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WORLD LAW

THE JUSTICIABILITY OF INTERNATIONAL RIVER DISPUTES: A STUDY IN THE CASE METHOD

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TWO SUMMERS ago, the Centre of the Hague Academy of International Law devoted its faculty seminar to the study of international river law. Drawn from eastern and western nations and divided into French and English speaking sections, the thirty participants prepared papers for presentation and critical discussion on various subtopics. The scholarship and the intensity of the seminars were gravely impressive. At nearly every turn, however, the discussions foundered on two points: first, disagreement on whether there are sources of international law which tend to establish legal principles applicable by a neutral tribunal to the type of problem being considered—a disagreement which riddled and ventilated nearly every session; second, the generality of the substantive law principles offered by each reporter as applicable to his given subject—a generality so uncircumscribed as to leave the probable result of any given hypothetical case almost wholly unpredictable.

The application of international law to non-navigational uses of international rivers has a very substantial bibliography: dozens of treaties dating back four centuries, a substantial number of decided cases, parallel municipal law practices, and an abundance of treatises by highly qualified publicists. These should provide ample bases for outlining the law of international rivers in a useful, predictive fashion. The international law rule which commands a consensus is the same rule which the Supreme Court of the United States will apply in apportioning the economic use of interstate rivers when there is no overriding federal statute or congressionally approved interstate compact¹—the rule of equitable apportionment. The con-

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¹ *Arizona v. California*, 373 U.S. 546, 562, 565 (1963); *Nebraska v. Wyoming*, 325 U.S. 589 (1945); *Colorado v. Kansas*, 320 U.S. 383 (1943); *Wyoming v. Colorado*, 259

tent of this rule is clear enough to render future disputes over international rivers fully justiciable: a neutral tribunal would have reasonably clear legal guidelines to employ in the adjudicatory process and the litigating nations would not be involved in reckless gambling by submitting to a tribunal committed to these guidelines.

This conclusion is, however, at variance with the considered opinion of some very excellent writers,² including professors Berber and Smith who have contributed the most lengthy treatises on the subject. In a fairly recent recapitulation of materials which a tribunal might employ under article 38 of the statute for the International Court of Justice, Professor Berber discouragingly concluded: "It is noteworthy that water disputes are generally agreed to constitute a classical example of disputes which cannot be satisfactorily solved by judicial decision."³ Twenty years after completing the first definitive text on the subject,⁴ Professor Smith was even less confident that the judicial process was equal to the task than he was in 1931:

[R]eference to a court is obviously little more than a gamble unless there are clear and accepted rules of law which the court can apply to the facts before it, and in this matter of international water rights it is unfortu-

U.S. 419 (1922). For a complete bibliography of American interstate water cases, see *The Original Jurisdiction of the United States Supreme Court*, 11 STAN. L. REV. 665, 708-18 (1959).

² BRIERLY, *THE LAW OF NATIONS* 204 (5th ed. 1955); *id.* at 126 (1st ed. 1928); SCHWARZENBERGER, *INTERNATIONAL LAW* 218 (3d ed. 1957); *De Visscher, Théories et Réalités en Droit International Public* 260-65 (2d ed. 1955); Eagleton, *The Use of the Waters of International Rivers*, 33 CAN. B. REV. 1018 (1955); MacKay, *The International Joint Commission Between the United States and Canada*, 22 AM. J. INT'L L. 292, 295 (1928). See also BISHOP, *INTERNATIONAL LAW* 388 (1962); BRIERLY, *THE OUTLOOK FOR INTERNATIONAL LAW* 42-43 (1944); 1 HYDE, *INTERNATIONAL LAW* 563 (2d rev. ed. 1947); KAECKENBEECK, *INTERNATIONAL RIVERS* 181 (1918); SIMSARIAN, *THE DIVERSION OF INTERNATIONAL WATERS* 99 (1939); *Legal Aspects of Hydro-Electric Development of Rivers and Lakes of Common Interest*, REPORT OF THE UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE, U.N. Doc. No. E/ECE/136, at 85 (1952) [hereinafter cited ECE REPORT]; *Report of the Nile Commission*, 130 BRITISH & FOREIGN STATE PAPERS 112 (1929) [hereinafter cited as BRIT.ST.P.]; Austin, *Canadian-United States Practice and Theory Respecting the International Law of International Rivers: A Study of the History and Influence of the Harmon Doctrine*, 37 CAN. B. REV. 393, 399 (1959); Goldie, *International Law and the Development of International River Basins*, 1 U. BRIT. COLUM. L. REV. 763 (1963); Murphy, *The Function of International Law in the International Community: The Columbia River Dispute*, 1961 MILITARY L. REV. 181.

³ BERBER, *RIVERS IN INTERNATIONAL LAW* 263 (1959); Berber, *The Indus Water Dispute*, 6 INDIAN YB. INT'L AFF. 46, 60 (1957). See also Scott, *Kansas v. Colorado Revisited*, 52 AM. J. INT'L L. 432, 454 (1958); *The Problem of the Indus and Its Tributaries: An Alternative View*, THE WORLD TODAY 266, 274-75 (1958).

⁴ SMITH, *THE ECONOMIC USES OF INTERNATIONAL RIVERS* 87, 154 (1931).

nately true that the law of nations has so far signally failed to keep pace with modern developments.⁵

There is, however, more in common between these writers and some participants in the Hague seminar than erudition and mutual discouragement for the lack of an explicit international law on this subject. The treatment of the subject has suffered from an approach largely given to an effort to deduce a single clear rule from a catalogue of authority. Since the doctrine of equitable apportionment does not *on its face* appear to dictate the resolution of any given dispute, it is frequently denigrated as no doctrine at all but only a general appeal to international conscience or to a decision *ex aequo et bono*.⁶

The *ex aequo* clause,⁷ never yet employed by the International Court, fundamentally rests on an agreement by the litigants to trust to the good conscience of the court to decide according to its own notions of fairness; if the principle of equitable apportionment fits no other slot, Professor Smith is doubtless correct that an adjudication on such a basis would be a gamble.

Berber and Smith have tried to recover from the apparent dead end of the law by suggesting that in the absence of clearly established legal principles, riparian states should be encouraged to adjust their differences by mutual agreements.⁸ The suggestion is not, however, incompatible with a bolder proposition that certain legal principles do exist; indeed, the suggestion that disputes can be resolved without reference to established principles may otherwise have unfortunate consequences. If there are no general principles limiting the claim of a state to all water flowing through its territory, then it would appear that no upper riparian would concede the legitimacy of a claim made by any water-consuming lower riparian except under threat of superior force or, if the balance of power were in its own favor, in return for disproportionate benefits, *e.g.*, receipt of undue compensation or an exorbitant share of the economic benefits. This is the

⁵ Smith, *The Waters of the Jordan: A Problem of International Water Control*, 25 INT'L AFF. 415, 420 (1949).

⁶ BERBER, SOME METHODOLOGICAL CONSIDERATIONS CONCERNING THE STUDY ON THE USES OF THE WATERS OF INTERNATIONAL RIVERS 5 (1957); Andrassy, *Korišćenje voda prema rezoluciji*, *International Law Association u New Yorku*, 9 ZBORNIK PROVOY FAKULTETA U ZAGREB 236 (1939); Smith, *supra* note 5, at 415.

⁷ STAT. INT'L CT. JUST. art. 38, para. 2.

⁸ For a brief discussion, see BERBER, RIVERS IN INTERNATIONAL LAW 266-67 (1959); BERBER, *op. cit.* *supra* note 6, at 5.

natural course of extralegal negotiations, in contrast with the course of events where the negotiating position of each party is bottomed on a conviction that an influential and neutral third party, whether it be a court, an international bank, or a consensus of other states, would accommodate their interests differently in accordance with basic legal postulates.

An entirely separate development which would appear extraordinary indeed if there are really no emergent legal principles is the argument that there exists a duty under international law to submit water disputes to arbitration in the event that mutual agreement cannot be reached. This "duty," described by John Laylin four years ago,⁹ was enlarged upon recently in Laylin's report to the ILA Committee on International Rivers, at The Hague.¹⁰ Almost simultaneous with the last event was the adoption of a nearly identical recommendation by the *Institut de Droit International*.¹¹ This duty, to arbitrate interests which appear irreconcilable by negotiation, purportedly results from the fact that most riparian states are members of the United Nations and that they have renounced the use of force as a means of settling international differences.¹² With this limitation upon the power of the state which objects to a proposed use, the proposing riparian "cannot pursue a course of unilateral action in derogation of the agreement by other parties to the dispute to abstain from taking the law into their own hands."¹³ Thus, the proposing state may not proceed with its project if an objection is made by a co-riparian, *unless the objecting state is itself unwilling to arbitrate*. The objecting state may therefore delay the proposed use "if it is willing to have the validity of its objection tested by third-party determination."¹⁴

Support for this bilateral duty to arbitrate is found in a United State Senate document which purports to set forth the State Department's understanding of principles of international law:

⁹ Laylin & Bianchi, *The Role of Adjudication in International River Disputes*, 53 AM. J. INT'L L. 30 (1959).

¹⁰ Laylin, Report on the Rights and Duties of Parties to a Water Dispute Pending Its Solution by Peaceful Means, Int'l Law Ass'n Committee on the Uses of the Waters of International Rivers, (Den Haag, Aug. 30, 1961) [hereinafter cited as *Laylin Report*].

¹¹ Texte Définitif de la Résolution tel qu'Adopté au Cours de la Séance, Sept. 11, 1961, arts. 6-8 reprinted in 56 AM. J. INT'L L. 737, 738 (1962).

¹² U.N. CHARTER art. 2, para. 3.

¹³ *Laylin Report*. See also Note, 55 AM. J. INT'L L. 645 (1961).

¹⁴ Laylin & Bianchi, *supra* note 9, at 36-37.

If the coriparian, in good faith, objects and demonstrates its willingness to reach a prompt and just solution by the pacific means envisaged in Article 33 (1) of the Charter of the United Nations, a riparian is under a duty to refrain from making, or allowing, such change, pending agreement or other solution.¹⁵

Mr. Laylin asserts that the duty to arbitrate is generally supported by treaty practice, and that at least sixty-six states have made agreements of this type, affecting international rivers.¹⁶ Two major river treaties executed within the last three years expressly bind the signatories to compulsory arbitration,¹⁷ although a third treaty, affecting the Nile, contains no similar provision.¹⁸

But the point here is not to prove or disprove the existence of a legal duty to submit water disputes to arbitration in accordance with general principles of international law. It is, rather, simply to underscore the assumption implicit in any such duty, that *there necessarily exists some body of law for a court of arbitration to apply!* The duty to arbitrate is not confined by its proponents to treaty signatories or to questions involving merely the interpretation of treaties which may supply their own law *ad hoc*. Rather, it allegedly applies between riparians who have simply fallen into disagreement as to the right of one to make a particular use of a communal river. To stipulate that these parties must submit to an arbitral decision based on international law surely assumes that there is a sufficient body of law to make such a process useful; otherwise the duty to arbitrate comes to nothing, since the commission would be obliged to dismiss the case for want of sufficient substantive rules to adjudicate the dispute. The parties would thus be returned to the same stalemate which the duty to arbitrate is designed to avoid.

Neither do these agreements to submit to arbitration suggest that the parties intend that the tribunal is to decide *ex aequo et bono*—more or less according to its own conscience. Such an uncharted departure from legal protections of sovereign interest is not to be lightly suggested. Thus, notwithstanding the diffidence of some, it

¹⁵ Griffin, *Legal Aspects of the Use of Systems of International Waters*, S. Doc. No. 118, 85th Cong., 2d Sess. 91 (1958). See also Griffin, *The Use of Waters of International Drainage Basins Under Customary International Law*, 53 AM. J. INT'L L. 50, 79 (1959).

¹⁶ Laylin Report at 10.

¹⁷ See *Columbia River Treaty*, 44 DEP'T STATE BULL. 234, 239 (1961); *Indus Waters Treaty*, 123 WORLD AFF. 99 (1960).

¹⁸ See 13 MID. EAST J. 422 (1959).

is evident that not every state or every author insists that disputes involving the economic uses of international rivers are nonjusticiable for lack of a sufficiently developed body of international law.

It is submitted that equitable apportionment is considerably more of a legal doctrine than is sometimes supposed, and that it will provide a justiciable basis for a wide variety of real international disputes. The persuasiveness and clarity of the principle can be made most apparent through its application to a representative series of cases rather than through the more orthodox technique of drawing a chain of authority around the general proposition itself. In what follows we shall be concerned with matured fact situations setting forth concrete disputes between two or more nations traversed by a common river, where one of the nations proposes to make some economic use of the river in a way which antagonizes another riparian claimant. The cases are arranged to move from the easier to the more difficult, the better to illustrate some aspect of equitable apportionment.

CASE I

The Z River flows through states X and Y, X being the upper riparian. X proposes to construct a dam along the Z River; the dam will provide power for several domestic hydroelectric projects. The water passing the dam will be returned to the Z river bed to cross the border into Y in the same amount, at the same rate of flow and, for all practical purposes, as though it had never been involved in the project. Nevertheless, Y objects to the project and asserts that its consent is indispensable as a condition precedent to the use of the Z River by any other riparian. Y bases its objection on a claim of absolute territorial integrity.

During the ensuing arbitration proceeding, Y enlarges upon its objection by asserting the inviolability of prior consent as a customary rule of international fluvial law recognized by civilized states and evidenced by a substantial number of treaties. Y points out, as an example, that the Prussian-Netherlands Treaty of 1816 fixed certain frontiers and provided: "[Neither State] shall make any alteration whatever in the course of the rivers or in the actual banks of the rivers, nor grant any concession or diversion of water, without the consent and agreement of the two Governments."¹⁰ A Finnish-

¹⁰ *Traité de Limites entre Leurs Majestés le Roi de Prusse et le Roi des Pays-Bas*, June 26, 1816, 3 BRIT.ST.P. 720, 729 (1815-1816). (Author's translation; emphasis added.)

Russian Treaty of 1922 similarly provided that: "Waters may not be diverted from the watercourses . . . unless a special agreement has been concluded in each case between the Contracting States."²⁰ A Costa Rican-Panamanian Treaty of 1941 stipulated at article 5 that: "Any work either one of the two countries may desire to undertake on the rivers marking the frontier line must be approved, in anticipation, by the other party."²¹ And the ECE Report of 1952 recommended that: "Any work such as canalization, irrigation, or the development of electrical power shall only be undertaken subject to the mutual consent of both riparian States."²² Y also draws from United Nations proceedings to quote the argument of the Syrian delegate before the Security Council in 1953, in which he insisted with regard to development of the Jordan River: "There is no doubt whatever that in this case a mutual prior agreement for the use of the waters is necessary before *any* project can be started in connection with them."²³

This case is not entirely hypothetical, and while case decisions lack the force of *stare decisis* in international law, it is clear that a neutral tribunal would reject Y's position for the same reasons as those employed by the Court of Arbitration in *Affaire de Lac Lanoux*.²⁴ On stipulated facts that waters from Lake Lanoux flowing into Spain would not be affected by French diversions from the Carol River which fed the lake and which France sought to use in a hydroelectric project wholly within French territory, the Arbitral Court upheld the right of France to proceed without Spanish consent. It expressly rejected prior consent as a general principle or customary rule of international law investing each riparian with an absolute veto power. While the holding is necessarily cast in the form of rejecting the Spanish proposition as a rule of law (because of the manner in which the case arose procedurally), it virtually as-

²⁰ Convention Between Finland and Russia Concerning the Maintenance of River Channels and the Regulation of Fishing on Water Courses Forming Part of the Frontier Between Finland and Russia, Oct. 28, 1922, 19 L.N.T.S. 193, 194-95 (1923).

²¹ Treaty Regarding Frontiers Between Costa Rica and Panama, May 1, 1941, 144 BRIT.ST.P. 751, 753 (1940-1941). (Emphasis added.)

²² ECE REPORT 149 (Emphasis added), quoting from Exchange of Notes Between the United Kingdom and Brazil, March 15, 1940, 5 U.N.T.S. 72 (1947).

²³ U.N. SECURITY COUNCIL OFF. REC. 8th year, 649th Meeting (S/PV.649) 21 (1953). (Emphasis added.)

²⁴ 62 REVUE GÉNÉRALE DE DROIT INTERNATIONAL PUBLIC 79 (1958). Excerpts are reprinted in 53 AM. J. INT'L L. 156 (1959).

serts that a state may unilaterally develop harmless²⁵ uses of an international river within its borders as a legitimate exercise of sovereign interest. The decision appears to be equally useful whether we are discussing harmless diversions for hydroelectric projects, or harmless diversions for recreational purposes such as fishing, boating, or swimming. Restated, the *Lake Lanoux* decision holds for the following proposition: The right of territorial sovereignty over an international river entitles a riparian state to use the river in any manner which will not result in a material alteration of the river or of its availability for use as it passes through other riparian states.

Y's position in our hypothetical case, like Spain's in the *Lake Lanoux* arbitration, should be rejected as a matter of reason and authority. First, it is arguable that notwithstanding the absolute phraseology of the scattered treaty provisions assembled by Y, these provisions were intended to apply only when a proposed use by one riparian would result in a significant disadvantage to the other signatory powers; harmless unilateral uses may not be within the common obligation to secure prior consent. Second, even assuming these provisions do confer an absolute veto power on each riparian, they are contrary to a far greater number of treaties and practices which limit the doctrine of prior consent to instances where substantial harm can be shown.²⁶ Consequently, they may simply represent an *ad hoc* departure from what the signatory states otherwise understood would prevail as a matter of customary international law in the absence of such a special agreement.²⁷ Finally, the special

²⁵ It is correct, of course, that neighboring states whose use of the river is physically unimpaired may still feel *politically* disadvantaged by the growth of power which their riparian neighbor may realize from harnessing the river. Explicit in the *Lake Lanoux* decision, however, is the proposition that pacific political advantage resulting from an otherwise harmless use of an international river does not constitute a legal injury.

²⁶ A substantial number of these treaties, with supporting comments by highly qualified international law publicists, are discussed in *Case II, infra*.

²⁷ "[Treaties]... may go to show, according to the nature of the case and the particular circumstances, the existence of general usage which the parties wished to record for convenience in apt words and an authentic form (though this is not common), or the dissatisfaction of the parties with existing usage and their desire to improve on it, or the absence of any settled usage at all antecedent to the particular agreement. It is, therefore, impracticable... to make any general statement as to the value of treaties and similar instruments as evidence of the law of nations." Pollack, *The Sources of International Law*, 2 COLUM. L. REV. 511 (1902). See also LAUTERPACHT, *THE DEVELOPMENT OF INTERNATIONAL LAW BY THE INTERNATIONAL COURT* 377-79 (1958).

adoption of these veto-power provisions has never been accompanied by any declaration that they were required by international law, and thus the *opinio juris* condition is lacking to make them useful as evidence of customary law under article 38 of the International Court's statute.²⁸

As a matter of reason, it should be clear that each nation must be free to develop fluvial resources which will advance its economy or welfare when no substantial alteration of the river as it flows from or into co-riparian states results. Any rule to the contrary could operate to frustrate the useful application of a valuable natural resource, according to political jealousies of states tempted to invoke their veto power for unworthy reasons or for no reason at all—a prospect wholly at odds with the principle of equitable apportionment.²⁹

While the affirmative rule of customary international law deducible from the *Lake Lanoux* case is necessarily limited to simple facts, it is a rule which does contribute to the justiciability of international river disputes and it makes clear that submission to a tribunal under some circumstances will not be a gamble.

CASE II

State X, the upper riparian, proposes to construct its hydro-electric plant near the X-Y border. The acceleration of the flow occasioned by the river passing through new sluices just on the X side, will result in the quickened erosion of irrigation canals in the upper part of Y. At a cost of \$100,000 (less than 1% of the total project cost), X could restore the river flow to its original rate of movement through Y either by introducing certain concrete water breaks into the river on its side of the border—thus promoting its own development with no substantial injury to Y—or by removing its proposed dam further up the river. X refuses to take either of these measures, however, asserting that there is no rule of international law to proscribe its use of water within its territory according to its own inclination. To the contrary, it asserts that the

²⁸ "We can therefore hold fast to the firmly established proposition that state practice alone, even when frequently recurring and carried out over a long period, does not constitute sufficient evidence of the existence of customary law, but that a psychological element—often difficult to verify—must be present, namely, the conviction of states that they are bound in law to the particular course of conduct." BERBER, *RIVERS IN INTERNATIONAL LAW* 48 (1959); see authorities cited *id.* at 46-47. See also FENWICK, *INTERNATIONAL LAW* 62-63 (1934); LAUTERPACHT, *op cit. supra* note 27, at 379; I OPPENHEIM, *INTERNATIONAL LAW* 27 (8th ed. 1955); Tunkin, *Remarks on the Juridical Nature of Customary Norms of International Law*, 49 CALIF. L. REV. 419, 422 (1961). But see discussion in text at notes 61-65 *infra*.

²⁹ See discussion in text at notes 98-112 *infra*.

rule is that sovereign power over all water flowing through one's territory is unlimited.

At the arbitration hearing, X supports its case by relying partly on the "teachings of the most highly qualified publicists" that there is no international law on point to restrict a state's exercise of its sovereignty.³⁰ Additionally X draws upon the whole body of authority accompanying the Harmon doctrine,³¹ viz., that a sovereign may appropriate resources within its territory regardless of the consequences to its neighbors, a rule seemingly acknowledged by Briggs³² and Kluber,³³ and the alleged state practice of India as represented by Mr. Sikri.³⁴

Even so, there is little doubt that an international court would possess an authoritative basis for rejecting X's contention, and for affirmatively sustaining the objection of Y. The principle finally applicable to justiciable disputes of this kind is this: No state may use the water of a communal river in a manner which substantially and adversely affects other riparians where reasonable means exist to secure the same use without adversely affecting the other riparians.

To establish this principle, the first step is to negative X's claim based upon the Harmon doctrine, i.e., absolute territorial sovereignty as a matter of international law. This step has already been taken by other writers.³⁵ The following will do as a succinct summary.

³⁰ See authorities cited note 2 *supra*.

³¹ See BERBER, *op. cit. supra* note 28, at 14-19; 1 HYDE, *op. cit. supra* note 2, at 565-72; SIMSARIAN, *op. cit. supra* note 2, at 71; Austin, *supra* note 2, at 393; Murphy, *supra* note 2, at 186-87.

³² "In the absence of [a special convention between States]...national rivers and those portions of international rivers which are within the national territory are subject to the exclusive control of the territorial sovereign. No general principle of international law prevents a riparian State from excluding foreign ships from the navigation of such a river or from diverting or polluting its waters." BRIGGS, *THE LAW OF NATIONS* 274 (2d ed. 1952).

³³ "A State...is entitled to exploit its territory to achieve its proper objects...by...changing the course of waterways, even if that might turn out to be to the detriment of other States." 1 KLUBER, *EUROPAISCHES VOLKERRECHT* 128 (1821), quoted in ECE REPORT at 52. See Sikri, *Principles of Law Governing the Uses of International Rivers*, 1956 REPORT OF THE INTERNATIONAL LAW ASSOCIATION CONFERENCE 8 [hereinafter cited as INT'L L. ASS'N CONF. REP.].

³⁴ India eventually relinquished the position in negotiations with Pakistan and the World Bank concerning the Indus River basin.

³⁵ BERBER, *op. cit. supra* note 28, at 19-40; Austin, *supra* note 2; Griffin, *The Use of Waters of International Drainage Basins Under Customary International Law*, 53 AM. J. INT'L L. 50, 69 (1959); Johnson, *Effect of Existing Uses on the Equitable Ap-*

The Harmon doctrine finds its basis in the mere opinion of an United States Attorney General that the rights of America as the upper riparian on the Rio Grande River were unlimited by any effect the unbridled exercise of those rights might have on the flow of the river into Mexico.³⁶ The doctrine was expressly reserved in the American-Mexican Treaty of 1906,³⁷ and it continued to receive lip service by the United States until 1939.³⁸ It was expressly disclaimed as a principle of municipal law in 1922 by the United States Supreme Court,³⁹ however, and it has not been applied even during negotiations with Mexico, since 1944.⁴⁰ Moreover, it is quite clear that the "doctrine" was merely an instrument of foreign policy, not only because it was never widely supported abroad but also because the United States has assumed a radically different attitude when, as a lower riparian on the Columbia River, application of the doctrine would have operated to its distinct disadvantage.⁴¹ In granting ultimate control to the uppermost riparian, the doctrine places lower riparian uses and projects in constant jeopardy. In affirming the untrammelled sovereignty of the upper riparian, it senselessly denies the claims of lower states in which the communal river may be as much or more of a natural, territorial and "sovereign" asset. Ultimately the doctrine has failed to engender support because, as persuasively presented by Professor Smith: "[The doctrine of absolute supremacy of the territorial sovereign] is . . . essentially anarchic . . . permit[ting] every state to inflict irreparable injury upon its neighbours without being amenable to any control save the threat of

portionment of International Rivers I: An American View, 1 U. BRIT. COLUM. L. REV. 389 (1960).

³⁶ See I MOORE, *INTERNATIONAL LAW* 654 (1906).

³⁷ Convention Providing for the Equitable Distribution of the Waters of the Rio Grande for Irrigation Purposes, May 5, 1906, 34 Stat. 2953 (effective Dec. 26, 1906).

³⁸ See discussions in the *Report of American Section of the Int'l Water Comm'n, United States and Mexico*, H.R. Doc. No. 359, 71st Cong., 2d Sess. (1930); Simsarian, *op. cit. supra* note 2.

³⁹ *Wyoming v. Colorado*, 259 U.S. 419, 466 (1922). See also cases cited note 1 *supra*, squarely identifying equitable apportionment as reflecting the rule to govern interstate river disputes.

⁴⁰ Treaty With Mexico Respecting Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande, Feb. 3, 1944, arts. 8, 9, 59 Stat. 1219, T.S. 994 (effective Nov. 8, 1945).

⁴¹ *Hearings Before the Senate Foreign Relations Committee on Treaty with Mexico Relating to the Utilization of the Waters of Certain Rivers*, 79th Cong., 1st Sess., pt. 1, at 19-21, pt. 5, at 1738-55 (1945); State Dep't Memorandum, *Legal Aspects of the Use of Systems of International Waters*, S. Doc. No. 118, 85th Cong., 2d Sess. 91 (1958); *The United States Position—Diversions of Columbia River Waters*, 1956 PAC. N.W. REGIONAL MEETING, AM. SOC'Y INT'L LAW 16-18, 21, 35.

war."⁴² Although the doctrine has been said to represent the state practice of India,⁴³ there is every indication that this too was merely a matter of momentary political expediency to strengthen India's position during negotiations with Pakistan concerning apportionment of the Indus River; the treaty settlement of this dispute reflects a different principle altogether.⁴⁴

Having negated X's right to use the river with utter impunity, it remains to be affirmatively demonstrated that international law would support the principle that X must use every reasonable means to avoid substantial adverse effects on Y. Material is already abundant on this point and only a summary is presented here.

From one point of view, the principle is simply an extension of the traditional tort maxim that one must use his own property so as not to injure others. As restated by Professor Eagleton:

It seems safe . . . to state as a general principle of international law that, while each state has sovereign control within its own boundaries, in so far as international rivers are concerned, a state may not exercise that control without taking into account the effects upon other riparian states. This is a negative statement, which I can as confidently put into positive form in the old maxim *sic utere tuo ut non alienum laedas*.⁴⁵

Other authors have arrived at the same point, not from the common law tradition, but from Roman law tradition.⁴⁶ Others, as Professor Oppenheim, would ground the principle as an illustration of an abuse of right.⁴⁷ And still others, as Hans Thalmann, derive the principle from a more amorphous neighborhood law.⁴⁸ In any event, the overwhelming opinion of international law publicists supports the basic principle.⁴⁹

⁴² SMITH, *THE ECONOMIC USES OF INTERNATIONAL RIVERS* 144-45 (1931).

⁴³ See note 34 *supra*.

⁴⁴ See *Indus Water Treaty*, 123 WORLD AFF. 99 (1960); text at notes 53, 106 *infra*. See Berber, *The Indus Water Dispute*, 6 INDIAN YB. INT'L AFF. 46 (1957); 9 FOREIGN AFF. REP. 153 (1960).

⁴⁵ Eagleton, *The Use of the Waters of International Rivers*, 33 CAN. B. REV. 1018, 1021 (1955).

⁴⁶ See, e.g., Neumeyer, *Ein Beitrag zum internationalen Wasserrecht*, Festschrift für Georg Cohn 143-44 (1915).

⁴⁷ 1 OPPENHEIM, *op. cit. supra* note 28, at 345-47.

⁴⁸ THALMANN, *GRUNDPRINZIPIEN DES MODERNEN ZWISCHENSTAATLICHEN NACHBARRECHTS* 159 (1951).

⁴⁹ See BATY, *THE CANONS OF INTERNATIONAL LAW* 83 (1930); BERBER, *op. cit. supra* note 3, at 254 (Professor Berber is adamant, however, that the vague and inchoate nature of the principle falls short of making it a general principle of law recognized by civilized nations or a principle of customary law suitable for application by an international tribunal); BRIERLY, *LAW OF NATIONS* 205 (5th ed. 1955); HALL, *INTER-*

In the same category of authority may be placed the views of the International Law Association. Typical of its resolutions during conferences over the last decade is the fourth resolution of the ILA from its Dubrovnik Conference of 1956: "A State is responsible, under international law, for public or private acts producing change in the existing régime of a river to the injury of another State, which it could have prevented by reasonable diligence."⁵⁰ The restriction on state X is derived not only from the opinions of highly qualified publicists who comprise but a secondary source of international law authority under article 38 of the I.C.J. statute.⁵¹ The principle is equally well endorsed by parallel treaty provisions,⁵² only the most

NATIONAL LAW 175 (8th ed. 1924); KAECKENBEECK, *INTERNATIONAL RIVERS* 181 (1918); SMITH, *op. cit. supra* note 42, at 151; Cardona, *El Regimen Juridico de los Rios Internacionales*, 56 *RIVISTA DE DERECHO INTERNACIONAL* 24 (1949); Griffin, *Supra* note 35, at 50; Hartig, whose views are discussed by Seidl-Hohenveldern, *Austrian Views on International Rivers*, 9 *ANNALES UNIVERSITATIS SARAVIENSIS* 191 (1961); Hostie, *Problems of International Law Concerning Irrigation of Arid Lands*, 31 *INT'L AFF.* 61 (1955); Huber, *Ein Beitrag zur Lehre von der Gebietschoheit an Grenzflüssen*, *ZEITSCHRIFT FÜR VOLKERRECHT UND BUNDESSTAATSRECHT* 160-63 (1907); Sauser-Hall, *L'Utilisation Industrielle des Fleuves Internationaux*, 83 *RECUEIL DES COURS ACADEMIE DE DROIT INTERNATIONAL* 470, 517 (1953).

⁵⁰ *Waters of International Rivers: Resolution*, 1956 *INT'L L. ASS'N CONF. REP.* 216, 242. See also *Resolutions*, 10 *REPORT OF PROCEEDINGS OF INTER-AMERICAN BAR ASS'N CONFERENCE* (1957) [hereinafter cited as *INTER-AM. BAR ASS'N CONF. REP.*]; *ECE REPORT* 61; 24 *ANNUAIRE DE L'INSTITUT DE DROIT INTERNATIONAL* 170 (1911).

⁵¹ The International Court has never referred to the writings of a single author as representing the "teachings of the most highly qualified publicists of the various nations" under the *STAT. INT'L CT. JUST.* art. 38, para. 1 (d). See LAUTERPACHT, *THE DEVELOPMENT OF INTERNATIONAL LAW BY THE INTERNATIONAL COURT* 23 (1958).

⁵² See, e.g., *Treaty Regarding Frontiers Between Costa Rica and Panama*, May 1, 1941, 144 *BRIT.ST.P.* 751 (1941); *Exchange of Notes Between the United Kingdom and Brazil*, March 15, 1940, 75 *U.N.T.S.* 72 (1947), *ECE REPORT* 149; *Water Rights on the Boundary Between Tanganyika and Ruanda-Urundi*, Nov. 22, 1934, 139 *BRIT.ST.P.* 746 (1935), *Brit. T.S. No. 42* (1938); *Treaty Between France and Germany Regarding the Delimitation of the Frontier*, Aug. 14, 1925, 75 *L.N.T.S.* 264, 268; *Agreement Between South Africa and Portugal Regulating the Use of the Water of the Kunese River*, July 1, 1926, 123 *BRIT.ST.P.* 593 (1926); *Treaty with Great Britain*, Feb. 24, 1925, art. XI, 44 *Stat.* 2108, *T.S. No. 721* (proclaimed July 17, 1925); *Convention and Protocol Between Finland and Norway Respecting the Legal Regime Governing the Waters of the Pasvik and Jakobselv*, Feb. 14, 1925, 122 *BRIT.ST.P.* 530 (1925); *Convention entre la France et les Pays-Bas pour fixer conventionnellement la limite entre les colonies de la Guyane française et de Suriname*, Sept. 30, 1915, 110 *BRIT.ST.P.* 872 (1916); *Convention entre la France et la Suisse pour l'Aménagement de la Puissance du Rhône entre l'usine projectée de la plaine et un point à déterminer en a mont du Pont de Pougny-Chancy-Berne*, Oct. 4, 1913, 110 *BRIT.ST.P.* 886 (1916); *Convention entre la France et l'Italie pour l'Utilisation des eaux de la Rivière la Roya et ses Affluents*, Dec. 17, 1914, 108 *BRIT.ST.P.* 467-68 (1914); *Convention Between Sweden and Norway Concerning Lakes and Waters in Common*, Oct. 26, 1905, 98 *BRIT.ST.P.* 828, 829 (1905); *Traité de Limites entre Leurs Majestés le Roi de Prusse et le Roi des Pays-Bas*, June 26, 1816, 3 *BRIT.ST.P.* 720, 729 (1816-1818). For additional references, see BERBER, *RIVERS IN INTERNATIONAL LAW* 52-122 (1959); SMITH, *op. cit. supra* note 42,

recent of which will be noted here. Some of these recent treaty provisions make clear not only that unilateral appropriations to the substantial detriment of co-riparians are excluded, but they also provide concrete evidence of what constitutes "substantial detriment" by explicitly acknowledging the avoidable harm to certain types of pre-existing uses. In our *Case II*, the existing irrigation canals in State *Y* represent such a prior use, and current treaty practice consistently harmonizes with the protection of this type of use wherever avoidance of injury is reasonably available.

Foremost among these treaties is the Indus Water Treaty of 1960,⁵³ accommodating India's interest in harnessing the western rivers of the Indus basin for irrigation projects to serve India, without injuring pre-existing irrigation canals serving forty million Pakistani. To insure that the Pakistan projects would not be adversely affected, it was agreed that currently unused eastern rivers would be diverted to replenish the supply of water taken from the Indus by the Indian projects. Significantly, India agreed to defray the cost of the replacement diversions, even though the cost will exceed one billion dollars; in doing so, it appears to recognize the very principle contended for by *Y* in *Case II*, *i.e.*, that in utilizing an international river, *X* is obliged to use every reasonable means to avoid substantial harm to co-riparians.

Similarly, the Nile Waters Agreement of 1959 between Egypt and Sudan bound both parties to limit prospective diversions in a manner which would not deprive existing uses in either country of water currently being employed.⁵⁴ And in the Columbia River Treaty of 1960 between the United States and Canada, upper riparian flood control dams which might have been developed along the Peace River with disruption of the Columbia's flow to established downstream hydroelectric dams in the United States, were ultimately agreed upon only after construction of the dams in Canada

at 159-216; Hirsch, *Utilization of International Rivers in the Middle East*, 50 AM. J. INT'L L. 81 (1956).

⁵³ Reported and discussed, 123 WORLD AFF. 99 (1960); Gupta, *The Indus Waters Treaty, 1960*, 9 FOREIGN AFF. REP. 153 (1960); 55 AM. J. INT'L L. 797 (1961). See also 1 REPORT OF THE INDUS COMMISSION (1950). See also Convention Between Yugoslavia and Austria Concerning Water Economy Questions Relating to the Drava, May 24, 1954, 227 U.N.T.S. 111 (1956), in which Austria agreed to indemnify Yugoslavia for damages resulting from Austrian interference with the flow of the Drava River.

⁵⁴ See 13 MID. EAST J. 422 (1959).

was planned so as to avoid any injury to existing uses.⁵⁵ Along the southern border, the 1944 treaty between Mexico and the United States protected existing uses in both countries from harm which might otherwise have been threatened by future projects in either country.⁵⁶

Professor Berber has written critically, however, that treaties and parallel state practices are serviceable only as evidence of a rule of *customary* international law;⁵⁷ "general principles" are not derived from these sources, but from abstraction based upon parallel *municipal* law practices of a large majority of civilized states. If Professor Berber is correct, the question arises whether a given treaty provision or a given state practice was adopted, (a) as an affirmation of what the parties understood to be required by customary law; (b) as in stipulated derogation of customary law; or (c) merely *ad hoc*, in the absence of any clear customary rule. Unless the treaty provision represents an instance of (a), it allegedly lacks the element of *opinio juris*, i.e., adoption from a sense of juridical obligation, essential to give it any legal effect beyond committing the immediate, signatory parties to a private international law contract.⁵⁸ Berber feels that none of the many treaties he has examined in this context clearly meets the *opinio juris* requirement, and thus he is quite scornful of efforts to generalize. While he is not alone in those views,⁵⁹ it is possible that he has overstated the case.⁶⁰

Professor Hyde maintains that something less than a sense of

⁵⁵ See 44 DEP'T STATE BULL. 227 (1961); 12 EXTERNAL AFF. 870 (1960). Compare Johnson, *Effect of Existing Uses on the Equitable Apportionment of International Rivers I: An American View*, 1 U. BRIT. COLUM. L. REV. 389 (1960) with Goldie, *Effect of Existing Uses on the Equitable Apportionment of International Rivers II: A Canadian View*, 1 U. BRIT. COLUM. L. REV. 399 (1960).

⁵⁶ Treaty with Mexico Respecting Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande, Nov. 14, 1944, 59 Stat. 1219, T.S. No. 994 (effective Nov. 8, 1945).

⁵⁷ BERBER, *op. cit. supra* note 28, at 45-46, 168-69, 185-86 (1959).

⁵⁸ *Id.* at 136-56. BERBER, SOME METHODOLOGICAL CONSIDERATIONS CONCERNING THE STUDY ON THE USE OF THE WATERS OF INTERNATIONAL RIVERS 8-10 (1957). See authorities cited, note 88 *infra*; Kunz, *The Nature of Customary International Law*, 47 AM. J. INT'L L. 662 (1953).

⁵⁹ *Ibid.*

⁶⁰ A strict *opinio juris* requirement might propound customary international law on the basis of mistaken impressions. "On the one hand it is said that usage plus *opinio juris* leads to such norm; that, on the other hand, in order to lead to such norm, the states must already practice the first cases with the *opinio juris*. Hence, the very coming into existence of such norm would presuppose that the states acted in legal error." Kunz, *supra* note 58, at 667. See also KELSEN, GENERAL THEORY OF LAW AND STATE 114 (1949).

obligation will suffice to validate parallel treaty provisions as a source of customary law.⁶¹ Professor Hudson believes that a sense of consistency with international practice, rather than a sense of juridical duty, would suffice.⁶² Judge Lauterpacht agrees with the *opinio juris* requirement, but softens the burden of proof by creating a rebuttable presumption of its presence when the particular treaty provision is in line with a frequent and widespread practice.⁶³ Professor Schwarzenberger avoids the problem by urging that general state and treaty practices may at least evidence a "general principle" of international law, even should they fail to meet the harsher qualifications as evidence of some customary rule.⁶⁴

These mitigants of *opinio juris* are persuasive, if only because the rigour of *opinio juris*, when stringently applied, unrealistically impedes the development of international law. Treaty negotiations are seldom recorded and generally involve a host of policy considerations for both parties. It is scarcely ever possible to isolate a particular reason to account for the character of the treaty, aside from declarations in the preamble or the body of the treaty itself. Treaty declarations that a particular provision was adopted because of or in spite of customary law are, understandably, very rare.

But this does not mean that considerations of law may not have played a substantial part in the treaty settlement, or that the admixture of desire to conform with established norms and more political considerations is without evidentiary value. It seems utterly unrealistic to divorce political considerations for adopting treaty provisions from juridical considerations, because the latter obviously play a substantial part in shaping and in "selling" the former, *i.e.*, the bargaining position of a state is measurably strengthened to the extent that it can support its national demands on appeals to generally observed, international practice. This, it seems, singularly accounts for Pakistan's success in persuading the International Bank and India that India should defray the costs of replacing water

⁶¹ I HYDE, *INTERNATIONAL LAW* 10 (2d ed. 1945). For related views which substantially jettison an *opinio juris* requirement in the formulation of customary international law, see Kelsen, *PRINCIPLES OF INTERNATIONAL LAW* 311-12 (1952); SIERRA, *TRATADO DE DERECHO INTERNACIONAL PUBLICO* 25 (2d ed. 1955); Guggenheim, *Les Deux Éléments de la coutume en droit international*, 1 *ÉTUDES EN L'HONNEUR DE G. SCHELLE* 280 (1950).

⁶² Hudson, *Working Paper on Customary International Law*, U.N. Doc. No. A/CN.4/16 (1950).

⁶³ LAUTERPACHT, *op. cit. supra* note 51, at 379-80.

⁶⁴ SCHWARZENBERGER, *INTERNATIONAL LAW* 39-49 (3d ed. 1957).

diverted from the eastern rivers; no other hypothesis is quite so consistent with the efforts of Pakistan's counsel to carry his case to the International Law Association on so many occasions, to debate for their support.

The same borrowing from legal principles to buttress a national policy position is evident in the treatment of the *Lake Lanoux* dispute. Initially, France argued that it was entitled to divert water from the Carol River without substituting water from the Ariege River, even though this would have resulted in a substantially diminished flow from Lake Lanoux into Spain. Before carrying its case to the Court of Arbitration, however, France altered its position so as fully to protect Spain's interest in the undiminished flow. French policy probably would not have taken such a turn involving considerable expense to France, had it not felt that its position before a neutral arbitrator would be improved as a *legal* consideration. It therefore seems entirely reasonable that while we can seldom isolate *opinio juris* elements as alone accounting for the recent, general uniform willingness of states to use all reasonable means not to injure co-riparian interests, the coincidence and frequency of this policy is compelling; surely it is relevant for a court to consider in resolving *Case II*. And if this is so, then the principle we have examined is a sound one. No treaty within the past twenty years has actually disregarded substantial interests of co-riparians, and only one has declared that the treaty provision is not to be considered representative of the parties' view of their duty.

The *Lake Lanoux* decision is the only international tribunal decision involving sovereign states and the division of economic rights in international rivers. There are, however, a number of municipal decisions which, while not relevant immediately as judicial decisions under article 38 (a), may evidence "general principles" of international law under 38 (c), since they tend to reflect parallel state practices from which certain propositions applicable to the community of states can be generalized.⁶⁵ That a state must not affect the condition of the river whenever reasonably avoidable is agreed by all municipal courts which have had occasion to consider the problem. Hostie has accurately characterized the Ameri-

⁶⁵ See Trail Smelter Arbitral Tribunal, 35 AM. J. INT'L L. 684 (1941); Hostie, *supra* note 49, at 69; 1 REPORT OF THE INDUS COMMISSION 54 (1950). But see BERBER, *op. cit. supra* note 58, at 4, 51; BERBER, RIVERS IN INTERNATIONAL LAW 171-72; Case of the S.S. "Lotus," P.C.I.J., ser. A, No. 10 (1927) (dissenting opinion).

can cases in the following manner: "In all relevant cases, the [Supreme] Court has primarily applied a rule of law...that a riparian State must abstain from causing substantial injury to another riparian State of the same river system, where appropriate, by diversion including storage."⁶⁶ In 1927, the Deutsches Staatsgerichtshof declared: "No State has the right to cause substantial injury to the interests of another State by the use it makes of the waters of a natural waterway."⁶⁷ The same proposition is recognized in the Rau Report which antedated settlement of the Indus River dispute by treaty,⁶⁸ and again the view appears in dicta of the Italian Court of Cassation, in a 1939 decision involving clarification of Franco-Italian interests in the Roya:

[A]lthough a State in the exercise of its right of sovereignty, may subject public rivers to whatever regime it deems best, it cannot disregard the international duty, derived from that principle, not to impede or to destroy, as a result of this regime, the opportunity of the other States to avail themselves of the flow of water for their own national needs.⁶⁹

And notwithstanding his reluctance to use municipal practice as evidence of customary law, Professor Berber derives this much from municipal experience among civilized states: "Underlying almost every such system is a principle according to which the user must in some way take into consideration the use of water by other users."⁷⁰ It is submitted that the "way" in which this consideration has uniformly been acknowledged is to condition the right of exploitation of a riparian state on the requirement that it use every reasonable means to avoid substantial injury to co-riparians.

As an aspect of equitable apportionment, this rule has substantial predictive application. First, it means in the case of *X* versus *Y* that *Y*'s objection to the *X* project should be sustained, since *X* could

⁶⁶ Hostie, *supra* note 49, at 68. See *Nebraska v. Wyoming*, 325 U.S. 589 (1945), *modified*, 345 U.S. 981 (1953); *Wyoming v. Colorado*, 309 U.S. 572 (1940); *Wyoming v. Colorado*, 298 U.S. 573 (1936); *Washington v. Oregon*, 297 U.S. 517 (1936); *Wyoming v. Colorado*, 260 U.S. 1 (1922); *Wyoming v. Colorado*, 259 U.S. 419 (1922); *Kansas v. Colorado*, 206 U.S. 46 (1907); *Kansas v. Colorado*, 185 U.S. 125 (1902). See also BERBER, *RIVERS IN INTERNATIONAL LAW* 247-52 (1959); SMITH, *op. cit. supra* note 42, at 105-17.

⁶⁷ ANNUAL DIGEST OF PUBLIC INTERNATIONAL LAW CASES 128 (Lauterpacht ed. 1927-1928).

⁶⁸ I REPORT OF THE INDUS COMMISSION (1950).

⁶⁹ *Société Énergie Électrique du Littoral Méditerranéen v. Compagnia Imprese Elettriche Ligure*, ANNUAL DIGEST OF PUBLIC INTERNATIONAL LAW CASES 121 (Lauterpacht ed. 1938-1940).

⁷⁰ BERBER, *op. cit. supra* note 35, at 254.

avoid altering the river flow by either of two reasonable means. Second, taken in combination with the rule of law examined earlier, it means that in the event that *X* does install breakwaters to avoid any substantial harm to *Y*, *X* is then entitled to proceed with its hydroelectric project without further complaint from *Y*. This simply amounts to an application of the earlier rule, just as easily restated here in its traditional, negative tone as applied to *Y*: "No State is justified in opposing the unilateral action of another in utilizing waters, if such action neither causes nor threatens any appreciable injury to the former State."⁷¹ These elementary rules will settle most of the cases where the facts make clear that use by one riparian can be secured without unavoidable harm to co-riparians. Where the hydroelectric dam threatens navigation, the rules suggest that the construction of the dam is conditioned upon the development by the proposing state of a navigable route around the dam. If it is a matter of irrigation for the proposing state, then the duty would be to replenish lower riparian rivers with other available streams, as in the Indus settlement. Again, it will subsequently be seen that these rules too are merely particular applications of the broader principle of equitable apportionment.

CASE III

State *X*'s hydroelectric project (otherwise described in *Case II*), will accelerate the water of the *Z* River enough to quicken the erosion of a small island in the middle of the river just on the *Y* side of the border. The island is useful only to support a summer cottage of a *Y* resident, and the island is worth ten thousand dollars. An installation of breakwaters necessary to avoid any damage to the island would cost *X* five hundred thousand dollars.

At first glance the case appears to fall within the rule used in *Case II*, obliging *X* to take expensive precautionary measures before using the river. But the rule is qualified so that *Y*'s objection would be sustained only if: (a) the unavoidable injury to its interests is substantial; or (b) although the unavoidable injury is not substantial, *X* refuses to offer adequate compensation for the damage. If measures are taken by *X* to compensate *Y* for the trivial damage, short of leaving the river exactly as it was due to the disproportionate expense of this measure, the combination of reasonable compensation with a residue of merely trivial injury to *Y* ought to free *X* to

⁷¹ This is, of course, a restatement of the principle we derived from the discussion of *Case I*, *supra*, with the emphasis now resting more on an "abuse of right" theory.

develop its interest unilaterally. Thus, X could discharge its legal obligation by paying Y the money value of the island, much as Egypt has recently agreed to compensate Sudan for the money value of land which will unavoidably be flooded from the waters of the Aswan Dam.⁷² This, of course, does not mean that Y has sustained no damage whatever, for certainly a state may prefer to have property to the property's money's worth. Nevertheless, the residue of damage after compensation is so trivial in comparison with the five hundred thousand dollar cost of avoiding it altogether, that a court should consider the matter as *de minimis* and allow X to proceed with its project under our first rule.

That trivial damage to a riparian is not sufficient grounds to thwart proposed uses by co-riparians, is well supported by many of the same authorities we have previously reviewed. The ECE Report declares:

A State has the right to develop unilaterally that section of the waterway which traverses or borders its territory, insofar as such development is liable to cause in the territory of another State, only *slight* injury or *minor* inconvenience compatible with good neighborly relations.⁷³

The Madrid Declarations of 1911 speak of forbidding only those unilateral appropriations which would "*seriously* interfere" or "*seriously* modify" the river's flow.⁷⁴ Professor Smith condemns only that kind of unilateral action which threatens "appreciable" injury to co-riparian interests.⁷⁵

Illustrative treaty provisions include the Swedish-Norwegian Treaty of Karlstadt of 1905, most significant because it is one of the few treaties which expressly rests the critical provision on international law:

Conforming to general principles of international law, it is understood that works . . . shall not be executed in one of the two States without the consent of the other, every time that these works in affecting the water situated in the other State *sensibly* hinder the use of the water course

⁷² See *Nile Waters Agreement*, 13 MID. EAST J. 422 (1959) (£15 million to compensate Sudan).

⁷³ ECE REPORT 61 (Emphasis added.)

⁷⁴ 24 ANNUAIRE DE L'INSTITUT DE DROIT INTERNATIONAL 170 (1911) (Emphasis added.); SMITH, *op. cit. supra* note 42, at 156; ECE REPORT 261. For similar treaty provisions, see, e.g., Convention Relating to the Development of Hydraulic Power Affecting More Than One State, Dec. 9, 1923, 36 L.N.T.S. 76, 81, Br. T.S. No. 26 (1925); Convention entre la France et l'Italie pour l'Utilisation des Eaux de la Rivière la Roya et ses Affluents, Dec. 17, 1914, 108 BRIT.SR.P. 467-68 (1914).

⁷⁵ SMITH, *op. cit. supra* note 42, at 151.

for navigation or the floating of logs, or otherwise effect *serious* changes in the water over a *considerable* area.⁷⁶

Turning again to judicial decisions, note that the *Donauversinkung* case denied the right of a state to act only where "substantial" injury was involved.⁷⁷ And in the American case of *Kansas v. Colorado*,⁷⁸ the right of the upper riparian to utilize an interstate river for irrigation needs was sustained over proof by the lower riparian that some slight damage would result. Professor Sauser-Hall has summarized the municipal practice of Italy and Switzerland in this manner: "A single principle appears to be generally respected: no alteration of a watercourse which would effect *substantial* prejudice to other riparians is allowable."⁷⁹

There is reason to believe, therefore, that a useful set of international law principles is emerging to provide that a state may utilize an international river for economic purposes under any of the following conditions:

- a) Where the proposed use will have no effect on the flow of the water through coriparian states;
- b) Where the proposed use would adversely affect substantial interests of coriparians but the proposing state undertakes additional measures to safeguard the coriparian interests fully;
- c) Where the proposing state acts to avoid substantial injury occasioned by its project and adequate compensation is made for the residue of injury which is not substantial.

There remains to be considered a final and more difficult situation: the case where exploitation of the river by one riparian will necessarily have a substantial adverse effect on coriparians and where the means of avoiding injury is not reasonably within the economic capacity of the proposing state.

CASE IV

X and Y are contiguous national states through which the River Z passes. X is the upper riparian and proposes to divert a substantial part of the Z River for use in a massive hydroelectric

⁷⁶ Convention Between Sweden and Norway Concerning Lakes and Rivers in Common, Oct. 26, 1905, 98 BRIT.ST.P. 828, 829 (1905). (Emphasis added.) See also I (2) FAUCHILLE, *TRAITÉ DE DROIT INTERNATIONAL PUBLIC* 498-99 (1925).

⁷⁷ ANNUAL DIGEST OF PUBLIC INTERNATIONAL LAW CASES 128 (Lauterpacht ed. 1927-1928).

⁷⁸ 206 U.S. 46, 113, 114, 117 (1906); Hostie, *supra* note 49, at 61.

⁷⁹ Sauser-Hall, *supra* note 49, at 471, 517. (Emphasis added.)

project which would convert X from a marginal agrarian economy to a prosperous industrial economy supporting ten million people within its 230,000 square mile area. Until now X has scarcely used the River Z.

Y, the lower riparian, has gradually drawn upon the River Z in ever increasing measure to support its expanding agricultural basin. This basin is the principal source of Y's wealth; its surplus food production has enabled Y to achieve a favorable trade balance resulting in prosperity for the fifteen million Y inhabitants. As Y increased its irrigation supply from the Z River from time to time, its government notified the government of X of these developments. The government of X replied to each notice only with a terse statement that it acknowledged no right in Y to the continued flow of the River Z, and that it would reserve all of its sovereign rights under international law. Some of the Y irrigation canals are more than one hundred years old; others have been completed within the last five years, and still others—at the time when X proposed to divert the river—were under construction. Some of the existing Y canals are extremely inefficient, losing large quantities of water through absorption, evaporation, and flooding from irregular levelling. Some of the most efficient canals serve areas in Y which are relatively unproductive.

The diversion proposed by X would cut off more than eighty per cent of the Z River. It would take water away from more than fifty per cent of Y's arable land, ruin thousands of Y farmers, and impair the national economy of Y. While it would be possible to avoid this by returning most of the diverted flow to the Z riverbed after use in the X hydroelectric project, this could only be accomplished by a rerouting system on the X-Y border at the cost of three billion dollars, a figure somewhat in excess of X's entire annual gross national product.

After prolonged negotiation, X and Y have reached an impasse: X is determined to proceed with the hydroelectric project to develop its industrial potential, and Y is equally determined that it shall not lose its existing and projected irrigation system. By mutual agreement, the dispute is submitted for arbitration according to "accepted principles of international law."

One response would be for the court to determine which use, that of X or that of Y, enjoys a qualitative superiority over the other. This suggests that we should undertake a canvass of international law to develop a ranking of uses, with a ruling in favor of hydroelectric uses or irrigation uses, whichever is to be preferred. But aside from certain *ad hoc* rankings accomplished by treaty,⁸⁰ and a few tradi-

⁸⁰ Treaty With Mexico Respecting Utilization of Water of the Colorado and Tijuana Rivers and of the Rio Grande, Nov. 14, 1944, art. III, 59 Stat. 1219, T.S. No.

tionists who stress the primacy of navigation, the consensus is clearly that no *a priori* division of rights can be secured in such a superficial fashion.

The ECE Report of 1952 concluded its own survey with this observation: "It is difficult to establish priorities among these interests, and consequently difficult to classify the uses to which the waterways can be put."⁸² Similarly, Professor Sauser-Hall has made an independent review of treaty practice, concluding: "The juridical situation remains in flux, full of unknowns and uncertainties."⁸³ Smith,⁸⁴ Eagleton,⁸⁵ Hirsch,⁸⁶ and Griffin⁸⁷ concur. It is obvious that international law could not reasonably resolve *Case IV* by this means, for a moment's reflection makes clear that states with an economy substantially dependent upon well established irrigation uses in the position of Y would not ordinarily agree to the abandonment of these interests merely because a coriparian proposed to harness the river for hydroelectric purposes; nor would states in the position of X customarily abandon the improvement of their economy by conceding that competing interests of coriparians in irrigation enjoy an absolute priority. Even if states were inclined to regard a river basin as an indivisible unit, and even if they would defer to the *type* of use of greater benefit to the greatest number of people, the character of that more beneficial use obviously will vary from region to region: the importance of navigation on the Danube, for instance, clearly giving way to the pre-eminence of irrigation on the Indus.

And, finally, settlement of disputes on this basis would necessarily

994 (effective Nov. 8, 1945); Treaty With Great Britain Relating to Boundary Waters Between the United States and Canada, Jan. 11, 1909, art. VIII, 36 Stat. 2448 (effective May 13, 1910); 1 REPORT OF THE INDUS COMMISSION 11 (1950).

⁸² I (2) FAUCHILLE, *TRAITÉ DE DROIT INTERNATIONAL PUBLIC* 452 (1925). The materials cited in note 80 *supra*, however, rank navigation after domestic, industrial and agricultural uses. See also Laylin, *Principles of Law Governing Use of International Rivers*, 10 INTER-AM. BAR. ASS'N CONF. REP. 14 (1957).

⁸³ ECE REPORT 210.

⁸⁴ Sauser-Hall, *supra* note 49, at 538.

⁸⁵ SMITH, *THE ECONOMIC USES OF INTERNATIONAL RIVERS* 152 (1931); Smith, *The Waters of the Jordan*, 25 INT'L AFF. 415 (1949).

⁸⁶ Eagleton, *The Use of the Waters of International Rivers*, 33 CAN. B. REV. 1018, 1025 (1955).

⁸⁷ Hirsch, *Utilization of International Rivers in the Middle East*, 50 AM. J. INT'L L. 81, 99 (1956).

⁸⁸ State Dep't Memorandum, *Legal Aspects of the Use of Systems of International Waters*, S. Doc. No. 118, 85th Cong. 2d Sess. 90, 91 (1958). See also 1956 INT'L L. ASS'N CONF. REP. 216.

ignore the fact that certain types of uses have become important only in recent decades; thus, circumstances which might have supported the paramount significance of navigation on rivers in general are no longer applicable, if, indeed, they ever were. As noted by Berber:

The uses of flowing water other than navigation, fishing and floatage were until recently either too unimportant to occasion serious examination, *e.g.*, the use of water by mills, or else, although in themselves important, *e.g.*, irrigation in arid countries, were too far removed from the main areas of international intercourse to attract the interest of international law.⁸⁸

A simple alternative solution might be to adopt a rule of international law requiring an arithmetically equal division of any particular river's water, as followed in an Austro-Czechoslovakian treaty of 1928, and more recently in a Russo-Iranian treaty of 1959, affecting the waters of the Aras and Atrak rivers. But in neither of these cases was there any question at the time that the rivers would support projects contemplated by both parties, and thus there was no occasion to consider proper apportionment of a *scarce* commodity, as in *Case IV*. Moreover, there is otherwise no authority to support such a scheme, and again, arithmetical apportionment without regard to the types of uses, their comparative value, their wastefulness, the relative population, arable land, degree of industrialization of each state, etc., renders the whole idea fanciful.

A third approach would seem to be available, supported by a principle of prior consent and a principle which protects existing uses. Since *X* is the state which currently seeks to utilize the river in a manner inflicting substantial and unavoidable damage to *Y*, it might be thought that *Y* may prevail simply by withholding its consent and by demonstrating to a tribunal's satisfaction that *X*'s proposed use violates a *sic utere* principle. Independently of this argument, it might also rely on the primacy of her own existing uses as settling the matter, a suggestion traceable to Vattel who viewed a "first use" as perfecting a claim grounded in the tradition of territorial sovereignty:

[T]he nation that first established her dominion on one of the banks of the river is considered as being the first possessor of all that part of the river which bounds her territory.

If that nation has made any use of the river, as, for navigation or

⁸⁸ BERBER, RIVERS IN INTERNATIONAL LAW 6 (1959).

fishing, it is presumed with greatest certainty that she has resolved to appropriate the river to her own use.⁸⁹

The primacy of existing uses, as a principle which forecloses other riparians from drawing on an international river in a manner which would disrupt those uses, has been enthusiastically supported by John Laylin who represented Pakistan in the recent dispute with India over the Indus River system.⁹⁰ Largely through his efforts, it has also generated support within a number of international law associations.⁹¹

A number of recent treaties apparently acknowledge the inviolability of pre-existing uses, even without questioning their possible lesser value to the river system as a whole. In apportioning

⁸⁹ Vattel, *THE LAW OF NATIONS* 120 (1870).

⁹⁰ "As a rule, the protection of uses, lawful when they came into existence, so long as they remain beneficial, has been treated as an absolute first charge upon the waters. . . . In less favored regions, not only are existing uses protected, but as between existing uses those first established ordinarily enjoy a priority over uses established later." Laylin, *supra* note 81, at 12. See also 1956 INT'L L. ASS'N CONF. REP. 12; Laylin & Bianchi, *The Role of Adjudication in International Water Disputes*, 53 AM. J. INT'L L. 30, 38 (1959).

⁹¹ See, e.g., *First Report of the Committee on the Uses of the Waters of International Rivers*, 1956 INT'L L. ASS'N CONF. REP. IV (1956).

For additional support of pre-existing uses, see 1 REPORT OF THE INDUS COMMISSION 10-11 (1950) ("In the general interest of the entire community inhabiting dry, arid territories, priority may usually have to be given to an earlier irrigation project over a later one: 'priority of appropriation gives superiority of right.'"); Convention of 1923 ratified by Great Britain, Northern Ireland, New Zealand, Denmark, Greece, Siam, Southern Rhodesia, and Newfoundland, art. 2, 36 L.N.T.S. 76, 81 (1925); Convention Between Persia and Russia defining the Boundary Between the Two Countries East of the Caspian Sea, Dec. 9, 1881, art. IV, 73 BRIT.ST.P. 97 (1882); Decret de l'Empereur des Français, portant promulgation du Traité de Delimitation conclu, le 26 Mai, 1866, entre la France et l'Espagne, July 14, 1866, art. X, 56 BRIT.ST.P. 212, 226 (1866); Convention de Délimitation, entre les Pays-Bas et la Belgique, Aug. 8, 1843, art. 37, 35 BRIT.ST.P. 1202 (1847); Traité de Limites entre Leurs Majestés le Roi de Prusse et le Roi des Pays-Bas, June 26, 1816, 3 BRIT.ST.P. 720 (1816); U.N. SECURITY COUNCIL OFF. REC. 8th year, 649th Meeting 21 (S/PV.649) (1953); *Hearings Before the Senate Foreign Relations Committee on Treaty With Mexico Relating to the Utilization of the Waters of Certain Rivers*, 79th Cong., 1st Sess., pt. 1, at 19-21 (1945); Report of Special Master, Supreme Court of the United States, No. 7 Original, Oct. Term, 1943, p. 109: "A rule that would seem elementary in equitable distribution (even aside from legal right based on priority statutes) is that present rightful uses should be preferred to prospective uses under possible future development." To some extent, the suggestion has found favor with Andrassy, who illustrates its operative effect in the following manner: "Certain developments and constructions have taken place before the conflict of interest and the necessity for regulation made themselves felt. In such a case, one applies the principle of acquired rights. The priority of the existing fact is respected, since needs have already been adapted to those possibilities created by this previous construction." Andrassy, *Le Droit International De Voisinage*, 79 RECUEIL DES COURS ACADEMIE DE DROIT INTERNATIONAL 77, 119 (1951).

the Nile River, the Sudan agreed that the disproportionately large share which Egypt was already using for irrigation purposes would be recognized.⁹² But the case is not entirely on point, for the apportionment of the surplus greatly favored Sudan so as to redress the historic imbalance, and it appeared that the proposed uses in both countries could be accommodated from the whole river without substantial damage to the interests of either—a saving feature critically absent from *Case IV*. Moreover, the treaty was not considerate of Tanganyika, Ethiopia, or the Congo, all of which may feel prejudiced by the one hundred per cent division between Sudan and Egypt. Thus the primacy of pre-existing uses along the Nile has not yet finally been tested.

It is true also that India has agreed to underwrite the cost of diverting eastern rivers to protect the pre-existing uses in Pakistan, and that the cost of this replacement exceeds one billion dollars.⁹³ But, again, the case is distinguishable; in *Case IV*, the damage to *Y* is not similarly avoidable because the cost of the rerouting system exceeds three billion dollars and could not reasonably be sustained by a country as small or poor as *X*. Indeed, in the Indus River case itself, the cost of avoiding harm to Pakistan in fact is borne largely by the World Bank and the United States Government.

The Columbia River Treaty of 1960 would appear to support pre-existing use protections, since Canada ultimately abandoned its threat to develop flood control dams by diverting water from the Columbia River so as to cut off supply to existing hydroelectric dams in the United States.⁹⁴ But this too was simply another case where the threatened harm was wholly avoidable by reasonable means, and the case better fits under our second principle than here.⁹⁵ Moreover, in return for constructing the dams to increase the amount and uniformity of flow on the United States side, Canada secured an agreement by the United States to share equally in all power increases attributable to the Canadian dams, an example of developing the basin as a whole, rather than apportionment of severable assets. This agreement by the United States would not have been required had the United States felt secure in relying entirely on the primacy of pre-existing uses, since the power plants

⁹² See note 54 *supra*.

⁹³ See note 44 *supra*.

⁹⁴ See note 55 *supra*.

⁹⁵ *Ibid.* See also discussion in text at notes 45-71 *supra*.

which will benefit from the Canadian program already existed along the river on the American side; the United States might therefore have asserted that it needed to make no concessions whatever, in restraining Canada from diverting the river.

In another area of the world, the Russo-Iranian treaty of 1959 protects pre-existing Iranian uses, but this is not convincing towards establishing such protection as an axiom of international law because the river appeared to both parties as capable of supporting their mutual needs without any substantial adverse effect on the interests of either.⁹⁶

The primacy of pre-existing uses as a tentative rule of law must be discounted, however, not merely because there is but meager authority to support it, but because the *reasons* given to support it are not convincing in every context—certainly not in *Case IV*. The first of these reasons has already been alluded to by Andrassy, that pre-existing uses are to be respected “since needs have already been adapted to those possibilities created by this previous construction.”⁹⁷ The same persuasion is offered by Laylin, that prior appropriations have resulted in a dependent relationship which it is essentially unfair to disturb by subsequent demands on the limited resources of a river. The problem is, however, that although this dependent relationship is relevant, it can hardly be allowed to tyrannize over other considerations without producing even more unfortunate consequences for the river basin considered as a whole. In *Case IV*, while it is clear that pre-existing irrigation uses in *Y* have contributed much to the *Y* economy, it is also clear that many of the canals are enormously wasteful and that others serve relatively unproductive areas. It seems wholly unrealistic to condemn or foreclose the development of the *X* economy, with its promise of benefiting a larger number of people and in a more efficient manner, merely because *Y*'s uses were prior in time. It seems doubtful too that *Y* may reasonably rely upon its investment and dependence on its irrigation system to prevent *X*'s proposed diversions, since *X* at no time misled *Y* as to *X*'s interest in the river flow, and at all times made clear that it regarded its vital interests as untrammelled by the *Y* developments.

The other reason commonly brought forward to support the

⁹⁶ See 13 MID. EAST J. 193 (1959).

⁹⁷ Andrassy, *supra* note 91, at 119-21.

protection of pre-existing uses is the incentive which such a rule provides to promote the rapid and complete utilization of river resources: by agreeing that one prior in time is prior in right, international law would encourage the timely utilization of waters which might otherwise continue to run uselessly to the sea for lack of security for any state to make necessary investments, unhampered by a rule of prior consent.

Again, however, the rule giving primacy to pre-existing uses exceeds the merit of the reason offered in its behalf; adoption of the rule as a principle of international law would result in river communities repenting at leisure what was constructed in haste. The economic future of X is blighted because Y was fortuitously able to devise a cheaper use of the river water in simple, but wasteful, irrigation canals, while X was obliged to wait for technological advances and the acquisition of greater financial means. Water uses are hurried along by one country from apprehension that coriparians may otherwise succeed in establishing some other absolute first claim. No equitable solution of *Case IV* can be derived from a myth that existing uses are always to be protected against any subsequent proposals, even where substantial harm to those uses is not reasonably avoidable by any unilateral action of the proposing state.

Nevertheless, there is some element of sense in the doctrine of pre-existing uses which may provide a guide when employed more flexibly, as one consideration within a larger principle. It would be sound to place primary emphasis on a rule which will facilitate the fullest development of the river for the whole community. What is needed is a formulation which will combine the legitimate aspects of both doctrines—that of prior consent and that of existing uses—to assure the expeditious apportionment of river benefits in the most equitable manner consistent with full utilization of the river system. To the extent that respect for prior consent guarantees that no legitimate aspiration of any interested riparian shall be ignored in developing a river basin, its requirement as a matter of law is to be applauded; it is to be deplored only if it is taken to confer an unqualified veto, enabling each riparian to frustrate river development except on its own terms. To the extent that the protection of pre-existing uses encourages a riparian to develop a river system by providing assurance that projects carefully constructed cannot be disregarded cavalierly by subsequent coriparian developments, it

too is a laudable principle; it is to be deplored only if it is taken to insulate every antique or extravagant use from review, no matter how little its comparative value to the contemporary community may be.

These elements, just as the regional superiority of a certain type of use, the presence of certain treaty arrangements, technological changes, comparative dependence of economies upon the river, etc., are obviously relevant but not independently conclusive considerations in the equitable apportionment of an international river treated as an integrated whole. Just as *Case IV* has elements in common with nearly every recent river dispute, and yet itself is different from them all at least in the altered prominence of one feature over another, so it is obvious that none of the considerations within the overriding principle of equitable apportionment can be converted into law suitable by itself for every system; each simply represents an interest which competes for protection in each case, more or less relevant as it contributes to the expeditious development of the river system as a whole, with due regard for the several interests of all riparians.

And this, it is now becoming clear, is what is generally meant by the principle of "equitable apportionment" as it has been applied in American municipal law,⁹⁸ in the settlement of the Indus,⁹⁹ the

⁹⁸ "[D]isputes [over interstate rivers] are to be settled on the basis of equality of right. But this is not to say that there must be an equal division of waters of an interstate stream among the States through which it flows. It means that the principles of right and equity shall be applied having regard to the 'equal level or plane on which all the States stand, in point of power and right, under our constitutional system' and that, upon a consideration of the pertinent laws of the contending States and all other relevant facts this Court will determine what is an equitable apportionment of the use of such waters." *Connecticut v. Massachusetts*, 282 U.S. 660, 670-71 (1931). "But if an allocation between appropriation States is to be just and equitable, strict adherence to the priority rule may not be possible. For example, the economy of a region may have been established on the basis of junior appropriations. So far as possible those established uses should be protected though strict application of the priority rule might jeopardize them." *Nebraska v. Wyoming*, 325 U.S. 589, 618 (1945). See *Washington v. Oregon*, 297 U.S. 517, 523-24 (1936) (wasteful existing uses not treated as a fixed charge on the river); see cases cited notes 1, 66 *supra*; Hostie, *Problems of International Law Concerning Irrigation of Arid Lands*, 31 INT'L AFF. 61 (1955).

⁹⁹ Note 44 *supra*. "It follows from [these principles] that the rights of the several units concerned in this dispute must be determined by applying...the rule of 'equitable apportion,' each unit being entitled to a fair share of the waters of the Indus and its tributaries." 1 REPORT OF THE INDUS COMMISSION 10-13 (1950). "The water resources of the Indus basin should be cooperatively developed and used in such manner as most effectively to promote the economic development of the Indus basin viewed as a unit." Letter by Eugene Black, President of the World Bank,

Columbia,¹⁰⁰ the Nile,¹⁰¹ the Oder,¹⁰² or the Jordan¹⁰³ river disputes, or in the resolutions of the International Law Association.¹⁰⁴ The same principle emerges clearly under various names put forward by other writers. Thus, Hartig has written of a "principle of coherence,"¹⁰⁵ and the President of the International Bank was firm in declaring that the Indus river was to be "used in such manner as most effectively to promote the economic development of the Indus basin *viewed as a unit*."¹⁰⁶ Professor Eagleton has spoken of the "integrated river system," and the "unified system,"¹⁰⁷ while Fortuin of the Netherlands speaks of the "fullest possible profit," and Garland of "full utilization."¹⁰⁸ Professor Sauser-Hall has observed the phenomenon of equitable apportionment at work in state practice in the following way:

We are confronted with a remarkable illustration of an international practice not based originally on precise rules, but which has moved so consistently toward a consensus of concordant unilateral acts that it ultimately served as a basis for a treaty *manifesting the idea of a com-*

in Berber, *The Indus Water Dispute*, 6 INDIAN YB. INT'L AFF. 46, 57 (1957). (Emphasis added.) The resulting treaty closely conforms to this suggestion.

¹⁰⁰ See text at note 96 *supra*, and at note 110 *infra*.

¹⁰¹ Note 54 *supra*.

¹⁰² "But when consideration is given to the manner in which states have regarded the concrete situations arising out of the fact that a single waterway traverses or separates the territory of more than one state, and the possibility of fulfilling the requirements of justice and the considerations of utility which this fact places in relief, it is at once seen that a solution of the problem has been sought not in the idea of a right of passage in favour of upstream states, but in that of a community of interest of riparian states. This community of interest in a navigable river becomes the basis of a common legal right, the essential features of which are the perfect equality of all riparian states in the use of the whole course of the river and the exclusion of any preferential privilege of any riparian state in relation to others." Judgment No. 16, P.C.I.J., ser. A, No. 23, at 27 (1929).

¹⁰³ See Dees, *Jordan's East Ghor Canal Project*, 13 MID. EAST J. 357 (1959).

¹⁰⁴ See 1958 INT'L L. ASS'N CONF. REP. 28; *Principles of Law Governing the Uses of International Rivers*, 1956 INT'L L. ASS'N CONF. REP. 241. See also *Resolutions*, 10 INTER-AM. BAR ASS'N CONF. REP. at 82 (1957); Texte Définitif de la Résolution tel qu'Adopté au Cours de la Séance, Institut de Droit International, translated in 56 AM. J. INT'L L. 737 (1962): "Considering that the maximum utilization of available natural resources is a matter of common interest...if the States are in disagreement over the scope of their rights of utilization, settlement will take place on the basis of equity, taking particular account of their respective needs, as well as of other pertinent circumstances." *Id.*

¹⁰⁵ *Ein neuer Ausgangspunkt für internationale wasserrechtliche Regelungen: das Kohärenzprinzip*, 1958 WASSER- UND ENERGIE-WIRTSCHAFT; Seidl-Hohenveldern, *Austrian Views on International Rivers*, 9 ANNALES UNIVERSITATIS SARAVIENSIS 191 (1961).

¹⁰⁶ See letter cited note 99 *supra*. (Emphasis added.)

¹⁰⁷ Eagleton, *supra* note 85, at 1021-23.

¹⁰⁸ *Id.* at 1028.

munity of interests founded on good neighbor relations entirely subject to international law.¹⁰⁹

The principle of equitable apportionment has gained impressive support from treaties and juridical decisions as well as from highly qualified publicists.¹¹⁰ Its fundamental emphasis is upon the maximum utilization of fluvial resources of a river basin treated as a whole.

This principle will not, of course, operate to parcel a river in the same fashion in every case—no more than does the “due process” or “equal protection” clauses of the United States Constitution act identically on differing facts.¹¹¹ It does, however, provide

¹⁰⁹ Sauser-Hall, *L'Utilisation Industrielle Des Fleuves Internationaux*, 83 RECUEIL DES COURS, ACADEMIE DE DROIT INTERNATIONAL 471, 581-82 (1953). (Emphasis added.)

¹¹⁰ See *Resolution*, 24 ANNUAIRE DE L'INSTITUT DE DROIT INTERNATIONAL 365 (1911); Griffin, *Legal Aspects of the Use of Systems of International Waters*, S. DOC. NO. 118, 85th Cong. 2d Sess. 90 (1958): “Riparians are entitled to share in the use and benefits of a system of international waters on a just and reasonable basis.... In determining what is just and reasonable account is to be taken of rights arising out of... comparison of the economic and social gains accruing, from the various possible uses of the waters in question, to each riparian and to the entire area dependent upon the waters in question.” *Id.* (Emphasis added.) SMITH, *THE ECONOMIC USES OF INTERNATIONAL RIVERS* (1931): “The first principle is that every river system is naturally an indivisible physical unit, and that as such it should be developed as to render the greatest possible service to the whole human community which it serves, whether or not that community is divided into two or more political jurisdictions.” *Id.* at 150-51. See also Cardona, *El Regimen Juridico de los Rios Internacionales*, 56 REV. DE DERECHO INTERNACIONAL 24 (1949); ECE REPORT at 60.

For supporting cases, see, e.g., *Donauversinking Case*, 116 Entscheidungen des Reichsgerichts in Zivilsachen, Anhang 18 (1927), also reported in ANNUAL DIGEST OF PUBLIC INT'L LAW CASES 128 (Lauterpacht ed. 1927-28): “An attempt must be made to apportion or measure the respective interests in an equitable manner balancing the advantages gained by one state against the injury, or possible injury, caused to another.” *Id.* *Leitha River Case*, 1 HACKWORTH, INTERNATIONAL LAW 594 (1940); *Aargau v. Zurich*, Entscheidungen des Schweizerischen Bundesgerichts aus dem Jahre 1878, noted by Schindler, *The Administration of Justice in the Swiss Federal Court in Intercantonal Disputes*, 15 AM. J. INT'L L. 149, 169-72 (1921). See also cases cited in Austin, *A Study of the History and Influence of the Harmon Doctrine*, 37 CAN. B. REV. 393, 433-34 (1959).

For supporting treaties, see, e.g., *Franco-Hispanic Treaty of 1866*, arts. IX, X, 56 BRIT.ST.P. 212, 226 (1866); *Treaty with Mexico Respecting Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande*, Feb. 3, 1944, art. 8, 59 Stat. 1219, T.S. No. 994 (Nov. 8, 1945); *Treaty with Great Britain Relating to Boundary Waters Between the United States and Canada*, art. VIII, 36 Stat. 2448, T.S. No. 548 (Jan. 11, 1909); *Agreement between France and Turkey relative to Cilicia*, art. XII, 114 BRIT.ST.P. 771 (1921); *Regime of Navigable Waterways of International Concern* art. 6, Brit. T.S. No. 28 (1923); *Convention of 1923 Relating to the Development of Hydraulic Power Affecting More Than One State*, Dec. 9, 1923, art. 2, 36 L.N.T.S. 76, 81; *Franco-Turkish Protocol of 1930*, translated by Hirsch, 50 AM. J. INT'L L. 81, 86 (1956) from the *Rapport a la Société des Nations sur la situation de la Syrie et du Liban* 177 (1930).

¹¹¹ “[N]or shall any State deprive any person of life, liberty, or property, without

a primary interest which riparian states may reliably employ to predict the probable result of a dispute submitted to a neutral tribunal. It will, for instance, clearly subordinate the claims of absolute sovereignty, prior consent, sovereign integrity, and pre-existing use to the paramount concern of developing the river basin as a unit. Moreover, equitable apportionment does not address itself to the court's subjective and personal conscience, but to a weighing of interests in a manner conforming to general practice and with an end view of maximizing benefits of the river system as an integrated whole. In precisely the same fashion, the Supreme Court has repeatedly applied the law of the fourteenth amendment after a scrupulous review of the following considerations:

The precise nature of the interest that has been adversely affected, the manner in which this was done, the reasons for doing it, the available alternatives to the procedure that was followed, the protection implicit in the [state] whose conduct is challenged, the balance of hurt complained of and good accomplished—these are some of the considerations that must enter into the judicial judgment.¹¹²

The application of due process standards is more than merely an appeal to the conscience of the Court. Indeed, the Court has frequently made clear that it does not fashion due process standards from the Justices' private views of fairness, and that it is bound, rather, to seek them in less personalized sources of law. Equally, the principle of equitable apportionment may reasonably be regarded as an emerging law wholly susceptible of judicial application, even though it too is not encapsulated in a verbal formula possessing the ingratiating clarity of a simpler, more rigid principle.

due process of law; nor deny to any person within its jurisdiction the equal protection of the laws." U.S. CONST. amend. XIV.

Procedural due process is assuredly a meaningful constitutional mainstay in the United States. Mr. Justice Frankfurter has observed that "the history of liberty has largely been the history of observance of procedural safeguards." *McNabb v. United States*, 318 U.S. 332, 347 (1943). Nor is it any less "law" simply because the Court "has always declined to give a comprehensive definition of it, and has preferred that its full meaning should be gradually ascertained by the process of inclusion and exclusion in the course of the decisions of cases as they arise." *Twining v. New Jersey*, 211 U.S. 78, 100 (1908). The same can be said for the principle of equitable apportionment as an emerging rule of international law. For other judicial descriptions of procedural due process, no more specific in their fashion than what we have said of equitable apportionment, see *Palko v. Connecticut*, 302 U.S. 319, 325 (1937) ("[procedures] implicit in the concept of ordered liberty..."); *Herbert v. Louisiana*, 272 U.S. 312, 316 (1926) ("fundamental principles of liberty and justice which lie at the base of all our civil and political institutions.")

¹¹² *Joint Anti-Fascist Refugee Comm. v. McGrath*, 341 U.S. 123, 163 (1951). See also Karst, *Legislative Facts in Constitutional Litigation*, 1960 SUP. CT. REV. 75.

To be specific, we can briefly look to the facts of *Case IV* and suggest certain conclusions as to the adjudication of this dispute under a principle of equitable apportionment. First, it is not consistent with maximum utilization of the Z River, treating the basin as an integrated whole, to jeopardize X's plans in order to maintain those canals in Y which are wasteful. As a minimum requirement, Y should be held responsible for improving the canals to minimize losses from absorption, evaporation and flooding. In the absence of any showing that the water thus saved can more usefully be employed or shared by Y, X may utilize that water in its hydroelectric projects without taking costly measures to restore its flow into Y. Water might also reasonably be withdrawn from the unfertile areas of Y for use in the X facilities where it would be more economically employed, especially if X were to compensate Y for the meager loss of benefits occasioned by the withdrawal.

If this proposed arrangement would still not provide enough water for a substantial hydroelectric installation in X, an alternative arrangement might be feasible: maximum use of the river can be secured both for hydroelectric and irrigation uses if the rerouting costs are *shared*. The costs, in accordance with equitable apportionment, should be allocated between the states according to their relative abilities to pay and the relative benefits they will receive from the river (including any arrangement X might make with Y to share the power produced in X's dams), with due regard for the efficient uses already existing in Y.

It is clear, of course, that a court cannot directly dictate the particular terms of an agreement between X and Y. It can only pass on the validity of one party's objection to the position that the other party has taken. But in testing the position of each party against the principle of equitable apportionment, the court clearly influences negotiations by its anticipated decision on the validity of the complaining state's objections. Before repairing to the Court of Arbitration in the *Lake Lanoux* case, as we have previously noted, the French coupled their proposed diversion with an offer to replenish the lake from other sources, correctly anticipating the favorable influence this offer would have with the Court of Arbitration in disposing of the subsequent Spanish complaint. In short, mutual awareness of a prospective decision based on equitable apportionment may be expected to induce good faith negotiations so

that each state may legitimately claim it has acted to encourage development of the river basin as a whole.

The pressure for good faith negotiations is not exerted on the proposing state alone, for should an objecting state not couple its objection with any counter-offer to the proposing state's plan, it stands in danger of being defeated in court under a decision holding that the proposing state is entitled to proceed.

In this larger view, the first three principles of international law we examined earlier are simply specific applications of equitable apportionment where the position taken by the prevailing state was reasonable *under the facts of each of those cases, i.e.*, it was conducive to maximizing the benefits of the river system with due regard for the several considerations we have reviewed here. In *Case IV*, neither state has presently advanced a proposal wholly consistent with equitable apportionment, and thus neither could gain by seeking an arbitral decision. Since the present use of the water is clearly more satisfactory to *Y* than to *X*, one might expect that *X* would alter its position during negotiations first, perhaps in the direction indicated above, to share the costs of the rerouting system. The burden of initiative does not necessarily fall always on the proposing state, however, for it could just as easily be that *X* would proceed with its project; then *Y* would be obliged to come forward with a more reasonable proposal to complement its objection to *X*'s imminent diversion, in order to win an arbitral decision enjoining *X*'s project.

It has not been the purpose of this article merely to catalogue treaties or to review once again the myriad problems in establishing a given proposition objectively as a rule of international law. It is reasonably clear, however, that the parallel practices of states in recent times, and the consensus of highly qualified publicists, support the unifying principle of equitable apportionment which has been illustrated here. On balance, the principle enjoys sufficient authoritative support, and is sufficiently coherent in its application to disputes involving economic interests in international rivers to render such controversies justiciable according to international law.