Revisiting the substantive rules of the law of international watercourses: an analysis through the lens of reciprocity and the interests of China

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Abstract

The United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses, 1997, finally entered into force in August 2014 after nearly 17 years. To explain this delay scholars point to, among other reasons, misconceptions of the substantive rules of equitable and reasonable use and the duty not to cause significant harm, particularly between upstream and downstream states. Reciprocity plays an important role within international law especially in treaties, where it informs the distribution of rights and duties, advantages and disadvantages, establishing balance and fairness in the legal regime. Together, this ensures that states cannot interpret treaty provisions in their favour. Using the Convention on the Law of the Non-Navigational Uses of International Watercourses as an authoritative text, this article aims to analyse the substantive rules of international law concerning transboundary water resources including equitable and reasonable use and the duty not to cause significant harm through the lens of reciprocity and the interests of China. In doing so, it aims to provide a more nuanced understanding of the rules and to establish that these principles do not favour upstream or downstream states, but instead promote balance among riparians.

Keywords: China; Equitable and reasonable use; No significant harm; Reciprocity; United Nations Watercourses Convention

Introduction

In 1970, ‘considering that water, owing to the growth of population and the increasing and multiplying needs and demands of mankind is a growing concern to humanity’, the United Nations 6th Committee recommended that the International Law Commission ‘take up the study of the law of the non-navigational uses of international watercourses’ (UNGA, 1970). The process, lasting nearly 30 years, resulted in the adoption of the Convention on the Law of the Non-Navigational Uses of International Watercourses, 1997, which entered into force in August 2014 after nearly 17 years. To explain this delay, scholars point to, among other reasons, misconceptions of the substantive rules of equitable and reasonable use and the duty not to cause significant harm, particularly between upstream and downstream states.
International Watercourses (UNWC) in 1997, which aims to codify and develop the rules and practice that govern the rules of international law concerning transboundary water resources (international water law). Although the UNWC received wide support at the United Nations General Assembly with 106 votes in favour, three against, and 22 abstentions (UNGA, 1997a)¹, it entered into force after nearly 17 years in August 2014 (UNWC, 1997a).

There are multiple reasons why the Convention had taken so long to enter into force, but one of the primary reasons relates to contention surrounding two of its primary principles: equitable and reasonable use, and the duty not to cause significant harm (no-significant-harm principle). Citing an imbalance in the rights and duties and favouritism of these principles for upstream and downstream states, multiple states did not support it. The lengthy process of the entry into force of this multilateral agreement, coupled with ongoing issues related to cooperation over shared transboundary water resources, highlights the need to revisit the international law that applies to this area. As the water crisis continues to escalate and is further exacerbated by climate change, recent studies have illustrated that these tensions continue to hinder the engagement of states (primarily upstream) with the UNWC, linking such concerns to reciprocity (Zhong et al., 2016). Reciprocity acts as the ‘principle leitmotiv’ within international law, acting as a ‘constructive, mitigating and stabilizing force’ (Simma, 2008). Within treaties reciprocity plays its most vital role where it informs the distribution of rights and duties, advantages and disadvantages. Such reciprocal distribution brings a sense of fairness to the treaty regime, further promoting the sovereign equality of states.

Within international water law upstream states have favoured equitable and reasonable use, whereas downstream states favoured the duty not to cause significant harm, both perceiving these rules to provide protection for their uses. In spite of these perceptions, an analysis through the lens of reciprocity illustrates that these principles establish a fair balance of corresponding rights and duties, protecting the interests of both upstream and downstream states. In order to conduct this analysis, this article will first discuss the role that reciprocity plays in various kinds of treaties and treaty obligations. It will then set the stage for its analysis, exploring the drafting process of the UNWC including a review of relevant state views, particularly that of China, which illustrates the perception that the Convention is imbalanced or favours states in some geographic positions while putting others at a disadvantage. Given that aspects of the UNWC are often considered to be a codification of customary law, the principle of equitable and reasonable use (Art. 5 and 6) as well as the duty not to cause significant harm (Art. 7) found within the Convention will then be analysed through the lens of reciprocity. This will be followed by a discussion of river basin organizations (RBOs) and benefit sharing as methods to institutionalize reciprocity and to enhance opportunities for balance in the rights and obligations of riparians.

Reciprocity in treaties: bilateralism, multilateralism and collective interests

Reciprocity is one factor that drives states to act reasonably. When making a claim, a state must accord the same right to other states, thus reciprocity works to limit state claims and persistent objection, assisting in ensuring that states make claims they are willing to see generalized (Byers, 2004). This process establishes consistent behaviour between states, which may ultimately result in the establishment of customary

¹ The original vote had 103 in favour, three against (China, Turkey and Burundi), and 22 abstentions. After the vote Belgium, Nigeria and Fiji informed the Secretariat that they wished to vote in favour (UNGA, 1997a).
law (Byers, 2004; Leb, 2014). In transboundary waters, this process has ensured that states in various positions, who would make competing and contradictory claims of absolute territorial sovereignty and absolute territorial integrity, recognize each other’s rights resulting in the development of the doctrine of limited territorial sovereignty (Devlaeminck, 2016). As trust builds and states meet their good faith and reciprocal obligations, ties between them increase, and given states’ desire for stable and predictable relationships, these interactions are often formalized within treaties (Leb, 2014). It is in such treaties where reciprocity arguably plays its most important role, as international law provides a ‘reciprocity based framework [...] for legal transactions in the form of treaties’ (Simma, 1994).

In its legal form, reciprocity establishes corresponding rights and duties between parties in which the right of one is the duty of the other (Simma, 1989), and thus treaties act as a ‘reciprocal arrangement which determine the rights and obligations of the parties’ (Fard, 2016). In this role, reciprocity works to inform the distribution of advantages and disadvantages, rights and obligations, promoting balance and a sense of fairness within the treaty regime. Reciprocity ‘governs every international agreement, independent of its content’ (Simma, 2008) and, as a reflection of the formal aspects of reciprocity, any treaty could be considered reciprocal since every state party is ‘legally entitled to expect compliance from the other parties, and vice versa’ (Paulus, 2011). In terms of legal reciprocity, however, not all treaty provisions involve such ‘reciprocal arrangements’, and can be broadly classified into classes of reciprocating and non-reciprocating provisions (Fitzmaurice, 1958).

Reciprocating treaty provisions. Bilateral treaties are those international agreements concluded between only two states and provisions within bilateral treaties often involve aspects of reciprocity, or quid pro quo (Byers, 2004). For example, Article 22 of the Vienna Convention on the Law of Diplomatic Relations, which provides protection for diplomatic missions of one country on the foreign soil of another (VCDR, 1961), exemplifies a bilateral relationship between two states with corresponding rights and duties. States have an interest in protecting the foreign missions of other states based on reciprocity, in the sense that a state takes on the duty to protect and respect another state’s mission within their sovereign territory and in return the other state will do the same for their mission within the territory of the other state. Furthermore, violation of that right will permit the state whose mission was not protected to take action against the state who failed to protect it.

Although multilateral treaties involve more than two parties, they too can be conceptualized as ‘bundles’ of bilateral obligations, often connected through a multilateral instrument (Simma, 1989; Pauwelyn, 2003). Given that the aforementioned Convention on the Law of Diplomatic Relations is multilateral, Article 22 also exemplifies a multilateral obligation that can be broken down into bundles of bilateral relations. Parties to the Convention consent to the duty to protect foreign missions on their soil to all other parties of the Convention. For example, state A has the bilateral duty to both state B and C, state B has the duty to A and C, and so on. This duty, however, remains bilateral in the sense that the relationship between two parties can be detached from the others. If state A were to have their right violated by state B, then A, and only A, can take action against B, and only B. These bundles of bilateral obligations can also be seen in the regime of state reservations to treaties, as set out in the Vienna Convention on the Law of Treaties, Articles 19–23 (VCLT, 1969).

States consent to treaties through accession and subsequent signature and ratification; however, they are also able to place reservations on select sections of the treaty so long as their reservations are ‘compatible with the object and purpose of the Convention’ (ICJ, 1951). States cannot make reservations to all provisions of a treaty. For example, the Genocide Convention (1948) was designed to be universal in
scope, however some states wished to place reservations. The ICJ determined that ‘a reservation which has been objected by one or more of the parties to the Convention but not by others, can be regarded as being a party to the Convention if the reservation is compatible with the object and purpose of the Convention’ (ICJ, 1951).

Such reservations ensure that they will not be bound by that specific provision, and ‘enable states to limit their obligations but still be part of the treaty’, permitting states to reach consensus (Fard, 2016). In practice, however, states often make minimal reservations, since such reservations place reciprocal limitations on the duties between state parties. Thus, if one state makes a reservation to a provision that establishes a right or duty upon it, this limits the corresponding right or duty of the other parties in relation to that state (Fard, 2016); however, the corresponding right/duty persists between the other parties. Therefore, if state A makes a reservation to a treaty provision, then B and C do not owe state A the corresponding right, but the right/duty persists between state B and C.

Reciprocity within treaties emerges from the ‘actual equivalence of mutual advantages deriving from treaty performance’ (Simma, 2008). Such equivalence brings a sense of fairness into the rules, given that ‘a perception of the fairness of any particular rule depends, in major part, on its implicit promise to treat like with like’ (Franck, 1995). For Franck, optimal fairness discourse requires: (1) moderate scarcity where actors can expect a reasonable share, but not the entirety of a resource; and (2) a community based on ‘a common, conscious system of reciprocity between its constituents’ which leads to a fairness dialogue (Franck, 1995). Such moderate scarcity greatly reflects the status of water resources in the world, and is reflected in the customary rules of international water law, primarily limited territorial sovereignty and equitable and reasonable use. For an application of Franck’s concept of fairness as it relates to international water law, see Yihdego & Rieu Clarke (2016).

Reciprocity as a treaty mechanism, however, would not be possible without the principles of *pacta sunt servanda* and good faith, both of which are universally recognized (VCLT, 1969). *Pacta sunt servanda* entails that ‘every treaty in force is binding upon the parties and it must be performed by them in good faith’ (VCLT, 1969). Good faith, which is ‘the basis of trust and thus the essence of cooperation within a society of States’ (Leb, 2013), require states to perform their treaty obligations in such a way that is ‘honourable, reasonable and fair’ (Fard, 2016). Furthermore, as decided in the *North Sea Continental Shelf Case*, acting in good faith requires states to conduct themselves in such a way that ‘negotiations are meaningful, which will not be the case when either of them insists upon its own position without contemplating any modification of it’ (ICJ, 1969). Together, these principles establish consistency within the interpretation of the law, promoting fairness and ultimately providing the foundation upon which reciprocity can be applied (Fard, 2016). This ultimately discourages states from interpreting the rules in such a way as to provide them with an advantage (Fard, 2016). The inclusion of such reciprocal rights and obligations within treaties is one way in which the effective implementation of a treaty can be ensured (Simma, 2008) since the reciprocal interest of states to uphold such duties is one of the primary reasons for their effectiveness, providing stability to the system (Leb, 2013).

**Non-reciprocating treaty provisions.** A system based on bilateral reciprocal relations, however, is often criticized for standing in the way of greater international solidarity (Simma, 1994). With the evolution of the international legal system, however, more and more overarching values have been inserted into treaties. Thus, not all treaties or treaty provisions can be broken down into bundles of bilateral rights and duties. This is often the case in environmental agreements, which are born out of the collective...
interests of states and not the individual interests of state parties (Pauwelyn, 2003). Environmental agreements, which aim to connect that which has been artificially divided by states, essentially require states to agree to unilateral obligations (Brunée, 1989). These unilateral obligations are carried out within their own territory, and thus do not establish a form of reciprocal exchange between the parties (Simma, 1989). For example, it could be argued that reciprocity plays no role in many of the provisions of the UN Framework Convention on Climate Change since the duties are largely owed to the international community as a whole, and not to individual states (Mehling, 2012). In these treaties, however, states do have a reciprocal interest in all contracting parties upholding their rights under the treaty and contributing to the overall goal of such a treaty (Brunée, 1989; Simma, 2008). Thus, reciprocity and collective interests coincide in the sense that states have an interest in ‘not being impaired by equal conduct of another state’ (Brunée, 1989).

Areas of contention in the interpretation of the UNWC: balance, imbalance and reciprocity

The UNWC has had a lengthy process of development, negotiation and, eventually, ratification, finally entering into force in August 2014. Many authors cite different reasons why this may have been the case, including treaty congestion, a lack of awareness and capacity and a lack of champions for the Convention (Rieu-Clarke & Loures, 2009; Dellapenna et al., 2013). However, there were also many areas of contention concerning various treaty provisions including: the notification process under the Convention, the way in which the Convention does or does not apply to existing agreements, whether or not the dispute-settlement provisions of the Convention are too weak or too strong, the ‘expanded definition’ of the term ‘Watercourses State’, and concern over the loss of sovereignty surrounding international watercourses (Salman, 2007b). Most importantly for this article, however, was concern surrounding the relationship between the principles of equitable and reasonable use (Art. 5 and 6) and the duty not to cause significant harm (Art. 7), which together provide the foundation for a cooperative framework on transboundary waters. Some states, however, argued that the principle of equitable and reasonable use favours upstream riparians, whereas the duty not to cause significant harm favours downstream riparians, as was evident during the drafting process of the UNWC at the UN 6th Committee. China’s statements at these meetings clearly reflect the concern that these provisions are imbalanced towards states in different positions, while illustrating its desire for a balance of rights and obligations. Given that China is primarily an upstream country with a strong stance on state sovereignty and a preference for bilateral agreements with its riparian neighbours, reciprocity will arguably play a strong role in its transboundary water cooperation, and thus it is not surprising that it would strive for greater balance in these provisions. China is party to approximately 50 treaties that govern or are related to its transboundary waters. Although often underdeveloped, these treaties illustrate an acceptance of the substantive rules of international water law (Chen et al., 2013; also see Wouters & Chen, 2013; Su, 2014).

At the 12th Meeting of the 6th Committee, China had stated its support for the UNWC draft articles, stating that they ‘represented a realistic, balanced approach to the need to reconcile the different interests of watercourse States’ (UNGA, 1996a). Furthermore, at the 15th and 17th Meetings, the Chinese

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2 Crawford identified various collective interests, including: human rights, human development, world heritage, and environmental protection (Crawford, 2000). This list was later expanded to include obligations which concern the ‘security of a region’ (ILC, 2001).
delegation stated that both Article 5 and Article 7 represented a balance between the rights and obligations of upstream and downstream states (UNGA, 1996b, 1996c). With the introduction of a new draft at the 51st Meeting, however, China’s support began to waver and its opinion of these articles changed. At the 61st Meeting, taking Articles 5, 6 and 7 as a whole, many states argued that these provisions were balanced (Argentina, Brazil, Portugal, Egypt, Chile, Mexico, Romania, Vietnam, Republic of Korea and Hungary), whereas others argued that the balance had been upset (Austria, China, Czech Republic, Ethiopia, India, Israel, Liechtenstein, Slovakia, Syria and Turkey) (UNGA, 1997b).

Although many of the states who claimed it was balanced voted in favour (Brazil, Portugal, Chile, Mexico, Romania, Vietnam, Republic of Korea and Hungary) and a select few of those who claimed it was imbalanced voted against (Turkey and China), these categories do not always line up so neatly. Argentina and Egypt claimed this relationship was balanced, while Ethiopia, Czech Republic, India and Slovakia stated it was somehow imbalanced, but all abstained. Austria, Israel, Liechtenstein, and Syria stated it was somehow imbalanced, but voted in favour (UNGA, 1997c). The Chinese delegation stated that these provisions ‘were the cornerstone of the convention and should reflect a balance between rights and obligations’; however, they believed that the text, which was a compromise between various interests, ‘failed to strike a balance between rights and obligations’ (UNGA, 1997b). At the 62nd Meeting, China could not support the draft treaty since it ‘did not resolve the imbalance between upstream and downstream states’ (UNGA, 1997c). When before the General Assembly, China was one of three states to vote against the resolution stating that: (1) it did not represent general agreement by all countries; (2) it did not reflect a state’s sovereignty over the parts of a watercourse that flow through a state’s territory; (3) citing its preference to choose the method of dispute settlement; and (4) reaffirming its belief that provisions regarding rights and obligations of states contain an ‘obvious imbalance between those of States on the upper reaches of an international watercourse and those of States on the lower reaches’ (UNGA, 1997a).

Understanding the substantive rules through a lens of reciprocity

China’s statements during the drafting process illustrate that some states believed the rules could be interpreted in such a way as to favour upstream or downstream riparians. This is supported by a recent study that illustrates that downstream riparians tended to vote in favour of the UNWC, whereas upstream states tended to abstain or vote against it, further linking this to a misunderstanding of the reciprocal nature of the Convention (Zhong et al., 2016).

As a reincarnation of the clash between absolute territorial sovereignty and absolute territorial integrity, leading commentators have connected this divide to geographical considerations. Upstream states favoured equitable and reasonable use since it appears to provide space for them to utilize their waters in ways that may impact their downstream neighbours (Salman, 2007a). Downstream states, however, preferred the duty not to cause significant harm since it appears to provide protection against impacts from upstream activities (Salman, 2007a). Such interpretations, although incorrect, would benefit their competing interests, given that downstream states often develop first due to flatter, more suitable terrain, whereas the mountainous terrain of upstream states often requires more advanced technology prior to development (McCaffrey, 2014). In many ways this accounts for the discrepancies between state perceptions of these rules and the voting record, as set out in the above section, Areas of contention in the interpretation of the UNWC: balance, imbalance and reciprocity. Many states who abstained or voted against the draft were upstream, whereas many of the states who supported it were downstream. Some states, however, claimed
that it was balanced or imbalanced but abstained, whereas others claimed it was imbalanced but voted in favour. For example, Egypt and Argentina, both primarily downstream, claimed it was balanced but abstained from the vote. Others, such as Syria and Israel, claimed it was in some way imbalanced but voted in favour. This could be explained by their various positions on the river and a preference for various interpretations of the treaty. For example, in relation to Egypt, such a discrepancy may be explained by its primarily downstream position and long-standing disagreements concerning water allocation with upstream states. Together, this may illustrate that states tend to vote according to what they perceive is in their best interests, and do not necessarily strive towards greater legal reciprocity.

Such positions, however, are untenable, and states must recognize the rights of their riparian neighbours (Devlaeminck, 2016). Equitable and reasonable use and the duty not to cause significant harm provide the cooperative framework for states to do so. Unlike the UNECE Water Convention (1992) which specifically mentions reciprocity as one of its guiding principles of cooperation (see Article 2(6); Article 9(1); and Article 10), the UNWC does not explicitly mention reciprocity. However, as a general principle of international law (Simma, 2008; Crawford, 2012), reciprocity continues to inform state interactions and interpretation of the law, discouraging self-interested interpretation.

**Articles 5 and 6: equitable and reasonable utilization and participation.** Born out of the concept of limited territorial sovereignty, the principle of equitable and reasonable use acts as a guiding principle of cooperation between riparian neighbours. As such, it establishes a reciprocal obligation of consideration of the interests of other states in order to determine what is an equitable and reasonable allocation of a shared water resource. Found in Articles 5 and 6 of the UNWC, the principle of equitable and reasonable use governs the allocation and apportionment of water in transboundary watercourses. Aiming to protect a state’s ‘equitable share of the use and benefits of an international watercourse’ (McCaffrey, 2010), such a rule is based upon the equality of right; however, this does not entail an equal share of water for each watercourse state. Article 5 sets out the rights and duties of the state as well as the goal, to attain ‘optimal utilization and benefits’ (ILC, 1994). Framed as if it were an obligation, Article 5(1) requires that states ‘shall in their respective territories utilize an international watercourse in an equitable and reasonable manner’ (UNWC, 1997b). Furthermore, it establishes the right of watercourse states to an ‘equitable share, or portion, of the uses and benefits of an international watercourse’ (ILC, 1994). Meeting this goal requires cooperation, and thus Article 5(2) sets out the right to equitable participation, which includes both the ‘right to utilize’ and the ‘duty to cooperate’. This is followed by Article 6, which provides a non-exhaustive list of factors that are to be used to determine what is considered as ‘equitable and reasonable’.

Thus, the principle establishes both the right to an ‘equitable share, or portion, of the uses and benefits’ and the corresponding duty to use this portion in an ‘equitable and reasonable manner’. This does not entail that each state is entitled to an equal share, but instead there exists an ‘equality of right’ that entails an entitlement to the ‘use and benefit from the watercourse in an equitable manner’ (ILC, 1994). In determining what is equitable, states must consider the factors listed in Article 6 as a whole, with their weight being determined by their ‘importance in comparison with that of other relevant factors’ (UNWC, 1997b, Art. 6). Determining what is equitable and reasonable requires an ‘ongoing comparison’ of the conditions and uses in all riparian states (McCaffrey, 2010). Thus, all riparian states have the corresponding right to use the waters within their territory, but also the corresponding duty to do so in an equitable and reasonable manner, requiring them to ‘exercise due diligence to avoid depriving co-riparians of their equitable share’ (McCaffrey, 2010). As such, the principle of equitable
and reasonable use does not favour states in any position, but provides equal consideration for all in order to achieve an equitable and reasonable balance.

**Article 7: the due diligence obligation not to cause significant harm.** Laid out in Article 7, the duty not to cause significant harm establishes the due diligence obligation not to cause significant harm. Article 7(1) introduces the obligation, requiring states to ‘take all appropriate measures to prevent the causing of significant harm to other watercourse States’ (UNWC, 1997b). As an obligation of conduct (McCaffrey & Sinjela, 1998), it requires states to take appropriate measures to prevent significant harm when possible, and states will be found to be in breach of their obligation when the harm was caused intentionally or due to negligence (ILC, 1994). Thus, states have the right not to be significantly harmed and the corresponding due diligence obligation not to harm their riparian neighbours. The reciprocal nature of the obligation is clear as we move with the flow of the river, since harm is easily understood as flowing downstream. For example, upstream states have an obligation to ensure that upstream pollution does not cause significant harm downstream. The flow of harm upstream and the reciprocal rights of upstream states not to be significantly harmed are less obvious.

It is commonly accepted, however, that harm can also flow upstream, and thus the duty not to cause significant harm cannot be interpreted to favour either upstream or downstream states. Physical harm, such as the obstruction of fish migration patterns, can affect both upstream and downstream states; however, harm can also be legal (McCaffrey, 2010). As Salman explains, ‘[p]rojects on shared rivers in the downstream riparian states would help those riparians in acquiring, and later claiming, rights to the water abstracted under those projects’ (Salman, 2010). As such, we could imagine a conflict unfolding in which the earlier developing downstream state makes a legal claim to the right to use those waters, limiting the uses available to the upstream state. Such uses would then be challenged by the upstream state based on equitable and reasonable utilization, while the downstream state would counter this argument with a claim to the duty not to cause significant harm based on their pre-existing uses (Salman, 2010). Thus, taking into consideration legal and physical harm completes the reciprocal nature of the obligations within the no-significant-harm principle, providing upstream and downstream states with corresponding rights and duties.

**The relationship between the two principles.** Over time academics and practitioners have come to an agreement that a careful reading of Articles 5, 6 and 7 of the UNWC places equitable and reasonable use as the primary rule over the duty not to cause significant harm (Wouters, 1999; Salman, 2007b; McCaffrey, 2010). This conclusion is supported by the Gabčíkovo–Nagymaros case, which referred to equitable and reasonable use but did not mention no significant harm. It should be noted, however, that it is likely that the duty not to cause significant harm was not mentioned because harm was not found to have occurred in that case (Wouters, 1999). Referred to as ‘two sides of the same coin’ (McCaffrey, 2010), together these rules establish a framework for identifying “all relevant factors and circumstances” and for evaluating the lawfulness of new or increased uses” (Wouters, 2014). This framework ‘takes into account the needs of all concerned, balancing these needs and taking a decision based on the consideration of the whole’ (Wouters, 2014).

Article 6 provides a list of factors that need to be taken into consideration when determining equitable and reasonable use. Although the list of factors is to be taken into consideration as a whole, and each is to be considered and weighted against the others, it includes: ‘the effects of the use or uses of the watercourse in one watercourse state on other watercourse states’ and the ‘existing and potential uses of the watercourse’ (UNWC, 1997b, Art. 6(d) and 6(e)). In this sense, harm is but another factor to be taken into
consideration when determining what is equitable and reasonable, and therefore fits into the reciprocal process of consideration established by the principle of equitable and reasonable use. Furthermore, this indicates that some harm, even significant harm, may need to be tolerated in order to establish an equitable and reasonable balance of the shared water resource (McCaffrey, 2010). Even though downstream states are likely to have developed earlier, these rules reflect the fact that all riparian states will eventually develop their resources and that some harm must be tolerated (Zeitoun, 2015).

**Institutionalizing reciprocity through river basin organizations and benefit sharing**

The reciprocal nature of the substantive rules of international water law is clear in basins with two riparians with clearly assigned rights and duties, but as the number of riparians increases so too does the complexity of obligations. Although bilateral obligations can greatly benefit from some form of institutionalized management, the complexity of rights and obligations in multilateral river basins lends itself more clearly to institutionalization through RBO, commissions or some form of joint body. Furthermore, given the complexity of the rights and obligations involved, a series of procedural rules including prior notification, consultation and data sharing are necessary in order to support the ongoing process to determine what is equitable and reasonable, as well as where and when harm has occurred, among other things. Although there is no obligation under general international law to form such basin management organizations, nor is there an obligation within the UNWC (Earle & Wouters, 2015), McCaffrey notes that such organizations are ‘almost indispensable if anything approaching optimum utilization and protection of the system of water is to be attained’ (1990). Although they are not obliged to do so, such RBOs act as a natural focal point for states to communicate and reciprocate with their riparian neighbours, providing ‘concrete returns for relinquishing some of their sovereignty’ (Earle & Wouters, 2015). RBOs can take on multiple forms and responsibilities (see Schmeier, 2013), but may act as a staging ground for furthering the reciprocal balance between riparian states. Although the Watercourses Convention does not give priority to prior uses, in practice these prior uses will have some priority. For example, in Province of La Pampa v. Province of Mendoza (1987) the Supreme Court of Argentina granted the use of the whole of the waters of the Atuel River to the Province of Mendoza, a decision which was made after taking into consideration multiple factors, weighing Mendoza’s prior agricultural, domestic and economic uses against La Pampa’s need (Fuentes, 1997).

Given the intricacies of hydrological systems and the realities of basin development, it may be extremely difficult to establish an equitable and reasonable balance that satisfies the interests of all states. In these instances, some states may believe that they are contributing or are entitled to more than their riparian neighbour. Such imbalances, however, can be softened via cooperation between states in the form of benefit-sharing agreements. Said to have first originated as part of the Columbia River Treaty (see Paisley, 2002; McKenzie, 2013), benefit sharing can be defined as ‘any action designed to change the allocation of costs and benefits associated with cooperation’ (Sadoff & Grey, 2005). In other words, benefit sharing aims to distribute benefits to the river, from the river, because of the river and beyond the river (Sadoff & Grey, 2005), as well as the costs of such cooperation. Sometimes referred to as a general principle of international water law and environmental law (Tarlock & Wouters, 2007), a legal framework for benefit sharing would allow states to take a balanced approach even in instances where the costs and benefits of their rights and duties may not allow them to do so. Furthermore, it permits states to ‘optimize benefits and allocate costs’, since such a framework would provide ‘for the equitable sharing of those benefits and costs’ (McIntyre, 2015). Although these programmes can bring further balance, they are
not without cost, and benefit-sharing frameworks may not necessarily assist with poverty alleviation or take environmental concerns into consideration (Tarlock & Wouters, 2007). This is not always the case, however, as benefits do not necessarily need to be project-related, and instead can include payment for ecological benefits, such as ecological stewardship of headwaters (Sadoff & Grey, 2005).

China borders 14 neighbouring countries with over 220,000 km of land border, and is upstream on a large majority of its river basins (Feng & He, 2009). Given its upstream location, and its economic and military dominance, some argue that China acts as a hydro-hegemon, and in an upstream position it would have very little incentive to cooperate with its riparian neighbours (Lowi, 1995). China appears, however, to be slowly moving towards cooperation, further supported by ever-increasing interconnectivity with its riparian neighbours (Chen et al., 2013; Wouters & Chen, 2013; Su, 2014), and therefore acts as one example through which the importance of RBOs and benefit-sharing is exemplified. China is a member of multiple joint bodies concerning its transboundary waters with Kazakhstan, Mongolia and Russia, including the Sino–Kazakh Commission on the use and Protection of Transboundary Rivers, the Sino–Kazakh Commission on Cooperation in the Field of Environmental Protection, the Sino–Mongolian Joint Commission on Transboundary Waters, and the Sino–Russian Joint Commission on the Reasonable Utilization and Protection of Transboundary Waters (Wouters & Chen, 2013). Although not a member of the Mekong River Commission (MRC), China is a ‘dialogue partner’ and has an agreement with the MRC to provide hydrological data (Wouters & Chen, 2013, p. 239).

Furthermore, providing the impetus for cooperation with its downstream neighbours is increasing interconnectivity, through which these states are able to share the benefits of the Mekong. For example, as part of the Greater Mekong Subregion (GMS) programme through the Asian Development Bank, an interconnected power grid is being established throughout the region, and both economic and political exchange are increasing. Owing to its growing need for energy, China imports large amounts of hydropower from its downstream neighbours, primarily Laos PDR and Myanmar. These energy imports require a peaceful and healthy relationship between riparians, acting as a catalyst for greater Chinese cooperation (Lee, 2015; Ptak & Hommel, 2016). Such interconnectivity arguably counteracts aspects of China’s hydro-hegemony, since areas of its own development are now dependent on the success of its neighbours, while also revealing common agendas in non-water issues, allowing riparian states to resolve conflicts concerning water (Lee, 2015).

Conclusion

At the 20th Meeting of the 6th Committee, Professor Caflisch, eminent expert in this field, stated that ‘the draft articles imposed excessive obligations on upstream states that were planning measures’ and that ‘if such trends persisted, upstream states, which should be partners and not adversaries of downstream states, would have no further interest in becoming parties to the convention. Only a balanced and moderate approach could give the convention some semblance of universality’ (UNGA, 1996d). China, an upstream state on almost all of its transboundary waters, at first supported the draft, but as the conversation progressed, it too argued that the draft articles were imbalanced. Such perceived imbalances are based upon an incorrect interpretation of the substantive rules of international water law, one that favours one position over another: equitable and reasonable use, which purportedly favours upstream states, and the duty not to cause significant harm, which purportedly favours downstream states.
Reciprocity as a legal principle, however, informs their interpretation in such a way as not to favour states in any position. Although states may perceive equitable and reasonable use as protecting the interests of upstream states, it actually provides a process through which the interests of all riparians must be taken into consideration. Although states may perceive the duty not to cause significant harm as protecting the interests of downstream states, harm actually flows both ways and thus all states are equally susceptible, albeit to different kinds of harm. Given the primacy of the principle of equitable and reasonable use, some harm may even need to be tolerated by certain states in order to establish an equitable and reasonable balance. As such, analysis of these principles through the lens of reciprocity provides much-needed depth in our understanding of the substantive rules of international water law, highlighting processes and areas of exchange that may serve to enhance opportunities for cooperation. As these opportunities are utilized and these obligations become more complicated, it becomes desirable, if not necessary, to conduct such cooperation through some form of river basin organization or joint commission. Although the equitable and reasonable balance struck by these principles may not be perfect given the hydrological conditions of the basin, the emerging practice of benefit sharing is one way in which states can bring further balance, with China and its riparian neighbours acting as an example.

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