What’s in a name? The Silala waters and the applicability of international watercourse law

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1. Introduction

Several interstate disputes concerning the non-navigational uses of international watercourses have come before the International Court of Justice (ICJ or Court), as well as its predecessor the Permanent Court of International Justice, since its establishment.³ While these cases have undoubtedly contributed to the development of international watercourse law,² a fundamental question that the Court has yet to face is the precise scope of this body of law, ie, the types of watercourses that fall within its purview.³ The recent case submitted by Chile concerning its dispute with Bolivia over the Silala water system seems to provide the Court with the opportunity to address, for the first time, this unsettled issue.

The Silala water system rises from groundwater springs located at approximately 4,400 meters altitude in Bolivia and a few kilometers north-east of the Chile-Bolivia international boundary.⁴ Most of the springs are drained by a series of man-made channels on Bolivian territory and join to form a principal canal that then crosses into Chile and connects with

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¹ These include the Meuse River dispute between Belgium and the Netherlands, the Gabčíkovo–Nagymaros dispute between Hungary and Slovakia, the Pulp Mills dispute between Uruguay and Argentina, and the San Juan River dispute between Costa Rica and Nicaragua.

² The body of law governing non-navigational uses of international watercourses.

³ The above-mentioned cases all concerned usage disputes and did not raise the issue of the status of the water resources as international watercourses since the parties had all acknowledged them as such.


QIL, Zoom-in 39 (2017), 5-22
other rivers to form a tributary of the Loa River. The artificial channels carrying the water into Chile were constructed in 1908 by a Chilean mining corporation under a concession granted by Bolivia. In its Application, Chile requests the Court to ‘declare that the Silala River system is in fact and in law an international watercourse whose use by Chile and Bolivia is governed by customary international law’, which would entitle it to a reasonable and equitable share of the waters. Chile bases its request, *inter alia*, on the claim that Bolivia has recognized the Silala as being an international river and has acquiesced to Chile’s use of its waters for many years. This argument, however, will not be addressed in the present article. Rather, the article will focus on Chile’s claim that the Silala crosses the border from Bolivia to Chile naturally as a result of gravity, that the artificial channels did not alter its natural flow, and that it is therefore ‘international’. Bolivia, on the other hand, denies there is a Silala river and claims complete ownership over the Silala springs on the ground that they originate in its territory and that the waters are transported artificially into Chile as a result of man-made changes to their natural course by way of canalization. Accordingly, Bolivia argues that the Silala does not qualify as an ‘international watercourse’ and that Chile has no right to use its waters without Bolivia’s consent and without paying it compensation. A preliminary and key issue in the case therefore appears to be

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6 ibid.
7 cf Chile’s Application (n 4) [4]. Neither Chile nor Bolivia are parties to the 1997 UN Convention on the Law of the Non-navigational Uses of International Watercourses, nor have they concluded a bilateral agreement concerning the use of the Silala.
8 ibid [3], [11], [14], [20], [22], [45]. In its Application Chile also mentions groundwater forming part of the Silala River system and crossing its boundary with Bolivia, arguing that ‘[t]he surface flows of the Silala River emanate from groundwater springs in the Orientales and Cajones Ravines, which are fed by an aquifer that itself straddles the border between Bolivia and Chile’, ibid [2]. A detailed discussion of this argument is beyond the scope of the present article.
9 ibid [2], [12-13], [15-16], [21], [44].
10 cf Mulligan, Eckstein (n 5) 603; Chile’s Application (n 4) [23-25], [32].
11 According to one news source, Bolivia has requested the ICJ to send experts to the Silala River as well as conduct a site visit in response to statements made by a hydrology expert appointed by Chile that the Silala spring is an international watercourse <http://plenglish.com/index.php?option=10438&SEO=bolivia-to-request-intl-court-of-justice-to-send-observers-to-silala> accessed 2 April 2017.
the legal status of the Silala as an ‘international watercourse’, which, as already noted, is a novel question that merits exploration.

The query posed in this article is thus simple yet fundamental: what types of watercourses does international watercourse law apply to? A watercourse system ‘will always have certain kinds of components (such as streams, their tributaries and groundwater) and may have others (such as lakes, reservoirs and canals) as well…that may or may not be present’. Do the latter components, and particularly artificial canals, fall within the scope of this body of law? The purpose of the article is to examine this question on a general level above and beyond the Silala dispute. Since there are no general rules of customary international law applicable to all canals of international concern, it will use as a starting point the definition of ‘international watercourse’ set out in the 1997 UN Convention on the Law of the Non-navigational Uses of International Watercourses (UNWC). Section II of the article will examine this definition and its components, while section III will attempt to dig deeper into its origins and examine its historical evolution in the International Law Commission (ILC or Commission). Section IV will then go beyond the UNWC and survey other international instruments relating to both navigable and non-navigable uses of international watercourses and their treatment of artificial canals. This survey is not intended to be an exhaustive study of such instruments. The goal is merely to obtain a general sense of the cur-

13 Some authors have suggested that they do not, eg cf Mulligan, Eckstein (n 5) 602 (‘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 water bodies are proprietary and subject to the agreements that created them’); M Arcari, ‘Canals’ [2007] Max Planck Encyclopedia of Public International Law [6] (‘Unlike international watercourses which separate or traverse the territories of different States, a canal lying across national boundaries consists of two national sections, each remaining an internal waterway of the State where it is situated’).
14 Arcari (n 13) [4].
15 This analysis is undertaken in the spirit of arts 31-32 of the Vienna Convention on the Law of Treaties (adopted 23 May 1969) 1155 UNTS 331 (VCLT).
16 Navigable uses are included in this examination since they could be useful in ascertaining the definition of ‘international watercourse’ and the inclusion of artificial canals within it, even though they are governed by a separate body of international law.
rent and historical requirements, as generally accepted by states and international bodies, for the application of international watercourse law and whether such requirements have tended to exclude artificial canals. While definitive conclusions are difficult to draw from this preliminary study, section V of the article will nonetheless offer some thoughts on the legal and practical merits of including artificial canals within the purview of international watercourse law.

2. Definition of ‘watercourse’ in the UNWC

The UNWC defines a ‘watercourse’ as ‘a system of surface waters and groundwaters constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus’.\(^\text{17}\) An ‘international watercourse’ is defined as ‘a watercourse, parts of which are situated in different States’,\(^\text{18}\) which would depend ‘on physical factors whose existence can be established by simple observation in the vast majority of cases’.\(^\text{19}\) Accordingly, if artificial canals are considered as forming part of a ‘watercourse system’ and if the other requirements of the definition are satisfied, a given watercourse would be ‘international’ once any of its parts, including an artificial canal, cross a boundary between states.

The definition of ‘watercourse’ in the UNWC contains two cumulative conditions: the waters must constitute ‘by virtue of their physical relationship a unitary whole’ and they must be ‘normally flowing into a common terminus’. The first requirement of ‘constituting by virtue of their physical relationship a unitary whole’ has been interpreted by the ILC to mean that the components of the hydrological system, namely ‘rivers, lakes, aquifers, glaciers, reservoirs, and canals’ (emphasis added), are interrelated with one another so that they form part of a watercourse.\(^\text{20}\) The inclusion of ‘canals’ in the ILC’s commentary suggests that the definition was intended to apply to artificial man-made waterways. On the other hand, the second requirement of ‘normally flowing into a

\(^{17}\) Art 2(a).

\(^{18}\) Art 2(b).


\(^{20}\) Ibid [4].
common terminus’ was added to the definition since several members of
the ILC were of the view that without it ‘different drainage basins con-
ected by canals would constitute a single watercourse system, a result
which, in their view, had been undesirable’21 (emphasis added). This re-
quirement was therefore intended to ‘keep the scope of the articles within
reasonable bounds’ so that ‘the fact that two different drainage basins
were connected by a canal would not make them part of a single ‘water-
course’ for the purpose of the present articles’22 (emphasis added). The
addition of ‘normally’ to this requirement, moreover, was the result of a
compromise between those calling for the deletion of the requirement of
‘common terminus’ altogether and those who called to retain it in order
to limit the geographic scope of the articles. Thus, while under the first
requirement an artificial canal seems to be considered as forming part of
a ‘watercourse’, under the second requirement such a canal may not be
able to, in and of itself, turn two otherwise distinct watercourse systems
into one. This result has been criticized, however, since treating two dis-
crete systems connected ‘naturally or artificially’ even without a common
terminus as one system ‘would not be without logic for certain purposes’
such as regulating water withdrawals and pollution.23

A cursory reading of the UNWC definition therefore fails to clarify
whether an artificial canal would be considered as part of a ‘watercourse’
to which international watercourse law applies where it is the only link
between otherwise separate systems situated in different states. A more
detailed analysis of the historical evolution of this definition in the ILC,
undertaken in the next section, might prove useful in this regard.

3. The historical evolution of the ‘watercourse’ definition in the ILC

The definition of ‘international watercourse’ was a particularly con-
tentious issue in the ILC deliberations leading up to the conclusion of the

22 ILC, ‘Report of the Commission to the General Assembly on the work of its forty-
third session’ (29 April-19 July 1991) UN Doc A/46/10, 90-91 [6].
Initially the draft articles did not include a definition of the term. In 1980, the Commission decided to proceed on the basis of the following provisional working hypothesis regarding the concept of ‘international watercourse system’:

‘A watercourse system is formed of hydrographic components such as rivers, lakes, canals, glaciers and groundwater constituting by virtue of their physical relationship a unitary whole; thus, any use affecting waters in one part of the system may affect waters in another part.

An “international watercourse system” is a watercourse system, components of which are situated in two or more States.

To the extent that parts of the waters in one State are not affected by or do not affect uses of waters in another State, they shall not be treated as being included in the international watercourse system. Thus, to the extent that the uses of the waters of the system have an effect on one another, to that extent the system is international, but only to that extent; accordingly, there is not an absolute, but a relative, international character of the watercourse.’

This working definition, which included an explicit reference to ‘canals’, remained the basis for the ILC’s draft articles until 1991, when the current definition was adopted. In 1984, the Special Rapporteur Mr. Jens Evensen recommended to delete the following portion of the working definition: ‘hydrographic components such as rivers, lakes, canals, glaciers and ground water constituting by virtue of their physical relationship a unitary whole’, since ‘such an express reference in the article may once

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24 In 1970, the UN General Assembly recommended that the ILC take up the study of the law of the non-navigational uses of international watercourses. After studying the topic through reports of several Special Rapporteurs, information provided by governments, and documents prepared by the Secretariat, the ILC adopted on first reading the draft articles on the law of the non-navigational uses of international watercourses in 1980. In 1994, the Commission adopted the final text of a set of thirty-three draft articles, with commentaries. The Commission then submitted the draft articles to the General Assembly, which decided in 1996 to convene a Working Group to elaborate a framework convention on the subject on the basis of the draft articles adopted by the Commission, the written comments and observations of states, and views expressed in the debate at the General Assembly. In 1997, upon recommendation of the Working Group, the General Assembly adopted the Convention on the Law of the Non-navigational Uses of International Watercourses.

more open up the discussion of the merits of the ‘drainage basin’ concept or ‘watercourse system’ concept in connection with the ongoing attempts to formulate a broadly acceptable framework agreement’. Mr Evensen went on to state, however, that

‘It goes without saying that the Special Rapporteur accepts as a fact that international watercourses have a wide variety of “source components”. They may, inter alia, include rivers, lakes, canals, tributaries, streams, brooks and springs, glaciers and snow-capped mountains, swamps, ground water and other types of aquifers. But the nature and types of these components as well as their concrete relevance will vary from watercourse to watercourse, from region to region.’

Accordingly,

‘…the Special Rapporteur considers that a more flexible approach is to make a broad reference to the relevant components and parts only, and then in the commentary to the article to refer to various types of such components, without attempting of course to give an exhaustive enumeration. The relative importance of the various components may of course vary with the uses and problems involved. Thus pollution problems, especially the problems of persistent and dangerous pollutants, may be more relevant in regard to a wider variety of components and over wider areas than other problems, thus again enhancing the relevance of components.’

However, the omission of an indication as to the possible hydrographic components of an international watercourse was questioned by some members of the Commission:

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26 ‘Second report on the law of the non-navigational uses of international watercourses, by Mr Jens Evensen, Special Rapporteur’ (24 April 1984) UN Doc A/CN.4/381, 106 [24]. The third paragraph of the working definition, ie the notion of relative internationality, was deleted in 1990 since it did not take into account ‘the interrelationships between different parts and components of a watercourse system’ and ‘could eviscerate entire sections of the draft articles’. Moreover, ‘it will not always be clear in advance, even to experts, whether a particular project or use will have negative transboundary effects’ cf McCaffrey, Seventh report (n 12) 62-63 [74], [78-81].

27 Evensen, Second report (n 26) 106 [24].

28 ibid 106-107 [25].
‘It was considered not sufficient simply to refer to “relevant” parts or components. Without an indication of what those components might be, the combined effect of paragraphs 1 and 2 of article 1 only added to the confusion. It was thought preferable to include in the text of the article the examples given in the Special Rapporteur’s second report (rivers, lakes, canals, tributaries, streams, brooks and springs, glaciers and snow-capped mountains, swamps, ground water and other types of aquifers)…with a view to their closer examination to determine whether they should form the subject of separate articles or at least a very detailed commentary…’

More specifically,

‘Reference was also made to the need to clarify the definition as it related to canals.’

Some members of the Commission in fact objected to the inclusion of canals in the definition of ‘watercourse’. In their view, ‘the term ‘watercourse’ connoted a natural phenomenon and the draft had been elaborated on that assumption. A territorial scope larger than what had been envisaged in elaborating the draft would emerge if, for example, canals connecting natural watercourses were included. For those members, such a result would be undesirable’. Similarly, during the ILC’s 1987 session Special Rapporteur Stephen C. McCaffrey commented that:

‘Personally, he would be very reluctant to define an international watercourse so as to include such man-made diversions as a canal, which might take the water of an international watercourse into another drainage basin. The term “international watercourse” was normally used to refer to a watercourse created by nature and not to any artificial diversions.’

Nonetheless, ‘for the majority of the members of the Commission, the term ‘watercourse’ meant a system or a complex of waters comprising

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30 ibid.
31 cf ILC Summary record 1991 (n 21) 141 [72].
rivers, tributaries, canals, lakes, glaciers and groundwater related to surface waters’.\(^{33}\) Moreover, the Special Rapporteur cited above, Mr. McCaffrey, departed somewhat from his objection to the inclusion of man-made canals in the definition of an international watercourse, noting in his 1991 Report that surface waters forming part of a ‘watercourse system’ may take ‘several natural forms, including rivers, lakes and ponds, and various artificial forms, such as canals and reservoirs’\(^{34}\) He also recommended the inclusion of an article on ‘use of terms’ that defined a ‘watercourse system’ as a ‘system of waters composed of hydrographic components, including rivers, lakes, groundwater and canals, constituting by virtue of their physical relationship a unitary whole’.\(^{35}\) As already noted, this enumeration was ultimately left out of the definition of ‘watercourse’ in the UNWC and was included only in the ILC commentary, which noted that ‘the concept of a watercourse or river system has long been used in international agreements to refer to “a river, its tributaries and related canals”’.\(^{36}\) It further explained that since ‘the reference to rivers, lakes, groundwaters and canals’ merely provided examples [it] could therefore be deleted, on the understanding that the commentary would explain that a system of surface and underground waters included rivers, lakes, aquifers, glaciers, reservoirs and canals’.\(^{37}\)

The following comments made by UN Member States and the ILC Special Rapporteurs may shed further light on the treatment of man-made canals.

In its comments submitted to the ILC in 1978, Libya stated that the Commission should study watercourses ‘wherever natural geographic features extend beyond the territory of one or more States’ (emphasis added). Furthermore, according to Libya the ‘use or regulation [of water] at the international level…applies to waters which are interconnected in a natural basin where any portion of such waters extends over the territory of two or more States’, and ‘a river basin must be defined so that the term ‘basin’ covers the natural geographic unit which forms the

\(^{33}\) ibid 143 [6].

\(^{34}\) cf Seventh report 1991 (n 12) 51 [15], 58 [50].

\(^{35}\) ibid 64.

\(^{36}\) cf ILC Report 1994 (n 19) 91 [8].

\(^{37}\) cf ILC Summary record 1991 (n 21) 141 [71].
course of its waters and determines the quantity and quality of these waters, the control of the water flow and the character of their regulation...38 (emphasis added).

In its comments submitted to the ILC in 1980, Greece stated that “international watercourse” traditionally means any watercourse—usually rivers, but also canals and lakes—separating or flowing through the territories of two or more States39 (emphasis added).

In his 1980 Report to the ILC, Special Rapporteur Mr. Stephen M. Schwebel noted that “the exclusion of lakes (and canals) would raise serious questions regarding the relationship of the draft articles to important watercourses”40 (emphasis added), and in his 1982 Report he noted that the term watercourse ‘system’ was capable of comprehending ‘canals, groundwater and inter-basin connections’41 (emphasis added).

In his 1983 Report to the ILC, Special Rapporteur Mr. Jens Evensen noted that ‘lakes (and canals) form a natural part of a number of international watercourses’42 and that the term ‘watercourse system’ (as it was then named) was ‘sufficiently comprehensive to include, in addition to rivers, lakes and tributaries, other components such as canals, streams, brooks and aquifers and groundwater’43 (emphasis added).

Ultimately, as noted by the members of the ILC, ‘the draft [articles] did not properly deal with the diversion of waters, for example, by canals’.44 Accordingly, it might be useful to examine the treatment of this...
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issue in the general practice of states other than in the context of the UNWC.\footnote{This examination is limited to the practice of states as reflected in international agreements and does not include a review of domestic legislation. While the latter would be relevant and useful it is beyond the scope of the present article.}

4. Other international instruments

A preliminary examination of international instruments\footnote{These international instruments include bilateral, regional, and international treaties, as well as declarations, resolutions, studies and reports of intergovernmental and non-governmental organizations, although the examination is not intended to be exhaustive.} and their definition of ‘watercourse’, ‘international watercourse’, or functionally synonymous terms revealed no instruments that explicitly exclude artificial canals. However, some instruments refer to waters in their ‘natural course’ or to a ‘natural hydrological system’, thereby implicitly excluding artificial watercourses.\footnote{eg the 1960 Indus Waters Treaty between India and Pakistan, which applies to named rivers, their tributaries and any connecting lakes and defines a ‘tributary’ as ‘any surface channel, whether in continuous or intermittent flow and by whatever name called, whose waters in the natural course would fall into that river’. However, it also applies to ‘an artificial drainage’, art I(2). See also a 1974 report by the UN Secretary-General titled ‘Natural resources development and policies, including environmental considerations’, which contains an addendum titled ‘Issues of International Resources Development’ that defines ‘international water resources’ as ‘water in a natural hydrological system shared by two or more countries in different parts of the world’ (UN Doc E/C.7/2/Add.6).} There were also several instruments found that remain silent on this issue,\footnote{eg the 1969 ‘Report on a Draft European Convention on the Protection of Fresh Water against Pollution’ of the Council of Europe, which defines ‘international drainage basin’ as ‘a geographical area extending over two or more contracting states determined by the watershed limits of the system of waters, flowing into a common terminus’, art 1; the IIL 1979 Athens Resolution on the Pollution of Rivers and Lakes and International Law, which applies to ‘international rivers and lakes and to their basins’; the IIL 1961 Salzburg Resolution Concerning the Utilization of Non-Maritime Waters for Purposes Other than Navigation which applies ‘to the use of waters which are part of a river or of a watershed extending upon the territory of two or more States’.} leaving the question of artificial waterways open.\footnote{eg the ILA Dubrovnik Conference, The Uses of the Waters of International Rivers, First Committee Report (adopted 28 October 1955) 3, in which the question was left open as to ‘whether tributary streams should be included in, or whether artificial waterways should be excluded from, the definition of an international river’. In its}
Use of Transboundary Watercourses and International Lakes defines ‘transboundary waters’ quite broadly as ‘any surface or ground waters which mark, cross or are located on boundaries between two or more States’. The Guide to the Convention further explains that ‘surface waters include waters collecting on the ground in a stream, river, channel, lake, reservoir or wetland’, not specifically referring to an artificial ‘canal’.

On the other hand, quite a few international instruments were found that explicitly include ‘canals’ or other ‘artificial’ waterways in their def-
inition of ‘watercourse’, ‘international watercourse’, or functionally synonymous terms. Some of these instruments are of a general nature, 52 others are specific to issues of pollution, 53 while still others relate to navigational uses of international watercourses. 54

52 e.g. the Convention Instituting the Definitive Statute of the Danube (signed at Paris 23 July 1921), which defines an ‘internationalized river system’ as including ‘[a]ny lateral canals or waterways which may be constructed’, arts 1-2; the Agreement between the Government of the Federal People’s Republic of Yugoslavia and the Government of the People’s Republic of Albania concerning water economy questions, together with the Statute of the Yugoslav-Albanian Water Economy Commission and with the Protocol concerning fishing in frontier lakes and rivers (signed 5 December 1956), which addresses ‘[q]uestions concerning watercourses which form the State frontier and watercourses, lakes and water systems which are intersected by the State frontier’, including ‘surface and natural watercourses as well as underground and artificial ones’; the ILA 1958 Resolution on the Use on the Waters of International Rivers, which defines a ‘drainage basin’ as ‘...an area within the territories of two or more States in which all the streams of flowing surface water, both natural and artificial, drain a common watershed terminating in a common outlet or common outlets either to the sea or to a lake or to some inland place from which there is no apparent outlet to a sea’; the Treaty between the Government of the Polish People’s Republic and the Government of the Union of Soviet Socialist Republics concerning the regime of the Polish-Soviet State frontier and cooperation and mutual assistance in frontier matters (signed 15 February 1961), which provides that ‘those sectors of rivers, streams and canals along which the frontier line runs...shall be deemed to be frontier waters’, art 12; the World Bank Operational Manual, Operational Directive 7.50: Projects on international waterways (April 1990), which enumerates ‘types of international waterways’ to include ‘river, canal, lake or any similar body of water which forms a boundary between, or any river or body of surface water which flows through two or more States...’.

53 e.g. the 1972 ILA Draft Articles on Marine Pollution of Continental Origin, which applies to ‘the discharge or introduction of substances directly into the sea from pipelines, extended outlets, or ships, or indirectly through rivers or other watercourses whether natural or artificial, or through atmospheric fall-out’; the 1974 Draft European Convention for the Protection of International Watercourses against Pollution, which defines an ‘international watercourse’ as ‘any watercourse, canal or lake which separates or passes through the territories of two or more States’.

54 e.g. the Treaty of Versailles (adopted June 28, 1919) 225 CTS 188, which provides that ‘the following rivers are declared international...together with lateral canals and channels constructed either to duplicate or to improve naturally navigable sections of the specified river systems, or to connect two naturally navigable sections of the same river’, art 331; the Convention Instituting the Definitive Statute of the Danube (signed 23 July 1921), which defines its scope of application to the ‘internationalised river system’ comprising of ‘...any lateral canals or waterways which may be constructed, whether to duplicate or improve naturally navigable portions of the river system, or to connect two naturally navigable portions of one of these waterways’; the Convention and Statute on the regime of navigable waterways of international concern (signed 20 April 1921) 7 LNTS
Interestingly, some of these instruments apply a different definition of ‘international watercourse’ depending on the use of the waters, explicitly including artificial canals for some uses but not for others. Article II of the 1966 Helsinki Rules on the Uses of the Waters of International Rivers, for instance, defines an ‘international drainage basin’ as ‘a geographical area extending over two or more States determined by the watershed limits of the system of waters, including surface and underground waters, flowing into a common terminus’. Chapter IV of the Rules, which concerns navigation, defines ‘rivers and lakes’ as ‘navigable’ and therefore falling within the scope of the Rules ‘if in their natural or canalized state they are currently used for commercial navigation or are capable by reason of their natural condition of being so used’. Similarly, the ILA 2004 Berlin Rules define a ‘drainage basin’ as ‘an area determined by the geographic limits of a system of interconnected waters, the surface waters of which normally share a common terminus’, and only mentions canals in relation to navigation, considering a watercourse to be ‘navigable’ if ‘in its natural or canalized condition, the watercourse is currently used for commercial navigation or is capable of being so used in its natural condition’. However, the Commentary to the Rules also provides with respect to the definition of ‘drainage basin’ that ‘...there are exceptional

35, which includes in its definition of ‘navigable waterways of international concern’ ‘lateral canals constructed in order to remedy the defects of a waterway’ as well as ‘waterways, or parts of waterways, whether natural or artificial, expressly declared to be placed under the regime of the General Convention regarding navigable waterways of international concern either in unilateral Acts of the States under whose sovereignty or authority these waterways or parts of waterways are situated, or in agreements made with the consent, in particular, of such States’, arts 1(1)(d) and 1(2); the 1934 Regulation Governing Navigation on International Rivers (signed 19 October 1934), which applies 1. To rivers referred to as international, i.e. to those waterways which, in the naturally navigable part of their course, traverse or separate two or more States, and to any tributaries having the same characteristics; 2. To waterways which, though not international in the sense defined above, come under the following categories:...(b) artificial navigable waterways or other man-made facilities that are, or are to be, established on or between certain sections of the same international river with a view to making good the deficiencies of the naturally navigable waterway...”; art 1.


situations, however, where waters can be considered as constituting a single drainage basin or catchment area that must be managed as a unit even though they do not share a common terminus. Usually, this is because of human activity, as where canals have been cut to link the channels of naturally distinct surface watercourses.57

5. Conclusion

It is beyond the scope of this article to conduct an in-depth survey of state practice sufficiently detailed to determine the status of artificial canals in international watercourse law. Suffice it to say that from the limited analysis of the definition of ‘international watercourse’ presented above it seems that neither the UNWC nor the practice of states require that all parts of a ‘watercourse’ be naturally occurring for international watercourse law to apply, or for water to naturally cross a boundary in order for it to be considered an ‘international watercourse’. Moreover, in order to preserve the relevance and ensure the effectiveness of this body of law it may be argued that it should apply as broadly as possible to include artificial canals whenever the circumstances call for the cooperative regulation of a cross-border water resource. Indeed, states, international organizations, and experts have all recognized ‘the importance of dealing with international watercourse systems in their entirety’.58 The legal status of a given watercourse is important also for practical reasons since no state can directly control the use, and potential abuse, of waters flowing in its territory once they cross into the territory of another state. It is the principles of, and obligations imposed by, international watercourse law that would serve as the basis for cooperation between such states and as a measure of control prohibiting the overuse or pollution of shared waters.

Still, whether a given watercourse falls within the purview of international watercourse law may itself boil down to political considerations59

58 cf ILC Report 1994 (n 19) 91 [12].
that revolve around ‘the age-old concern with infringing upon the ‘sovereignty’ of a state over its internal waters. What this ignores, of course, is the ‘sovereignty’ of the other state(s) affected by the first state’s use of waters temporarily within its territory’.\(^{60}\) In this regard, the question must be raised whether it makes practical sense and good policy to treat a body of water that *de facto* crosses an international boundary as domestic.\(^{61}\) This normative question is raised here on a general level and without judgment on the merits of Chile and Bolivia’s respective arguments in the case of the Silala. As noted by the tribunal in the *Lake Lanoux* arbitration, ‘...the Tribunal, from the viewpoint of physical geography, cannot disregard the reality of each river basin, which constitutes...‘a whole’...[however] [t]he unity of a basin is supported at the legal level only to the extent that it conforms to the realities of life.’\(^{62}\) The rationale underlying this statement suggests that the reality of a body of water crossing a boundary and used jointly by two states should be given due consideration in determining its legal status as a domestic or international watercourse.

Moreover, even if one state retains sovereignty over such a watercourse *de jure*,

‘...there is a real difference when the authority of the State ends at a point on land and when it ends at a point in the water. The difference is not in the concept of authority but in its applicability to physical phenomena...State A’s prohibition against spilling oil into waters of a lake that lies partly on State A’s side of a boundary cannot be effective if State B on the other side of the lake does not also prevent such discharges into the lake. The physical properties of liquids and normal movements of the water will result in some oil crossing the border. So, too, a prohibition by State A against reducing the water level in a boundary river is ineffective if water users in State B on the other side of the river are not under any restriction as to the amount of water they can withdraw from the river. The principle of sovereignty will not keep water on one side of the river up when water on the other side goes down.’\(^{63}\)


\(^{61}\) cf McCaffrey (n 23) 41.

\(^{62}\) *Lake Lanoux Arbitration (France v. Spain)* (1957) XII RIAA 304.

Therefore, it is doubtful that a state could, practically speaking, exercise exclusive sovereignty or ownership over a water resource that is partially situated in another state’s territory, even if it is entitled to such ownership as a matter of international law. The mobile nature of water, its ‘hydrological unity’, and the ‘interrelationships of cause and effect’ throughout an entire river system all mean that sovereignty must be exercised differently than in the case of other natural resources. It should be recalled in this regard that ‘although water is part of a state’s territory while it is within its borders, it will later become part of another state’s territory; it is therefore more akin to clouds, winds and migratory birds than to land’.

This is not to say that all instances of shared use of a water resource necessarily negate exclusive sovereignty or should fall within the purview of international watercourse law. Cases could be envisioned in which an entirely domestic water resource is subject to an agreement that provides for some form of cross-border use of its waters while reserving both the practical control and legal right over it to the state of origin. Another possible ground for excluding a de facto cross-border watercourse in the form of an artificial canal from the scope of international water law might be where such canalization is a result of an illegal act under international law, on the basis of the principle of ex injuria jus non oritur. In these cases, it may be impractical or unjust to treat the water resource, either de jure or de facto, as an international watercourse. Ultimately, however, it must be recognized that ‘political boundaries are irrelevant to the physical unity of a river system’, be it natural or artificial. Even though states might be reluctant to recognize ‘as an international watercourse system a purely national watercourse that is connected by a canal to an international watercourse or a national one in a different country...’, failure to do so ‘would leave unaddressed potential problems...that could result

65 cf ILC Report 1976 (n 63) 160 [151].
66 cf McCaffrey (n 23) 68.
67 Meaning that ‘a wrongful act cannot become a source of advantages, benefits or rights for the wrongdoer’, Accordance with international law of the unilateral declaration of independence in respect of Kosovo (Request for Advisory Opinion: Separate Opinion of Judge Cançado Trindade) [2010] ICJ 141 [132].
68 cf First report 1976 (n 64) 189 [27].
from the interconnection of the two systems. It would also exclude the application of the principles of international water law, which could effectively address these problems.

69 cf McCaffrey (n 23) 41.