working of the first provision is apparently less problematic. Article II requires that, for any product appearing in the schedule of concessions of a state, only the custom duties provided for in the relevant heading of the schedule itself be levied. Since these documents conventionally follow the classification set by the Harmonizing System, which includes water under one of its headings,¹⁵¹ all states granting concessions under that heading will have to levy a certain custom duty on all imported water products. In a similar scenario, the distinction between product and non-product,

¹⁵⁰ David M. Quealy, *Bayview Irrigation District et al. v. United Mexican States: NAFTA, Foreign Investment, and International Trade in Water – A Hard Pill to Swallow*, 17 MINN. J. INT'L L. 99, 114-15 (2008). The author refers to the property rights of US investors that had acquired water rights relating to the Rio Grande, a river crossing the boundary between the United States and Mexico.

¹⁵¹ See *supra* notes 65 and 66 and related text.

on which many authors hinge the whole (and vague) idea of the ‘application of international trade law’, seems to be relevant for sure. Tariffs will be applied to water transfers if, and only if, they are deemed as products; otherwise, they will be spared. Is it that simple? No, it is not, since tariffs are regulated also by the obligation not to discriminate between goods, and we have already seen that when the principle of non-discrimination comes into play an apparent paradox occurs.

The principle can be split into two components, the most-favoured-nation treatment rule (Article I) and the national treatment rule (Article III), that can be dealt with together since their functioning is analogous. In fact, both of them prescribe that non-discriminatory conditions, as far as custom charges and regulations are concerned, be applied to like products, meaning that the goods entering a country must be treated on equal terms with those produced in its territory and also with goods originating from a third state and entering the country. In this case, as I have already noted above,¹⁵² the idea of ‘product’ as the conceptual basis for the applicability of the WTO provisions (including Articles I and III) is likely to be misleading, given that two water transfers may be ‘like’ and/or ‘directly competitive and substitutable’ even if one can be named a product and the other not. Thus, not only can a water transfer be non-competitive in relation to another one, even if the objects that are materially moved from one country to another are ‘like’ (first paradox, since the class of ‘like products’ is a sub-category of ‘competitive products’), but two bulk water transactions may be competitive even if only one possesses the features of a product (second paradox).

The question is whether non-products, despite their status, are covered by WTO law or not. The answer depends on which factor one is inclined to accord priority to – the requirement of being a product or the ban on discriminations between competitive or substitutable goods. If the *ut res magis valeat quam pereat* principle seems to speak in favour of the first solution by maintaining that a term of the agreement (‘product’) should not be ignored so as to render it void, a teleological interpretation perhaps justifies the equalization of products and non-products that are mutually competitive as far as their customs and regulatory treatment is concerned. However, a potential third paradox emerges. It cannot be denied that, given the huge differences existing between diverse means of transferring water – the provision of water through a pipeline and its movement by means of an artificial diversion differ in many respects, let alone the selling of water in bottles – it is hard to make sense of a blind application of the non-discrimination principle, both between a product and a non-product and, even more notably, between two products. What is paradoxical is that two water transfers that, on the basis of their

¹⁵² See *supra* notes 96-110 and related text.

end-form (very large amounts of water that allow for the same usage), are in principle competitive, cannot be treated equally because the different ways in which water is moved call for different conditions. The solution is best given on a case-by-case basis, an unavoidable outcome given the complexity of the provisions involved and the potentially far-reaching scope of the non-discrimination principle.¹⁵³

However, what is probably the most important and delicate issue in the application of international trade law to water, concerns Article XI of the GATT 1947.¹⁵⁴ This provision bans non-tariff limitations on import and export of products, so that a state imposing quotas for goods entering or exiting its territory would be found in violation of the WTO law. Although seemingly clear, this rule has aroused much controversy as its legal consequences cannot be easily deciphered. Does it mean that WTO members have lost their right to freely manage their water and, if they so prefer, to restrict or even prohibit its export? In the following lines I try to shed some light on this question.

¹⁵³ For e.g., Article III:1 of GATT 1947 refers to “internal taxes and other internal charges, and laws, regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use of products”. VALIANTE, *supra* note 23, at 539-41, supposes that the non-discrimination principle might require the reformulation of water rights, which, e.g., sometimes grant historic users a privileged treatment.

¹⁵⁴ We can take it as paradigm, given that it is explicitly referred to as the applicable law by other trade agreements. *E.g.*, North American Free Trade Agreement, U.S.-Can.-Mex., art. 309, Dec. 17, 1992 32 I.L.M. 289 (1993); Comprehensive Economic and Trade Agreement art. 2.11, *available at* http://trade.ec.europa.eu/doclib/docs/2014/september/tradoc_152806.pdf; New Zealand-Australia Free Trade Agreement, ch. 2, art. 7, Aug. 31, 1965 554 U.N.T.S. 169; China-Australia Free Trade Agreement, art. 2.7, June 17, 2015, *available at* <http://dfat.gov.au/trade/agreements/chafat/official-documents/Pages/official-documents.aspx> (last visited June 15, 2016). CHOUDHURY, *supra* note 22, at 145, notes that limitations of exports might be prohibited also under Chapter 11 of the NAFTA – i.e., the part of the agreement relating to investment protection; in such a case the qualification of water as a good would not even be a requisite. However, access to water under investment law is outside the scope of this article – even though the topic is important. Indeed, investment treaties might extend their benefits (e.g., most-favourite-nation treatment and national treatment) beyond the post-establishment phase; see Jorge E. Viñuales, *International Investment Law and Natural Resource Governance*, in RESEARCH HANDBOOK ON INTERNATIONAL LAW AND NATURAL RESOURCES (K. Kulovesi & E. Morgera eds., forthcoming 2016), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2628400.

A possible interpretation tells us that only ‘products’ are subject to Article XI.¹⁵⁵ This simply follows from a plain reading of the text, which explicitly use that word. Thus, all the water that cannot be said to have been produced or, according to the approach taken, that cannot be labelled a ‘good’,¹⁵⁶ is invisible to Article XI, which as a consequence does not apply to it. The only effect of the provision would be that a government cannot forbid water, having undergone a process of production, from leaving the country. However, it would still be up to that government to decide how much water is to be transformed into a good: it is a stance that fully respects the principle of permanent sovereignty on natural resources,¹⁵⁷ by affirming that “only a state can make this (. . .) determination”.¹⁵⁸

At least one objection can be made against this approach. One could note that the possibility for a state to lawfully decide which part of its waters are destined for production and thus covered by Article XI actually amounts to legitimizing the setting up of a different kind of quotas – production quotas. Considering that, as the WTO Report on Natural Resources reminds us, “production restrictions have the same effect as export restrictions”,¹⁵⁹ would this situation not run counter to the prohibition of export limitations enshrined in Article XI? An authority in international trade law suggests that this question must be answered in the negative, based both on the letter and the spirit of GATT, and that even if this were not true, an assessment should be made on a case-by-case basis in order to see whether the production quota results in a segmentation of the market to the detriment of other WTO members, something that would not necessarily occur if, for example, the limited quantity of water ‘produced’ within a country were sold abroad in its entirety.¹⁶⁰ In my opinion this reading of Article XI is most certainly

¹⁵⁵ It is the position of the Government of Canada as recounted by JOHANSEN, *supra* note 73, in the paragraph “Export of Water as a Precedent”.

¹⁵⁶ *Supra* Part II.B.

¹⁵⁷ Not by chance, this principle has been invoked by China in both the *Raw Materials case*, *supra* note 15, ¶¶ 6.33, 7.265, 7.356 and 7.377-83; and *Rare Earths case*, *supra* note 15, ¶¶ 5.76, 5.78. Manjiao Chi, *Resource Sovereignty in the WTO Dispute Settlement: Implications of China–Raw Materials and China–Rare Earths*, 12 MANCHESTER J. INT’L ECON. L. 2 (2015).

¹⁵⁸ WALKER SMITH, *supra* note 134, at 310.

¹⁵⁹ *World Trade Report*, *supra* note 42, at 147.

¹⁶⁰ PETROS C. MAVROIDIS, *TRADE IN GOODS*, 62-63 (2nd ed. 2012). In the case of water, however, even such a condition would be problematic since it is difficult to imagine that all or even most water produced in a country be sent beyond its borders, not to speak of absolute bans of production. On the same topic, coming to similar conclusions, see BROOME, *supra* note 34; see also Michele Ruta & Anthony J. Venables, *International Trade in Natural Resources: Practice and Policy*, 2 (World Trade Organisation: Econ. Research & Statistics Division, Staff Working Paper ERSD-2012-07, 2012), https://www.wto.org/english/res_e/reser_e/ersd201207_e.pdf.

the right one; however, since no explicit judicial interpretation has been given so far by any WTO Panel or the Appellate Body,¹⁶¹ nor have its member states taken an official position on the issue,¹⁶² there is room to speculate that the real purpose of this ambiguous provision is not merely the avoidance of market segmentation (which might entail far-reaching consequences nonetheless), but the full availability of the world resources to every state.¹⁶³ In this perspective, the unrestrained power of a country to decide how much water should be turned into products would deprive Article XI of (part of) its *raison d'être*, ultimately making it a self-judging clause. The effect would be akin to what we would get if we construed the permission for a limited quantity of water to exit the country not as the enforcement of an export restriction but, on the contrary, an enabling decision (as such not prohibited by Article XI).¹⁶⁴ With both approaches, states would be granted wide latitude – too wide, one could argue.

¹⁶¹ Before the WTO era a Panel equated fish “harvest limitations” to “restrictions on domestic production”, but not much may be inferred from that sentence, which referred to Article XX(g) of the GATT 1947. See *Canada – Measures Affecting Exports of Unprocessed Herring and Salmon*, L/6268 – 35S/98 ¶ 4.4, Panel Report (Nov. 20, 1987). In *China – Measures Related to the Exportation of Various Raw Materials*, ¶ 7.428, WT/DS394/R, WT/DS395/R, WT/DS398/R (Jul. 5, 2011), the Panel went as far as suggesting a policy of restricting production rather than export, but the fact that it was discussing conservation measures under Article XX on exceptions might render this stance less meaningful.

¹⁶² According to Crosby, “most Members consider that the exploitation of natural resources (. . .) remains outside the scope of the WTO Agreements”. However, the only examples he brings to support this thesis are the 1993 statement, CANADIAN INTERGOVERNMENTAL CONFERENCE SECRETARIAT, *supra* note 18 and Article 18(3) of the Energy Charter Treaty. See Daniel Crosby, *Background to WTO Rules and Production/Trade Restrictions in the Field of Energy*, in GLOBAL CHALLENGES AT THE INTERSECTION OF TRADE, ENERGY AND THE ENVIRONMENT 83-84 (Joost Pauwelyn ed., 2010).

¹⁶³ The Preamble of GATT 1947 is quite eloquent: the “relations in the field of trade and economic endeavour should be conducted with a view to (. . .) developing the full use of the resources of the world and expanding the production and exchange of goods”. The Preamble of the Marrakesh Agreement that established the WTO sets a limit (“the optimal use of the world’s resources” must happen “in accordance with the objective of sustainable development”), but its scope can hardly be assessed.

¹⁶⁴ This is an absolutely correct reading of Article XI. Unfortunately, it could be very difficult to enforce it outside those very few – if any – legal orders where trade in water is driven by market forces. It is true that when a state is selling the water of one out of two lakes, it is conducting a commercial activity and not issuing a trade-restricting law. However, governmental actions, although not legislative in nature, may count as ‘measures’ for the purpose of applying Article XI. See *India – Measures Affecting the Automotive Sector*, ¶¶ 7.245-53, WT/DS146/R, WT/DS175/R, Panel Report (Dec. 21, 2001). Moreover, since (almost) everywhere water is (almost) completely controlled by the state, the situation resembles a monopoly. State-owned enterprises acting as monopolies cannot breach the prohibition of export restrictions. See ANALYTICAL INDEX OF THE GATT - GUIDE TO

For this reason, a brief analysis of the competing legal positions is due. Considering all water resources of a country as free to be drawn from by any other WTO member is a possibility that we find at the other pole of the spectrum and because of its serious negative consequences on state sovereignty, it is probably to be discarded as excessive. However, an element of mitigation could be introduced by identifying a limit, a presumably objective one, to the right of states to access the waters of another member. Thus, for example, a country might be able to get a share of only those resources that are fully located within the boundaries of another country, on the premise that international watercourses and more generally, transboundary waters cannot be appropriated.¹⁶⁵ Not necessarily in the alternative, the constraint might be formulated as a threshold, being that states are authorized to extract water from foreign basins only up to a certain amount, so as to preserve the environmental health of the whole ecosystem. But it is probably difficult to spot any fault in the assertion that in a basin “there is never a ‘surplus’ of water”,¹⁶⁶ so that any withdrawal would risk damaging the natural balance of the system.

In between the above-mentioned extremes (Article XI as a self-judging provision, on the one side, and its coverage of any water resources, on the other) stands another option: the waters of a country may be appropriated by other states as soon as the former decides to ‘produce’ a part of it or as a far less intrusive solution, to export it. In this light, transboundary water transfers become ‘precedents’:¹⁶⁷ one of them suffices in order to open up the water resources of a country to the rest of the world. This approach, which once again makes the distinction between products and non-products collapse, has been strongly rejected by some countries, Canada among them,¹⁶⁸ and indeed is hard to accept because of the evident disproportion between cause and effect and also because of the seemingly retributive intent sparked by what is seen as a manifestation of the

WTO LAW AND PRACTICE 321, WORLD TRADE ORGANISATION, https://www.wto.org/english/res_e/booksp_e/gatt_ai_e/art11_e.pdf. Even if a state is not a state-led enterprise, it is likely that the same principle applies (perhaps it is not by chance that, albeit the quoted case law refers to monopolistic companies, the Index speaks more generally about “state-trading operations”).

¹⁶⁵ This depends, *inter alia*, on how common waters are conceptualized and how the relationship between water law and trade law is understood; see *supra* notes 84-94 and 149 and accompanying text.

¹⁶⁶ INTERNATIONAL JOINT COMMISSION, *supra* note 2, at 43.

¹⁶⁷ On this approach, see JOHANSEN, *supra* note 73, in the paragraph “Export of Water as a Precedent”.

¹⁶⁸ INTERNATIONAL JOINT COMMISSION, *supra* note 2, at 68.

animus lucrandi of a state. That is, governments not practicing “temperance” and rather indulging in the movement of their waters, as opposed to leaving them untouched, would be considered to be desecrating those waters and punished with the triggering of Article XI; availability to transfer water once is artificially read as availability to transfer it without limits. The punitive intent persists even if the decision to export, taken at a local level, is said to ‘set free’ not the water resources of the whole state but only those under the jurisdiction of the local entity involved.¹⁶⁹ All in all, the logic underlying this triggering mechanism seems unreasonable and legally untenable.

This brief overview was not meant to exhaust the issue of the application of trade law to water transfers. Even accepting what I believe is by far the most plausible solution (that is, the idea that only water products are affected by Article XI as long as export quotas, either *de jure* or *de facto*, do not segment the market) a plenty of factors comes into play calling for consideration and ultimately making any clear-cut answer impossible. In fact, all the elements that have been reviewed above while discussing the production and commoditization of water, and many other that I could not take into account, put together a composite mosaic that does not fit the simple WTO framework of non-resource products and their mutual (un)likeness. For example, a withdrawal of water (for commercial purposes) where the used good, or what remains of it, is brought back to the basin wherefrom it was extracted cannot be compared to one where water is sent thousands of miles away from its source. Similarly, from the standpoint of international trade law, differences might exist between those cases where water is an end-product (e.g., for domestic uses) and those others where it is an input for the production of other goods. The list could go on. In the next Part of this article, one further taxonomic problem relating to the WTO system will be addressed.

IV. THE CLASSIFICATION OF WATER FOR THE PURPOSE OF CHOOSING THE APPLICABLE TRADE RULES

Let us assume that a bulk water transfer falls entirely within the scope of the WTO system: what status must then be bestowed upon it with a view to applying the relevant provision? For instance, one might wonder whether water goods are to be considered as belonging to the class of ‘primary products’ that is mentioned in, e.g., Article XVI of GATT 1947 on subsidies.¹⁷⁰ The choice of the appropriate

¹⁶⁹ This would be a consequence of the fact that only that entity would be violating the WTO law. BROWN WEISS, *INTERNATIONAL LAW*, *supra* note 4, at 259.

¹⁷⁰ Tim Josling, *New Trade Issues in Food, Agriculture, and Natural Resources*, in *THE OXFORD HANDBOOK ON THE WORLD TRADE ORGANIZATION* 668 (Amrita Narlikar et al. eds., 2012).

category is likely to have extensive effects, since it determines which WTO covered agreement suits the transaction best and, as a consequence, which tariffs, rules (on monopolies, subsidies, non-discrimination, etc.) and exceptions are to be applied. In the following paragraphs, however, attention will be paid to the possible qualification of water rather than to the differences among the applicable legal regimes.

A basic distinction is represented by the dichotomy of goods and services. In fact, although this article has so far taken for granted that the water sold in bulk by a country to another falls within the category of goods, the extraction and distribution of water fits not only the notion of ‘production’, but also that of ‘provision of a service’. This has been noted by a large number of authors,¹⁷¹ and some of them have also stressed that the same confusion exists both among states parties to the WTO,¹⁷² and the drafters of one of the technical instruments to which these countries refer when classifying their commitments in their schedules of concessions.¹⁷³ But, if even standard classifications do not shed a clear light on this issue, how are we supposed to distinguish between water as a service and water as a product?

A reformulation of the question may perhaps help us frame the problem better: is the provision of water a service or the delivery of a product? In this sentence is clearer that the provision of water can be broken up into two parts: the withdrawal of water (i.e., the phase of production) and its transportation to the buyer, the

¹⁷¹ TIGNINO & YARED, *supra* note 21, at 170-72; BOISSON DE CHAZOURNES, *supra* note 21, at 86; Hilderling, Water as an Economic Good, *supra* note 121, at 230; COSTAMAGNA & SINDICO, *supra* note 21, at 277.

¹⁷² Cossy(A), *supra* note 21, at 198 (“il y a controverse entre les membres de l'OMC sur la question de savoir si les service de production (. . .) doivent être considérés comme des services entant que tels, et être dès lors soumis aux disciplines de l'AGCS, ou s'il fait considérer qu'il s'agit d'activités manufacturières, auquel casseraient applicable les dispositions du GATT concernant les produits”) (“among WTO members, it is disputed whether production services should be considered as mere services and thus be subjected to the rules of the GATS, or we should conceive them as manufacturing activities to which the product-related provisions of the GATT apply”). The issue – especially as it concerns water – “continues to be a matter of disagreement in international trade negotiations”. Bernard Sinclair-Desgagné, *The Environmental Goods and Services Industry* (Jan. 2008), <https://www.uclouvain.be/cps/ucl/doc/core/documents/sinclair2.pdf> [hereinafter SINCLAIR-DESGAGNÉ].

¹⁷³ COSSY(B), *supra* note 22, at 123. The reference here is to the Provisional Central Product Classification, which has been repeatedly revised. With a debatable argument, the same author also sides with the faction that considers transboundary water transfers as covered by GATT only. *See id.* at 134.

latter being a service, precisely, a transport service, consisting in delivering a product to its future owner (if there is no owner, such as in the case of water distributed for sanitary purposes, the contours of a service are even more recognizable and possibly the production phase is skipped¹⁷⁴). By identifying the various stages of what is apparently a single transaction, this solution seems to be able to capture the complexity of the economic world. According to one scholar, “[t]he WTO jurisprudence is clear that a single commercial activity and even a single measure can be covered by the rules of both the GATT and the (. . .) GATS”, and therefore we need to clarify which of its aspects are governed by which agreement.¹⁷⁵ However, things are not as simple as that.

Indeed, there are cases where the same amount of water destined for the same purpose might belong to two different categories, according to the means used to transfer it. Think of the transportation of water across a state boundary in order to make sewage operational. If done through a pipeline, it would most probably fall within the ambit of transport or environmental services (depending on whether the company running the sewage is local or not); if, differently, water were sent abroad by exploiting the natural course of a river, no service whatsoever could be detected, and thus the purchase of water could not but be an instance of trade in goods. But the problem is more radical. In fact, from a theoretical point of view the notions of ‘service’ and ‘product’ are blurred,¹⁷⁶ and we automatically subsume economic activities under one of them mostly because of our consolidated mental habits. On closer inspection, however, our convictions would not be able to withstand a rational scrutiny. Another example is perhaps useful. If we see a finite quantity of severable items (e.g., one hundred cars or one hundred tons of apples) crossing a state boundary, we are certain that goods have been sold within an international transaction. If we see a continuous flow of water crossing that very boundary in order to serve the water distribution network of a foreign city, we are equally sure that a service is being provided. If, however, the same flow of water crosses the same boundary in order to be stored in a cistern or a well from which it is withdrawn to irrigate crops, many of us will tend to believe that a good is being

¹⁷⁴ This does not necessarily mean that water has not been produced in the sense discussed in Part II.B. Solving this issue is relevant to determine whether some legal effects occur, for example the consequences of the triggering mechanism described in Part III, if one is keen to believe in its existence.

¹⁷⁵ Gabrielle Marceau, *The WTO in the Emerging Energy Governance Debate*, 5 GLOBAL TRADE & CUSTOMS J. 83 (2010). The author refers to *China – Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products*, WT/DS363/AB/R, Appellate Body Report (Dec. 21, 2009).

¹⁷⁶ As implicitly recognized by the GATT itself; indeed, in the *Ad Article XVII*, Paragraph 2 it is said that “the term ‘goods’ (. . .) is not intended to include the purchase or sale of services” – as if the meaning of this word itself would not bar this possibility.

traded – notwithstanding the fact that this third case has *prima facie* more to do with the second one than with the first one, having in common with the former both the consumptive use of the product and, in particular, the continuity of its delivery, which easily involves the on-going management and upkeep of the waterway.

The factors that we use, consciously or not, in order to attribute to a commercial activity the status of a product or a service are many. One of them, which is quite evident in the example above, is the fact that water may be seen both as a good detachable from the means used to transport it, and then storable in tanks and reservoirs (water for agriculture), and as something that is much more inextricably connected with the network through which it is transferred (drinking water and sanitation): the former being a product, the latter, a service. Here a parallel can be drawn with energy, since fossil fuels, which are storable, are goods whereas the energy produced consuming them is deemed to be a service by virtue of its inseparability from the grids used to serve factories and households.¹⁷⁷ This consideration allows us to propose again a second factor that we have briefly encountered before, that is, the cost of water and what it is paid for. In case the price is paid for the resource, then water is a good; on the contrary, if it covers the delivery of water, we are paying for a service.¹⁷⁸ This, however, is an oversimplification, given the fact that it can prove to be impossible to split the cost of a complex activity into its service-related and product-related components, and also because, “[a]s full-cost pricing becomes more widely adopted as a measure to induce conservation, the line between the two will become blurred”.¹⁷⁹

A third element is also visible in the example above. As is natural, we tend to associate certain functions and end uses with different commercial categories. Thus, if a company pumps water abroad to run a municipal supply business, we are used to seeing it as a service; if it sends water to foreign farmers who are not reached by the distribution network of their state, it is selling a product even if, to do so, it has to assure continuous maintenance of the pipeline through which water crosses the boundary. This is so partly because of the reasons explained above and partly because the running of the water supply system of a city is normally associated with the provision of a service, and carrying out an analogous activity in a different context can result in a change of category. Interestingly, the functions and end uses I am writing about do not only allow choosing a class along the divide good/service, but they also permit to do so within those very classes. In

¹⁷⁷ Thomas Cottier et al., *Energy in WTO Law and Policy*, in *THE PROSPECTS OF INTERNATIONAL TRADE REGULATION: FROM FRAGMENTATION TO COHERENCE* 222 (Thomas Cottier & Panagiotis Delimatsis eds., 2011).

¹⁷⁸ See *supra* note 120.

¹⁷⁹ VALLIANTE, *supra* note 23, at 534 n. 34.

fact, goods and services can be better qualified so as to make clear which good and which service we are dealing with. Water services, for instance, are usually put in the category of ‘environmental services’.¹⁸⁰ However, they may find themselves in a different family of services when provided in conjunction with other activities that, for some reasons, are seen as prevalent: when a water treatment plan is built and operated by a company for a decade long period during which the company is paid for the service, “it could be most obviously classified as engineering [...], and then the water operating service attached to it becomes covered as well”.¹⁸¹ It goes without saying that the classification of a service has an impact on the market of WTO members, since they could be forced to accept foreign competition in some water-related services even if they have not made, in their schedules, any explicit concessions directly concerning water supply.

Multiple sub-categories are also contained in the main family of goods, which can be divided into agricultural goods, environmental goods, and other goods not comprised in the first two classes (that is, the standard products covered by the GATT). Actually, it is the last category that includes the other two, since agricultural goods currently are and environmental goods might be in the near future, governed by different rules only to a limited extent and otherwise subject to the provisions of the GATT 1947. In fact, a parallel treaty, the Agreement on Agriculture (‘AoA’), has been devoted to the liberalization of agricultural goods, a complete legal regime whose Article 21 provides for the (residual) application of GATT insofar as it does not enter into conflict with the AoA itself. As to environmental goods, negotiations are being held since July 2014 in order to draft a list of goods (and possibly services) that will benefit from a duty-free condition (and possibly other advantages in the field of non-tariff barriers).¹⁸² The question is: to which of these categories does water belong?

¹⁸⁰ Although, apparently, there are disagreements about that; SINCLAIR-DESGAGNÉ, *supra* note 172, at 13.

¹⁸¹ Stephen Thomas & David Hall, *GATS and the Electricity and Water Sectors*, PUBLIC SERVICES INTERNATIONAL RESEARCH UNIT (Mar. 14, 2006), available at: <http://www.psiu.org/sites/default/files/2006-03-WE-GATS.doc>. In the Central Product Classification there are specific headings for this: those numbered 54231 (General construction services of aqueducts and other water supply conduits, except pipelines), 54241 (General construction services of long-distance pipelines) and 54253 (General construction services of sewage and water treatment plants), among others.

¹⁸² See *G Azevêdo welcomes progress in Environmental Goods Agreement*, WORLD TRADE ORGANISATION (Dec. 14, 2015), available at: https://www.wto.org/english/news_e/news15_e/envir_14dec15_e.htm. Till date, news about eleven rounds of negotiations has been made public, the latest one having been held in early December in Geneva.

It has been said to be ‘self-evident’ that water is a type of foodstuff.¹⁸³ Indeed, it is a primary product that is necessary for the survival of animals (human beings included) and plants. It is contained in large amounts, both concretely and ‘virtually’,¹⁸⁴ in food and shares with other natural goods the need to be paid special attention because of the particular conditions of its production (subject to droughts and other calamities) that threaten to bring about sudden and dramatic increases in its price. Moreover, as has been noted, water appears in the Harmonized System under Chapter 22 devoted to ‘beverages’, a chapter that is covered by the AoA as provided by its Annex 1. In light of this, a commentator has gone so far as to suppose that water would be a product and thus be governed by the rules of the WTO, only whenever destined for consumption, whereas agricultural and industrial uses would be left outside the scope of the regime.¹⁸⁵ I find this stance unconvincing both from a theoretical and a practical point of view. As to the former, it must be reminded that the Harmonized System is not meant to be an instrument sorting out what is covered by the GATT 1947, but is to be regarded merely as laying down guidelines (not binding but possessing an interpretive value¹⁸⁶) for determining which products profit from a particular tariff condition. In the absence of one or more headings specifically devoted to water as a non-agricultural product, it is probably more logical to infer that no tariff-related concessions were made for that product under Article II of the GATT 1947, all other provisions (in particular the non-discrimination principle) remaining applicable to transboundary water transfers with non-drinking purposes. Furthermore, from a practical point of view, most of the times it would be impossible to know for sure which function water will be serving once exported. Water has a great number of end-uses, and it is plausible that the millions of cubic meters of liquid transported by means of a pipeline will be put to many different uses.¹⁸⁷

The versatility of water can also have some effects when environmental goods are concerned. It is certain that the prospected Agreement on Environmental Goods, the text of which is expected to be completed by the end of 2016, will have the

¹⁸³ SINDICO, *supra* note 21, at 164.

¹⁸⁴ I am referring to the so-called virtual water. *See, e.g.*, BROWN WEISS & SLOBODIAN, *supra* note 54.

¹⁸⁵ Cossy(A), *supra* note 21, at 174. This hypothesis is also expressed – without quoting any source – by the *World Trade Report*, *supra* note 42, at 162.

¹⁸⁶ *See supra*, note 64.

¹⁸⁷ This is not an objection if one believes that only those transport modes that grant that water will be consumed as foodstuff (i.e., bottles and small-sized tanks) are covered by WTO rules. This, however, could have discriminatory effects since bulk quantities also may be used for nourishment purposes.

form of a plurilateral treaty,¹⁸⁸ and will not include water. Browsing through the lists that are being circulated during the negotiations, it is evident that attention has been focused on other kind of goods: technological products serving environmental purposes, a lot of which have a water-sparing function.¹⁸⁹ Of course, this does not mean that water cannot be, *per se*, an environmental good; this is demonstrated by the conventional inclusion of water services in the category of environmental services,¹⁹⁰ and also by the fact that at some point during the long pre-negotiation history of the agreement, foodstuffs (e.g., the yield of organic crops) were discussed as potentially relevant.¹⁹¹ But the states involved in the talks chose another direction – one that might pose a further obstacle to the recognition of water as an environmental good. In fact, several countries “have tabled an informal document stressing the importance of only liberalizing trade in environmental goods that serve a single environmental end-use”, putting aside multiple-use products.¹⁹² For the reason stated more than once in this article, water would fall outside the scope of such an agreement.

V. CONCLUSION

Our survey of the manifold legal guises that water may assume when approaching international trade law, and those it may assume when hosted within the

¹⁸⁸ In the legal jargon of the WTO, a plurilateral agreement is an instrument that does not bind all members of the Organization. In fact, almost all developing countries have not been attending the negotiations, for reasons explained in Mark Wu, *Why Developing Countries Won't Negotiate: The Case of the WTO Environmental Goods Agreement*, 6(1) TRADE L. & DEV. 93 (2014) [hereinafter WU].

¹⁸⁹ By way of example, see the full list of Norway's nominations, that the country has made publicly available; Copy of Norwegian Nominations, <http://www.norway-geneva.org/PageFiles/776371/Copy%20of%20Copy%20of%20Norwegian%20Nominations%20Total.pdf> (last visited Nov. 20, 2015).

¹⁹⁰ There is no reason why the tubes and pipes needed to build a sewer should be considered (as they are) environmental goods, while the water flowing inside them – and ultimately doing the cleaning job – should not. Moreover, the inconsistency of the approach taken towards water would be even greater in the case the negotiating parties decided, now or in the future, to complement the agreement with environmental services. It would be odd to include the management of a municipal water supply network while leaving aside water supply.

¹⁹¹ Robert Hamwey, *Environmental Goods: Identifying Items of Export Interest to Developing Countries: CBTF Briefing Note Prepared by the UNCTAD Secretariat*, 9 (Jul., 2004), http://s3.amazonaws.com/zanran_storage/www.unctad.org/ContentPages/8633012.pdf [hereinafter HAMWEY].

¹⁹² Gaëlle Balineau & Jaime de Melo, *Removing Barriers to Trade on Environmental Goods: An Appraisal*, 12 WORLD TRADE REV. 693, 706 (2013). See also Wu, *supra* note 188, at 102-03; HAMWEY, *supra* note 191, at 8.

boundaries of this branch of law, reveals a situation where it is by far easier to raise questions than to provide answers. This is certainly a problem from the point of view of the legal practitioner. From the perspective of the jurist, however, the intersection of water transfers and international trade law is an absorbing challenge, as it offers a unique occasion to better understand the functioning of trade rules by testing them against a scenario that is quite different from the ones for which they were devised. Since this consideration might not be enough to prevent the collision between these two worlds, scholars must be prepared to face the possibility that water will be, sooner or later, dragged into the orbit of trade law. Working on the purview of the exceptions to the regime, especially those aimed at preserving exhaustible natural resources,¹⁹³ is only a part of the job (albeit an important one), the other part being the investigation of ‘when’ and ‘how’ water exports in bulk relate with trade law.

As I hope I have partly demonstrated through this article, this task can be quite technical. International trade law is a highly specialized field of law, composed of complex rules that mutually interact to further increase the degree of complexity of the system. Applying them to the case of water transfers is a way to assess their scope and consistency. But it also represents an opportunity to bring into the system some ideas with which international trade law is not acquainted but that are, or are becoming, inextricably linked with water: that natural resources, as a part of nature, are not necessarily appropriable or cannot be owned in the conventional meaning of the term, and that this condition is the (legal) basis of truly sustainable development. Who knows, the (possibly emerging) notion of common goods and the (possibly inchoate) right of non-use¹⁹⁴ might find, in the future, the concreteness and the official legal sanction they now certainly lack, thanks to a water-related claim before the trade judge.

¹⁹³ For a recent account of how the WTO deals with the issue, see Manjiao Chi, “Exhaustible Natural Resource” in *WTO Law: GATT Article XX (g) Disputes and Their Implications*, 48 J. WORLD TRADE 939 (2014).

¹⁹⁴ JAN G. LAITOS, *THE RIGHT OF NONUSE* (2012).