

The Changing Nile Basin Regime: Does Law Matter?

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I. INTRODUCTION

Daily the Nile seemed to increase in grandeur and magnitude, and for a whole series of days we found our path running across something like an inland sea or delta, full of lovely tufted islands, some sinking and some emerging under the vibration of the waters. They had the lonely fragility of dreams in which one could only half believe. I could see now how it must be in the other great rivers of the world, the Yangtse or the Ganges or old Amazon. A whole world passing by in a kaleidoscope of color, yet always changing, always impermanent.

—Lawrence Durrell, *Monsieur or the Prince of Darkness*¹

Just as the sensual aspects of the Nile are constantly changing, so too are the actors and social structures that shape its fate, and that of the millions of people who rely upon its life-giving waters. Only a few years ago the regime of the Nile Basin was one of unremitting and open conflict, or at least of incipient and barely camouflaged competition. Journalists, as well as political and legal analysts, delighted in quoting a succession of regional statesmen, especially Egyptians, who spoke of the threat of war over scarce Nile resources. In the 1970s, Egyptian President Sadat and Ethiopian leader

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We wish to thank Richard Wodnicki, Hiroko Sawai, and Sasha Nowicki for their excellent research assistance. Mr. Wodnicki also provided English translations of materials in Arabic. Challenging comments were offered by Michael Byers, David Dyzenhaus, Ellen Hey, El Obaid A. El Obaid, and Roderick Macdonald. Our work also benefited from the insights of a number of commentators close to Nile Basin negotiations who wish to remain unnamed. Early stages of research for this Article were financially assisted by the Cooperative Security Program of the Canadian Department of Foreign Affairs and International Trade. We also gratefully acknowledge the support of McGill University and the University of Toronto, in the form of sabbatical leaves, and of the Social Sciences and Humanities Research Council of Canada. Jutta Brunnée benefited from the opportunity to conduct research at the Max Planck Institute for Foreign Public and International Law in Heidelberg.

1. LAWRENCE DURRELL, *MONSIEUR OR THE PRINCE OF DARKNESS* 156 (1974).

Mengistu Haile Miriam exchanged threats over the apportionment of Nile waters.² President Sadat warned that "[t]ampering with the rights of a nation to water is tampering with its life; and a decision to go to war on this score is indisputable in the international community."³ In 1988 the Egyptian Minister of State for Foreign Affairs, Boutros Boutros-Ghali, asserted that the next war in the Middle East would be over the Nile.⁴ As recently as 1991, media reports suggested that Sudan aimed missiles at the Aswan High Dam in Egypt during the Gulf War, rendering the Egyptian political hierarchy "apoplectic."⁵ These threats may never have been as serious as pundits feared, for most credible work on conflict management involving scarce resources suggests that the interstate use of force is, perhaps surprisingly, not a common feature of such settings.⁶ Nonetheless, the threats reflected the strongly competitive political and legal environment that dominated the Nile Basin for generations.

Consider, then, the more recent public actions and pronouncements of regional leaders. In July 1993, Egypt and Ethiopia concluded a cooperation agreement that focused on the Nile Basin as a "center of mutual interest."⁷

2. Ashok Swain, *Ethiopia, the Sudan, and Egypt: The Nile River Dispute*, 35 J. MOD. AFR. STUD. 675, 685 (1997). Swain goes further to suggest that the Egyptian invocation of war was entirely strategic: "Cairo has never hesitated to use the threat of war to prevent upstream countries from taking any actions that might adversely affect the lives of all Egyptians."

3. Raj Krishna, *The Legal Regime of the Nile River Basin*, in THE POLITICS OF SCARCITY: WATER IN THE MIDDLE EAST 23, 34 (Joyce R. Starr & Daniel C. Stoll eds., 1988). See also Niveen Tadros, *Shrinking Water Resources: The National Security Issue of This Century*, 17 NW. J. INT'L L. & BUS. 1091, 1092-93 (1996); Daniel Kendie, *Egypt and the Hydro-politics of the Blue Nile River. Part I*, ADDIS TRIBUNE, Aug. 6, 1999 (quoting Sadat saying, "Any action that would endanger the waters of the Blue Nile will be faced with reaction on the part of Egypt, even if that action should lead to war.")

4. John Vidal, *Ready to Fight to the Last Drop*, GUARDIAN WEEKLY, Aug. 20, 1995, at 13.

5. T. Hundley, *Water: New Crisis is Waiting to Grip the Middle East*, [MONTREAL] GAZETTE, Feb. 8, 1992, at B1. See also Nurudeen Babarunde, *Cooperation and Conflict in International Regimes: Water Resource Management in the Nile Drainage Basin 124* (1994) (unpublished Ph.D. dissertation, University of South Carolina) (on file with the Harvard International Law Journal).

6. See, e.g., Thomas Homer-Dixon cited in Jutta Brunnée & Stephen J. Toope, *Environmental Security and Freshwater Resources: A Case for International Ecosystem Law*, 5 Y.B. INT'L ENVTL. L. 44 nn.9-10 (1994) [hereinafter *Ecosystem Law*]. See also Greg Shapland, *Policy Options for Downstream States in the Middle East, in WATER IN THE MIDDLE EAST: LEGAL, POLITICAL AND COMMERCIAL IMPLICATIONS* 301, 312 (J.A. Allan & Chibli Mallat eds., 1995) (arguing that Egypt does not have the military capacity to wage an all-out war against Sudan as well as other up-stream states beyond its border with Sudan, and suggesting that Egypt would not be inclined to do so in any event, given the threat to its all important political and security relationship with the United States); Joseph W. Dellapenna, *Treaties as Instruments for Managing Internationally-Shared Water Resources: Restricted Sovereignty vs. Community of Property*, 26 CASE W. RES. J. INT'L L. 27, 30 (1994). But see Peter H. Gleick, *Water and Conflict: Fresh Water Resources and International Security*, 18 INT'L SEC. 79, 83 (1993) [hereinafter *Conflict*] (arguing that if the use of force is to result from resource conflicts, it will most likely be "on the local and regional level and in developing countries where common property resources may be both more critical to survival and less easily replaced or supplemented"). Gleick's comments could certainly fit the Nile context. See also Christopher L. Kukuk & David A. Deese, *At the Water's Edge: Regional Conflict and Cooperation Over Fresh Water*, 1 UCLA J. INT'L L. & FOREIGN AFF. 21, 46 (1996) (suggesting that the fact that many of the Nile countries view "water scarcity and water resources in solely nationalistic and national security terms" could lead to "guerilla attacks, such as occurred in Sudan, or even a full blown war").

7. Framework for General Co-operation, July 1, 1993, Egypt-Eth., pmb., <http://www.fao.org/docrep/w7414b/w74140p.htm>.

In November of 1994, in a speech at a conference in Cairo, the Ethiopian Environment Minister Mesfin Abebe declared that the Nile was not a source of conflict, but rather a means for regional cooperation.⁸ In May 1999, after a meeting between Prime Minister Meles Zenawi and Egyptian President Hosni Mubarak, Ethiopian Foreign Minister Seyoum Mesfin told a press conference that the issues of the Nile "will never be the cause of a war" between Ethiopia and Egypt.⁹ The Egyptian Minister of Public Works and Water Resources, Mahmoud Abu Zeid, had previously declared that "[t]here is no conflict or struggle between Egypt and any other Nile Basin country"¹⁰

Of course, simple declarations of peaceful intent do not in themselves signal a regime transition, but more concrete evidence of a striking shift in attitudes and approaches is growing. In January 1994, the Nile 2002 Conference¹¹ held in Khartoum specifically focused on means of furthering cooperation among the Nile Basin states. During the Conference, a group of technical specialists was able to discern "a new spirit of cooperation" among the Nile riparians.¹² That same year, a seasoned Nile specialist argued that although the increasing potential for Ethiopian exploitation of the Blue Nile would seem to threaten greater conflict, Egypt had already altered its policies to such an extent that the prospect for direct conflict was actually diminishing.¹³

In 1998, reports of tension between Ethiopia and Egypt over access to the Nile waters were denied at the highest levels. The Ethiopian Prime Minister admitted that the history of conflict was significant, but he suggested that Ethiopia's positions were changing because Egypt had shown "more . . . understanding of the Ethiopian viewpoint" in the previous year.¹⁴ After its annual meeting in May 1999, the Nile Council of Ministers, a high-level political body charged to pursue information sharing and to promote coordination, announced that it had passed resolutions "to facilitate the transition from the era of confrontation to cooperation among the Nile Basin coun-

8. Manuel Schiffler, *Konflikte um den Nil oder Konflikte am Nil?*, in *WASSER—KONFRONTATION ODER KOOPERATION: ÖKOLOGISCHE ASPEKTE VON SICHERHEIT AM BEISPIEL EINES WELTWEIT BEGEHRTEN ROHSTOFFS* 263, 269 (Jörg Barandat ed., 1997).

9. *Ethiopia Rules Out War with Egypt Over Nile Water*, XINHUA NEWS AGENCY, May 28, 1999. See also *Ethiopian Minister Denies Water Dispute with Egypt*, MENA NEWS AGENCY, May 28, 1999 (reporting the comments of the Ethiopian Minister of Economic Development and Cooperation, Ghirma Biru).

10. *Egyptian Minister Rules Out War Over Nile Waters*, Apr. 27, 1998, LEXIS, News Library, BBC Summary World Broadcast.

11. See *infra* Part V.A.

12. Aly M. Shady et al., *The Nile 2002: The Vision Toward Cooperation in the Nile Basin*, 19 *WATER INT'L* 77, 77 (1994).

13. J.A. Allan, *Developing Policies for Harmonised Nile Waters Development and Management*, in *THE NILE: SHARING A SCARCE RESOURCE* 385, 386 (P. P. Howell & J. A. Allan eds., 1994) [hereinafter *Policies*]. See also NURIT KLIT, *WATER RESOURCES AND CONFLICT IN THE MIDDLE EAST* 90 (1994) (suggesting that despite past threats of war, Egypt was very concerned about the possibilities of Ethiopian developments on the Blue Nile and had therefore "tried to maintain good relations").

14. *Ethiopia Moves Ahead on Nile Dams*, MIDDLE EAST ECONOMIC DIGEST, Apr. 24, 1998.

tries.”¹⁵ Over the last two years, Ethiopia, Sudan, and Egypt have agreed to increase their cooperation with respect to the Blue Nile,¹⁶ while nine Nile riparian (or water-supplying) states have agreed to the creation of a joint Nile Basin Initiative (NBI) and have established an NBI secretariat in Uganda.¹⁷ The NBI is designed to foster not only information sharing and technical assistance, but also joint development initiatives. It is cast as a “transitional arrangement,” intended to facilitate basin-wide discourse until a “permanent legal framework” is in place.¹⁸ At a meeting of water resources ministers from all ten Nile riparians, held in Khartoum, Sudan, in early August 2000, Osman el Tom, vice-chairman of Sudan’s Water Resources Authority, reported “remarkable convergence toward future co-operation.”¹⁹ One year later, it appears that consensus on many parts of the framework is emerging. Indeed, at a June 2001 meeting of Nile Basin states, the international donor community, and NGOs, participants expressed hope that the NBI will emerge as “an example of how international waters can become catalysts for cooperation, development, and stability.”²⁰

Although this new spirit is just that—new—and therefore hard to assess as to its long-term impact, anyone interested in regime transition can discern an emerging pattern that is worthy of notice.²¹ The recent developments in the Nile Basin provide an opportunity to consider the processes that surround the emergence and evolution of regimes. In particular, these developments provide a unique opportunity for international lawyers to examine the role of legal norms in these processes and to apply the rich theoretical insights that have emerged from the recent literature in the fields of international relations (IR) and international law.

It has already been argued that international lawyers can learn much about how international law actually functions by heeding the work of

15. *Nile Basin Council of Ministers' Meeting in Ethiopia Ends*, RADIO ETHIOPIA EXTERNAL SERVICE, May 15, 1999.

16. *Ethiopia, Sudan, Egypt to Join Hands in Water Project*, XINHUA NEWS AGENCY, Sept. 16, 1999 (“Ethiopia will cooperate with Sudan and Egypt in sharing and utilizing the water resources of the four rivers rising in Ethiopia, the Ministry of Water Resources and Development said.”).

17. *Nile Basin Initiative Secretariat Launched at Ceremony in Uganda*, NEW VISION, Sept. 6, 1999. The participating states are Burundi, Democratic Republic of Congo, Egypt, Ethiopia, Kenya, Rwanda, Sudan, Tanzania, and Uganda. Eritrea has not formally joined, but now participates as an observer. See *infra* note 190 and accompanying text. Note that the predecessor organization, TECCONILE, also had a secretariat. The NBI secretariat is housed in the old TECCONILE building and effectively replaces that organization’s secretariat. On TECCONILE, see *infra* notes 177–185 and accompanying text.

18. NILE BASIN INITIATIVE, STRATEGIC ACTION PROGRAM OVERVIEW DOCUMENT, ch. 1 (2001), http://www.nilebasin.org/overview_chapter_1.htm [hereinafter NBI Overview].

19. *Nile Basin Ministers Discuss Water Development*, PANAFRICAN NEWS AGENCY (PANA), Aug. 7, 2000, <http://allafrica.com/stories/200008070109.html>.

20. See Press Release, NBI, Donor Community Supports Poverty Reduction, Prosperity and Peace Through Nile Basin Initiative (June 28, 2001), <http://www.nilebasin.org/pressreleases.htm>.

21. What is happening in the Nile Basin is especially important as the mood among water specialists and diplomats alike is undeniably gloomy with regard to the state of freshwater resources around the world. See Hervé Kempf, *La Planète est Menacée par de Graves Pénuries d'Eau au XXI^e Siècle*, LE MONDE, Mar. 17, 2000, at 2.

norm-interested IR scholars.²² By the same token, international lawyers can help IR theorists to specify more clearly the distinctive role of legal norms in shaping the behavior of international actors.²³ The central link between the two disciplines is the study of regimes—constellations of patterned activity that come to induce expectations as to appropriate behavior among actors with a given identity.²⁴ The normative turn in IR is especially pronounced among scholars who can be loosely linked together under the banner of constructivism. Toope has argued that it is particularly through constructivism that international lawyers can gain instructive insights into their own discipline.²⁵ It is also within the framework of constructivism that international lawyers have most to contribute to IR theory.

The goal of this Article is to tease out factors that have contributed to the nascent regime change in the Nile Basin. The Article catalogues a variety of explanatory factors. Its most controversial argument is that evolving legal norms have influenced this change; but not through the creation of predictable rules and institutional structures, as IR scholars often posit.²⁶ Indeed, the typical IR characterization of international law has been unduly formalistic and positivist.²⁷ This narrow conception of law has been fed, at least in part, by predominant explanatory models within the discipline of international law itself. It has prevented international lawyers from recognizing the full range of contributions of legal norms to regime evolution and from seizing opportunities to promote normative development.

22. *Ecosystem Law*, *supra* note 6; Jutta Brunnée & Stephen J. Toope, *Environmental Security and Freshwater Resources: Ecosystem Regime Building*, 91 AM. J. INT'L L. 26 (1997) [hereinafter *Regime Building*]; Stephen J. Toope & Jutta Brunnée, *Freshwater Regimes: The Mandate of the International Joint Commission*, 15 ARIZ. J. INT'L & COMP. L. 273 (1998).

23. Stephen J. Toope, *Emerging Patterns of Governance and International Law*, in THE ROLE OF LAW IN INTERNATIONAL POLITICS 91 (Michael Byers ed., 2000). The insight is not unique. Indeed, over the last five years, after a long period of mutual disregard, quite a number of international lawyers and international relations experts have begun to talk to one another. See, e.g., ANTHONY CLARK AREND, LEGAL RULES AND INTERNATIONAL SOCIETY 87–104 (1999); MICHAEL BYERS, CUSTOM, POWER AND THE POWER OF RULES: INTERNATIONAL RELATIONS AND CUSTOMARY INTERNATIONAL LAW (1999); Anne-Marie Slaughter et al., *International Law and International Relations Theory: A New Generation of Interdisciplinary Scholarship*, 92 AM. J. INT'L L. 367, 383–93 (1998); FRIEDRICH KRATOCHWIL, RULES, NORMS, AND DECISIONS: ON THE CONDITIONS OF PRACTICAL AND LEGAL REASONING IN INTERNATIONAL RELATIONS AND DOMESTIC AFFAIRS (1989); NICHOLAS GREENWOOD ONUF, WORLD OF OUR MAKING: RULES AND RULE IN SOCIAL THEORY AND INTERNATIONAL RELATIONS (1989).

24. See Peter J. Katzenstein et al., *International Organization and the Study of World Politics*, 52 INT'L ORG. 645, 670–72 (1998).

25. See Toope, *supra* note 23, at 98–99.

26. See Kenneth W. Abbott et al., *The Concept of Legalization*, 54 INT'L ORG. 401 (2000) (positing "obligation," "delegation," and "precision" as the defining features of the legalization phenomenon). Although the "legalization" discourse is instructive, ultimately it is too narrowly drawn. See Martha Finnemore & Stephen J. Toope, *Alternatives to 'Legalization': Richer Views of Law and Politics*, 55 INT'L ORG. 751 (2001).

27. For a detailed discussion of the interplay between IR theory and international law, see Jutta Brunnée & Stephen J. Toope, *International Law and Constructivism: Elements of an Interactional Theory of International Law*, 39 COLUM. J. TRANSNAT'L L. 19 (2000) [hereinafter *Interactional Law and Constructivism*]. For a summary, see Jutta Brunnée & Stephen J. Toope, *Interactional International Law*, 3 INT'L L.F. 186 (2001) [hereinafter *Interactional International Law*].

Given the prevailing characterization of international law, it is not surprising that law has been accorded a subordinate role in the recent academic and policy debates concerning the Nile.²⁸ However, throughout the meandering evolution of the Nile Basin regime, legal norms have been influential and have both hindered and promoted cooperation. Building upon a previous description of "contextual regimes,"²⁹ this Article will suggest that the evolving normative framework for shared freshwater has helped to redefine both the identities and interests of key state actors in the Nile Basin, moving them more recently toward more cooperative behavior. There is an important distinction to be drawn between social norms and, more specifically, legal norms, but this distinction is based not on pedigree (sources), precision (certainty), or coercion (enforceability), but rather on distinctive forms of legitimacy and persuasion. The Article's approach is framed around the interactional legal theory of Lon Fuller. Fuller understood law not as hierarchical ordering but as an ongoing generative activity, oriented toward the construction of relatively stable patterns of practices and normative expectations. Rules are persuasive and legal systems are seen as legitimate to the extent that they are consistent with this background of practices and expectations. Many of the central insights regarding the role of law in the Nile Basin are gleaned from extending the analysis of constructivists such as Kratochwil, Onuf, Ruggie, and Wendt, into the discipline of international law.

Part II of the Article briefly reviews the linkages between constructivism and the "interactional theory of international law."³⁰ These linkages permit the development of a framework of analysis that allows a more complete explanation of the role of law in molding the changing Nile Basin regime, from the nineteenth-century treaties to newly created institutions such as the NBI. Part III provides an overview of the hydrological and geographic context of the Nile Basin. Part IV details the social and political context, including the weak legal framework that has fostered the historical evolution of a purely competitive regime of freshwater in the Nile Basin. While acknowledging that the "physical" and "socio-political" contexts are deeply interconnected, this Article separates the two sets of factors for purposes of clarity. Part V extends the empirical examination to highlight recent moves toward greater cooperation and canvasses various factors promoting regime change. Part VI connects the empirical investigation of Parts III through V to the theoretical framework of Part II, and posits findings concerning the role of international legal norms in helping to explain significant political change. In so doing, the Article assesses the contributions of the historic treaties governing the Nile Basin, of international water law, including the

28. See *infra* notes 245–248 and accompanying text.

29. See *Regime Building*, *supra* note 22, at 28, 36–37 (describing "contextual regimes" as nascent frameworks that shape interaction and facilitate normative evolution along a continuum from shared expectations to norms in a more precise, legal sense).

30. See generally *Interactional International Law*, *supra* note 27.

new UN Convention on the Law of Non-Navigational Uses of International Watercourses,³¹ and of various informal institutions designed to promote cooperation among Nile riparians.

Within the last decade, the legal framework has been recast in ways that seem more conducive to cooperation. Law's influence derives from three interrelated characteristics. First, law has the power to influence the individual and collective identities of states. Second, law both enables and constrains international discourse by establishing what counts as persuasive argument or rhetoric. Third, its inherent and specific form of legitimacy enhances the persuasiveness of law's postulates.

II. CONSTRUCTIVISM AND INTERACTIONAL LEGAL THEORY

One of the greatest challenges to theories of international relations in the last century was how to explain major political change. Two broad streams of IR theory, neo-realism and neo-liberalism, have dominated the disciplinary debate. In a neo-realist framework, states are seen as homogenous actors that proceed on the basis of rationally assessed and pursued self-interest.³² Participation in a regime or adherence to a norm occurs if the net benefits outweigh those of unilateral action. Regimes and norms are seen as reflections of underlying power and interest balances rather than as independent factors influencing behavior. While neo-liberal IR theory, particularly institutionalism, is also rooted in rationalist assumptions, states are not assumed to be homogenous actors. Rather, states must be understood, at least partly, in relation to the institutions in which they are enmeshed.³³ Ultimately, however, both approaches treat actors and their interests as exogenous to interaction, as "given."³⁴ Engagement in institutions may affect their behavior but not the "givens" as such.³⁵

Rationalist IR theory, almost by definition, attributes to law a highly limited role in influencing state behavior. Law, like other social norms, can

31. U.N. Convention on the Law of Non-Navigational Uses of International Watercourses, G.A. Res. 51/229, U.N. GAOR, 51st Sess., 99th plen. mtg., U.N. Doc. A/RES/51/229 (1997) [hereinafter *Watercourses Convention*].

32. See Katzenstein et al., *supra* note 24, at 658. For the original statement of neo-realism, see KENNETH WALTZ, *THEORY OF INTERNATIONAL POLITICS* (1979). The older version of realism is most clearly stated in HANS J. MORGENTHAU, *POLITICS AMONG NATIONS* 8 (2d ed. 1954).

33. See ROBERT O. KEOHANE & JOSEPH S. NYE, *POWER AND INTERDEPENDENCE* (1977); Robert Keohane & Joseph Nye, *Power and Interdependence Revisited*, 41 INT'L ORG. 725 (1987). Constructivist strains of regime theory were developing concurrently. See THE ANTIMOMIES OF INTERDEPENDENCE (John Gerard Ruggie ed., 1983).

34. John Gerard Ruggie, *What Makes the World Hang Together? Neo-utilitarianism and the Social Constructivist Challenge*, 52 INT'L ORG. 855, 862-63 (1998). See also Alexander Wendt, *Collective Identity Formation and the International State*, 88 AM. POL. SCI. REV. 384, 384 (1994) (discussing "rationalist two-step" in which "first interests are formed outside the interaction context, and then the latter is treated as though it only affected behavior").

35. See Steven Ratner, *Does International Law Matter in Preventing Ethnic Conflict?*, 32 N.Y.U. J. INT'L L. & POL. 591, 648-50 (2000).

provide predictable rules and stable institutional structures.³⁶ However, most IR theory devotes little time to distinguishing legal and non-legal norms or to attributing distinctive effects to the former.³⁷ IR theory tends to employ a formalistic and positivist conception of law and, at least implicitly, views international law through a domestic law prism, thereby unduly focusing on the absence in international law of legislative or executive hierarchy. As previously argued, this view has been supported by the predominantly positivistic stance of the discipline of law itself. This stance has significant implications for efforts, by IR theorists and legal theorists alike, to understand how norms function in international society. If law is understood as a hierarchical exercise in social control derived from a *de facto* sovereign,³⁸ a *grundnorm*,³⁹ or a rule of recognition,⁴⁰ the horizontal nature of international law is problematic. International law either does not exist at all or is epiphenomenal, as realists would conclude, or it must be distorted to fit into the positivist framework, as much legal theory scholarship has done to justify international law as "real" law.⁴¹

Much of the recent writing in IR and in international law, then, has been caught in a vicious circle of sorts. International lawyers have turned to IR theory for new insights that could help explain the distinctive influence of law;⁴² yet, many potentially useful IR insights are based upon an unconscious adoption of conceptions of law that have limited explanatory power in a horizontal system.

36. Institutional regime theory describes regimes as sets of "implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge" in a given issue area. Stephen D. Krasner, *Structural Causes and Regime Consequences: Regimes as Intervening Variables*, in *INTERNATIONAL REGIMES* 1, 2 (Stephen D. Krasner ed., 1983). Drawing upon game theory, Eyal Benvenisti has argued that international law's key role with respect to shared freshwater resources is to structure interactions as iterated games, thus maintaining indefinite interdependence among the players. See Eyal Benvenisti, *Collective Action in Utilization of Shared Freshwater: The Challenges of International Water Resources Law*, 90 AM. J. INT'L L. 384, 391-92 (1996). In such circumstances, "cooperation may emerge despite the self-interest of the players . . ." *Id.* at 391.

37. For more on this point, see Martha Finnemore, *Are Legal Norms Distinctive?*, 32 N.Y.U. J. INT'L L. & POL. 699, 701-02 (2000).

38. See 1 JOHN AUSTIN, *LECTURES ON JURISPRUDENCE* 86-103 (5th ed. 1885) (noting that for the command to be law it must also be "general" and matched with a potential sanction in the event of non-compliance).

39. See HANS Kelsen, *GENERAL THEORY OF LAW AND STATE* (1961); HANS Kelsen, *PRINCIPLES OF INTERNATIONAL LAW* (1952). Kelsen sought to explain international law as a logical, unified structure, in which the validity of all rules can be traced back to one basic norm (*grundnorm*)—the idea that states are required to behave as they had customarily behaved.

40. See H. L. A. HART, *THE CONCEPT OF LAW* 89-96 (rev. ed. 1994); H. L. A. HART, *ESSAYS IN JURISPRUDENCE AND PHILOSOPHY* (1983). Although Hart distanced himself from Austin's claim that law was whatever the sovereign commanded and could enforce, his conception of law remained hierarchical. Primary rules (imposing obligations) were seen as anchored in secondary rules (of recognition, change, and adjudication), and the legal system itself as anchored in an overarching power-legitimizing "rule of recognition."

41. KRATOCHWIL, *supra* note 23, at 2 (observing that public international law is inevitably underdeveloped, and defined by negatives, when seen in terms of a "domestic order-international anarchy" dichotomy).

42. For an overview, see Slaughter et al., *supra* note 23.

One possible starting point for breaking out of this vicious circle is constructivist IR theory,⁴³ which emerged in part as a reaction to the dominant rationalist explanatory models.⁴⁴ Like institutionalists, constructivists focus on interaction, communication, and discourse among actors.⁴⁵ The distinctive features of constructivist theory are its rejection of the assumption of interests as exogenous to interaction and its focus on the *identities* of the actors as generators of interests.⁴⁶ The main point is that identity formation is relational and *prior* to interest formation.⁴⁷ Identities are constructed through social interaction. The ends of the interaction are not predetermined but can be discovered and learned. Structures such as institutions, norms, and rules, are not immutable but can be recast through changes in actor identity, which, in turn, are influenced by interaction and mutually created structures.⁴⁸ Constructivists describe how structures foster "shared understandings" that can then shape both the identity of the actors and the further evolution of the structures themselves.⁴⁹ This emphasis on the shaping of identities contains a further important insight: ideas, shared understandings, or norms are seen not as direct causes of behavior but as structures that both constrain and enable choices.⁵⁰

This conception opens new vistas on the role of international law as neither simply imposed social control nor subordinate to the interests of states. Rather, law is seen as generated and molded through interaction and, in turn, as affecting actor behavior by influencing actor identity, and thereby reconstructing interests. The promise of constructivism for the dialogue between international lawyers and IR theorists is evident. By freeing law from a positivist optic and accounting for its horizontal traits, constructivists help international lawyers understand the genesis and effects of law. Conversely, international lawyers help constructivists answer the persistent question of

43. The term "constructivism" is Nicholas Onuf's. Onuf, *supra* note 23, ch. 1; Nicholas Greenwood Onuf, *Constructivism: A User's Manual*, in *INTERNATIONAL RELATIONS IN A CONSTRUCTED WORLD* 58, 59 (Vendulka Kubáľková et al. eds., 1998).

44. For helpful overviews that highlight the key distinctions between rationalist theories and constructivism, see Katzenstein et al., *supra* note 24, at 657–63, 674–78; Lisa L. Martin & Beth Simmons, *Theories and Empirical Studies of International Institutions*, 52 INT'L ORG. 729 (1998).

45. For an overview, see Thomas Risse, "Let's Argue!": *Communicative Action in World Politics*, 54 INT'L ORG. 1, 2–14 (2000). The term "interaction," as used in this Article, includes bilateral and multilateral intercourse among diverse international actors, mostly states, but increasingly—at least in some issue areas such as human rights, environmental law, and trade—involving actors from civil society and private business.

46. Wendt, *supra* note 34, *passim*. Although constructivists need to produce more empirical work demonstrating the role that identity plays in shaping actor behavior, Wendt has postulated a useful distinction between "type identities" (social categories of states that share characteristics such as regime type: liberal democracy, traditional monarchy, totalitarian dictatorship) and "role identities" (the product of relationships among states: friend, rival, enemy). ALEXANDER WENDT, *SOCIAL THEORY OF INTERNATIONAL POLITICS* 226 (1999).

47. Alexander Wendt, *Anarchy is What States Make of It: The Social Construction of Power Politics*, 46 INT'L ORG. 391, 397–98 (1992).

48. See Risse, *supra* note 45, at 4–5.

49. Ruggie, *supra* note 34, at 869–70; Wendt, *supra* note 47, at 396–97.

50. See Ruggie, *supra* note 34, at 869–70.

how legal norms affect identity and persuade actors. A more nuanced understanding of the creation and functioning of legal norms, rooted in a constructivist description of legal process, helps to specify important elements of persuasion in international society.⁵¹

A number of constructivist scholars, particularly Friedrich Kratochwil and Nicholas Onuf, have addressed the role of legal norms and have made significant contributions to the understanding of how international law affects the identities of states and influences their behavior.⁵² Yet, the richest repository of insights to assist international lawyers in these tasks is found in the work of Lon Fuller.⁵³ Fuller's work has much common ground with constructivism in that it articulates an interactional understanding of law. Law is seen as an enterprise and a social practice—a continuing challenge rather than a finished product.⁵⁴ Fuller conceived of a continuum of legality along which “both rules of law and legal systems can and do half exist.”⁵⁵ Further, law is not by definition hierarchical, but it is a construction dependent upon mutual generative activity.⁵⁶ Through interaction, relatively stable patterns of expectation (“shared understandings” in constructivist terms) must emerge to allow the application of norms in specific contexts.⁵⁷ Ultimately, rules are persuasive and legal systems are perceived as legitimate when they are broadly congruent with the practices and shared understandings in society.⁵⁸ These shared understandings create a framework for a rich conception of rhetorical activity whereby actors in a social system can be convinced of the need for legal norms.⁵⁹ In addition, actors learn to read the social context against which particular legal norms must be postulated and interpreted.⁶⁰

This interactional understanding of law has long been the relatively more neglected part of Fuller's work.⁶¹ Most of the attention tends to be devoted

51. See also Martha Finnemore & Kathryn Sikkink, *International Norm Dynamics and Political Change*, 52 INT'L ORG. 887, 906–12 (1998).

52. See Nicholas Greenwood Onuf, *Global Law-Making and Legal Thought*, in LAW-MAKING IN THE GLOBAL COMMUNITY 1, 18 (Nicholas Greenwood Onuf ed., 1982); Nicholas Greenwood Onuf, *Do Rules Say What They Do? From Ordinary Language to International Law*, 26 HARV. INT'L L.J. 385, 397–402 (1985); Onuf, *supra* note 23; Friedrich Kratochwil, *The Force of Prescriptions*, 38 INT'L ORG. 685 (1984); KRATOCHWIL, *supra* note 23; Friedrich Kratochwil, *How Do Norms Matter?*, in THE ROLE OF LAW IN INTERNATIONAL POLITICS 35, 38 (Michael Byers ed., 2000); Friedrich Kratochwil, *Thrasymachos Revisited: On the Relevance of Norms and the Study of Law for International Relations*, 37 J. INT'L AFF. 343 (1984). For a detailed discussion of the contributions of Onuf and Kratochwil, see *International Law and Constructivism*, *supra* note 27, at 38–43.

53. See *International Law and Constructivism*, *supra* note 27, at 43–64.

54. See Lon L. Fuller, *THE MORALITY OF LAW* 106 (rev. ed. 1969).

55. *Id.* at 122.

56. See *id.* at 110, 133–45, 195, 209 (disputing the “pyramidal structure of state power” as the essence of law; discussing and discarding Hart's normative hierarchy; and expanding upon mutual generative activity).

57. See Gerald J. Postema, *Implicit Law*, 13 L. & PHIL. 361 (1994).

58. *Id.*

59. *International Law and Constructivism*, *supra* note 27, at 61–62.

60. Postema, *supra* note 57, at 375–77.

61. Recently, however, much attention has been paid to Fuller's “interactive” understanding of the law. See, e.g., REDISCOVERING FULLER: ESSAYS ON IMPLICIT LAW AND INSTITUTIONAL DESIGN (Willem J. Witteveen & Wilbren van der Burg eds., 1999).

to his arguments regarding the distinctive "morality" of law and to his debate with Hart on whether or not law and morality should be strictly distinguished.⁶² The purpose here is simply to highlight that Fuller's concept of the morality of law—rejecting a rigid separation of law and non-law— informs the interactive understanding of law in two important respects. First, it illuminates the notion of law as a continuing activity, with norms existing on a continuum where the line between social and legal norms is often fluid. This perspective allows for the influence of emerging norms even when they have not yet attained legal status. Second, there are certain internal characteristics that distinguish law from other forms of social ordering. They may be summarized as requiring that rules be compatible with one another, that they ask reasonable things, that they are transparent and relatively predictable, and that known rules actually guide the discretion of officials.⁶³ It is these internal characteristics that account for the "bindingness" of law, rather than hierarchical authority or pedigree. The greater the extent to which these characteristics are present, the greater the legitimacy of the norms or legal system, and the greater law's power to promote adherence.⁶⁴ The criteria, and the resulting legitimacy of law, are largely related to the "process" of law creation; the tests remain neutral as to substantive goals pursued by the system. However, it is important to stress that "means" (process) and "ends" (substance) are not radically distinct. In an interactional model of law, process is part of the substance that law serves.⁶⁵

62. See H. L. A. Hart, *Positivism and the Separation of Law and Morals*, 71 HARV. L. REV. 593, 618 (1958). Fuller's initial response was published contemporaneously. Lon L. Fuller, *Positivism and Fidelity to Law—A Reply to Professor Hart*, 71 HARV. L. REV. 630 (1958).

63. FULLER, *supra* note 54, at 33–94, 152–86. Fuller actually posited eight internal requirements: generality of rules; promulgation; limiting cases of retroactivity; clarity; avoidance of contradiction; not asking the impossible; consistency over time; and congruence of official action with the underlying rules. One of his most controversial theses was that law is recognizable by adhering to these eight requirements of "internal morality," and by subjecting its substantive conclusions to weak tests of "external morality." Because of his emphasis upon "internal morality," Fuller, thus, believed that the basis of legal obligation is found within the system of rules itself, and is not dependent upon an external validating principle. Adherence to an internal morality helps to render law more legitimate in the eyes of those to whom rules are directed. In addition, modest substantive commitments to external morality evidence an underlying congruence with commonly shared understandings in society, thereby supporting the legitimacy of rules.

64. *Id.* at 46–91, 155 (asserting "the internal morality of the law is not something added to, or imposed on, the power of law, but is an essential condition of that power itself"). These tests are not perfect and other formulations would be plausible, but the purpose here is to stress Fuller's interactional thesis, not his commitment to a specific formulation of the internal morality of the law. See also Roderick A. Macdonald, *Pour la Reconnaissance d'une Normativité Juridique Implicite et "Inférentielle"*, 18 SOCIOLOGIE ET SOCIÉTÉ 47 (1986).

65. Fuller's internal tests of legality are to be distinguished from the conception of legitimacy developed by Franck. THOMAS M. FRANCK, *THE POWER OF LEGITIMACY AMONG NATIONS* chs. 4–11 (1990). Franck argues that there are four variables affecting legitimacy: determinacy, symbolic validation, coherence, and adherence. With the exception, perhaps, of "symbolic validation," these variables map onto Fuller's conditions of internal morality. However, Franck treats his variables as elements of "process fairness," which is distinct, in his view, from "moral fairness," his term for distributive justice. THOMAS M. FRANCK, *FAIRNESS IN INTERNATIONAL LAW AND INSTITUTIONS* 22 (1995). For Fuller, the conditions of internal morality are genuinely moral, not mere desiderata of coherence or logical soundness, because they are both means and ends. In an interactional model of law, process is part of the ends that law serves

The binding effect of law is self-bindingness—created through processes of mutual construction, legitimacy gained by adherence to internal criteria, and congruence with existing social norms, practices, and aspirations.

From the perspective of international law, the strengths of this model rest in the fact that it frees analysis from the “distorting optic” of the “monopoly on power” and “enforcement” fixations that so often skew domestic legal analysis and are then borrowed by international lawyers desperate to show that they work with “real” law. Interactional analysis makes sense of international law’s horizontal features and processes in several crucial respects. Law’s existence is not contingent upon enforcement (although power and force are relevant to understanding human interaction). An interactional model also allows for multiple sites of legal influence, both by accounting for the normative influence of state and non-state actors and by opening up the notion of “sources” of international law. Through processes of institutionalization and learning, norms emerge from patterns of practice that generate shared understandings. It is in part through interaction and communication that actor identity is constructed. Through its distinctive internal rationality and its attendant self-bindingness, law contributes to the self-understandings and evolving identities of actors, thereby affecting the construction of interests that actors bring to the discourse of international society. In turn, actors (through their identities and interests) affect social structures (including law) as shared knowledge and shared understandings evolve.

The implications of such an interactional understanding of law for the role of law in the context of the shared waters of the Nile Basin are significant. It is the prevailing anemic conception of law that drives the conclusion of many commentators that international law has little to contribute to the relations among basin states with respect to Nile waters.⁶⁶ An understanding of law that would posit its direct impact upon state behavior in the absence of underlying congruence with shared expectations is misconceived. If one’s expectation of law is that by its mere formal existence (as an enunciated “rule”) it can directly cause behavior, then one would inevitably conclude that international water law has been ineffective in the Nile context. Conversely, if one attributes no independent effect to law, as realists would, or sees it mainly as a device to coordinate interstate relations and make them more efficient, as institutionalists might, then international law’s role is confined to the mere formalizing of Nile agreements once reached. By contrast, an interactional view of law can lead to a better understanding of both the promise and the limitations of law in the Nile context. Specifically, this Article traces three distinct but interrelated facets of law’s persuasiveness: how it shapes the individual and collective identities of states, how it enables or constrains convincing arguments, and how it promotes adherence

because inclusive processes reinforce the commitments of participants in the system to the substantive outcomes achieved by implicating participants in their generation.

66. See *infra* notes 245–248 and accompanying text.

through its specific form of legitimacy. The Article examines each of these facets in relation to the historic Nile treaties, international water law (in particular as manifested in the Watercourses Convention), and various informal institutions involving Nile riparians.

III. THE HYDROLOGICAL AND GEOGRAPHICAL CONTEXT: SCARCITY AND RESOURCE DEGRADATION

The Nile is one of the world's great rivers, flowing for 6825 kilometers through much of Northeastern Africa, draining approximately 2.9 million square kilometers of territory, and nourishing the bodies and imaginations of roughly 280 million people in ten riparian (or water-supplying) states. The geographic and climatic setting of the basin is varied, ranging from tropical rain forest to mountains, plateaus, and deserts. Roughly 85% of the Nile's water originates in the highlands of Ethiopia, from which three rivers flow into the main body of the Nile: the Blue Nile (draining Lake Tana) and the Atbara and Sobat Rivers (through Eritrea and Sudan, and Ethiopia and Sudan, respectively). The remainder of the water flows along the White Nile from Central and East Africa, originating in Lake Victoria (Kenya, Uganda, and Tanzania) and the mountains of Burundi, Rwanda, and the Democratic Republic of Congo. The White Nile flows through and feeds the great Sudanese swamps (The Sudd). The White Nile and Blue Nile meet at Khartoum, the former "clear and limpid" and the latter carrying "the fertilizing lime which in the past has been so helpful to Sudan and to Egypt."⁶⁷ From Khartoum, the Nile is a single river, flowing through Egypt on its way to the Mediterranean Sea.⁶⁸

Although "flow" statistics for the Nile can be quite imprecise for a number of technical reasons, it is fair to conclude that annual flow of the Nile, measured at Aswan in Egypt, has diminished significantly over the last century.⁶⁹ The river is also highly seasonal, with roughly 80% of its discharge occurring between August and October.⁷⁰ Many scientists believe that with

67. Dante A. Caponera, *Legal Aspects of Transboundary River Basins in the Middle East: The Al Asi (Orontes), The Jordan and The Nile*, 33 NAT. RESOURCES J. 629, 650 (1993).

68. The geographic information in this paragraph is drawn from Arun P. Elhance, *The Nile Basin*, in *HYDROLOGICALS IN THE THIRD WORLD* 53, 54-59 (1999); CANADIAN INTERNATIONAL DEVELOPMENT AGENCY (CIDA), *WATER RESOURCES ATLAS OF THE NILE BASIN*, 5-6, 22 (1994) [hereinafter *ATLAS*]; John Waterbury & Dale Whittington, *Playing Chicken on the Nile? The Implications of Microdam Development in the Ethiopian Highlands and Egypt's New Valley Project*, 22 NAT. RESOURCES J. 155, 156 (1998); KLIOT, *supra* note 13, at 16-22; Dellapenna, *supra* note 6, at 50; Amy Dockser Marcus, *Water Fight*, WALL ST. J., Aug. 25, 1997, at 1.

69. Swain, *supra* note 2, at 675-80; KLIOT, *supra* note 13, at 22-27. It is also instructive to note that the Nile "shows the lowest specific discharge of comparable large rivers" around the globe. *Id.* at 15. On the unreliability of flow measurement absent technical verification, see *ATLAS*, *supra* note 68, at 2.

70. MIRIAM R. LOWI, *WATER AND POWER: THE POLITICS OF A SCARCE RESOURCE IN THE JORDAN RIVER BASIN* 69 (1993) (comparing various river basins as part of her analysis of the Jordan regime). See also *ATLAS*, *supra* note 68, at 22; Elhance, *supra* note 68, at 57. During flood periods, the disproportion in flow may be even greater, with roughly 95% of all of the Nile's water originating in Ethiopia, according to one report. Kendie, *supra* note 3.

the completion of the Aswan High Dam, and the creation of the huge reservoir known as Lake Nasser, controlled discharge has saved Egypt both from major floods and from major droughts.⁷¹ However, as a result of the same project, only about 2% of the Nile's flow actually reaches the sea.⁷² Such low flow levels have contributed to ecological problems that have reached crisis proportions. In a number of Nile riparians, a further problem is presented by poor water distribution. For example, in Ethiopia roughly forty million hectares of land are drought prone and 540,000 hectares are flood prone.⁷³

The Nile is essentially Egypt's sole source of water,⁷⁴ sustaining a population of over sixty-eight million, estimated to be growing at a rate of one million every nine months.⁷⁵ Over 95% of Egypt's population resides in the Nile Valley.⁷⁶ Population growth is even faster in Ethiopia, where it is expected that by 2025, there will be more people to feed than in Egypt.⁷⁷ A World Bank study has predicted that by 2025, the amount of water available to each person in North Africa will have dropped by roughly 80% in a single lifetime.⁷⁸ Water planners describe a country as "water scarce" when annual renewable freshwater is less than 1000 cubic meters per person per year. By this measure, as of 1990, Burundi, Kenya, and Rwanda were already subject to water scarcity. Egypt and Ethiopia are expected to fall into that category by 2025, and Tanzania and Uganda will join the group by 2050.⁷⁹ Sudan, because of its limited population in relation to its size, its

71. ATLAS, *supra* note 68, at 22. See also Peter Chesworth, *The History of Water Use in the Sudan and Egypt*, in THE NILE: SHARING A SCARCE RESOURCE, *supra* note 13, at 65, 69-71 (arguing as well that the Dam helped increase Egypt's agricultural production markedly).

72. Swain, *supra* note 2, at 680.

73. MOHAMED-HATEM EL-ATAWY, NILOPOLITICS: A HYDROLOGICAL REGIME 1870-1990, 46 (1996).

74. Gleick, *supra* note 6, at 86 ("Ninety-seven percent of Egypt's water comes from the Nile River, and more than ninety-five percent of the Nile's runoff originates outside Egypt . . ."). See also Hasanayn Tawfiq Ibrahim, *Mushkilat al-Miah fi Misr (The Problem of Water in Egypt)*, in MUSHKILAT AL-MIYAH FI AL-SHARQ AL-AWSAT [THE PROBLEM OF WATER IN THE MIDDLE EAST] 293, 295 (Najib Isa et al. eds., Richard Wodnicki trans., 1994) (stating that the Nile supplies Egypt with 97% of its water); Aaron Schwabach, *The United Nations Convention on the Law of Non-navigational Uses of International Watercourses, Customary International Law, and the Interests of Developing Upper Riparians*, 33 TEXAS INT'L L. J. 257, 263 (1998) ("Essentially all of [Egypt's] water comes from . . . the Nile . . . Perhaps nowhere else in the world is reliance on freshwater resources originating outside the country so complete, or so glaringly evident.").

75. Peter Theroux, *The Imperiled Nile Delta*, 191 NAT'L GEOGRAPHIC 2, 8 n.1 (1997). Egypt's population has been growing at between 2.8% and 3.5% a year since the late 1980s. Unless this rate is slowed dramatically, the population could almost double to 118 million by 2050. Mark Huband, *The Nile States Look to New Division of Waters*, FIN. TIMES (London), Feb. 28, 1997; Kendie, *supra* note 3.

76. Marcus, *supra* note 68, at 1. Water distribution systems serving this population are also notable for their waste. It is estimated that almost half of the water flowing through the Cairo system is lost to leaks and seepage. See Kempf, *supra* note 21, at 2.

77. Swain, *supra* note 2, at 689.

78. JEREMY BERKOFF, A STRATEGY FOR MANAGING WATER IN THE MIDDLE EAST AND NORTH AFRICA 1 (1994). See also Vidal, *supra* note 4, at 13 (quoting Bank Vice-President Ismail Serageldin). For a detailed study of water use patterns in Egypt and Sudan, see Chesworth, *supra* note 71.

79. Sam L. Laki, *Management of Water Resources of the Nile Basin*, 5 INT'L J. SUSTAINABLE DEV. & WORLD ECOLOGY 288, 289 (1998). According to the definition of "water stress" proposed by Falkenmark (annual renewable supplies approaching 2000 cubic meters per person per year), by 1992 Burundi,

relatively accessible flood region, and its endowment of enough rain to sustain significant rain-based food production, is not expected to face the effects of water scarcity in the near future.⁸⁰

A further troubling problem faces Egypt, the downstream riparian and the state most dependent on the Nile: pollution of the river and other negative environmental effects of water development choices made over the last few decades.⁸¹ The high use of pesticides and fertilizers in the Nile valley, and particularly in Egypt, has caused pollution of the river through the leaching of chemicals from the soil.⁸² The level of pollution has also been exacerbated by the inability to manage the industrial, domestic, and agricultural waste produced by a fast-burgeoning population.⁸³ The building of the Aswan High Dam in 1963 had many positive results; but for almost forty years, the Aswan High Dam "has kept the river from flooding and depositing renewing sediment at its mouth. The delta has instead been inundated with catastrophic superlatives: It is among the world's most densely cultivated lands, with one of the world's highest uses of fertilizers and highest levels of soil salinity."⁸⁴ The Aswan reservoir, Lake Nasser, also permits high

Egypt, Ethiopia, Kenya, Rwanda, and Tanzania were already experiencing such stress. Jan Hultin, *Source of Life, Source of Conflict: Fear and Expectations Along the Nile*, in REGIONAL CASE STUDIES OF WATER CONFLICTS 20, 22 (Leif Ohlsson ed., 1992). See also M. Falkenmark, *Fresh Water—Time for a Modified Approach*, 15 AMBIO 192, 194 (1986). For further discussion of water consumption patterns (and future projections) among Nile riparians, see EL-ATAWY, *supra* note 73, at 1–2.

80. *Policies*, *supra* note 13, at 387; Roy Stoner, *Future Irrigation Planning in Egypt*, in THE NILE: SHARING A SCARCE RESOURCE, *supra* note 13, at 195; KLIOT, *supra* note 13, at 65, 70 (noting that Sudan does not even use its current treaty-based allocations). It is important to note, however, that cotton, Sudan's principal agricultural export, is completely dependent upon Nile irrigation. See Babatunde, *supra* note 5, at 127. Sudan is generally considered to have "great potential for increased irrigation" as well. See, e.g., Peter H. Gleick, *Water Resources: A Long-Range Global Evaluation* 20 ECOLOGY L.Q. 141, 146 (1993). The constraints are not technical but political. See *infra* Part IV. In addition, development plans under consideration by upper riparians could have a significant negative impact on the Nile's flow into Sudan and Egypt, altering the current political equation enormously. See *id.* Further, climate change could well contribute to a speeding up of the processes giving rise to water scarcity throughout the Nile Basin. See Peter H. Gleick, *Climatic Changes, International Rivers, and International Security: The Nile and the Colorado*, in GREENHOUSE GLASNOST 147–65 (Terrell Minger ed., 1990).

81. Some Nile experts argue that pollution is not a major issue for the other Nile riparians. Indeed, the major pollution problems on the Nile arise downstream from Cairo. Dale Whittington et al., *Toward a New Nile Waters Agreement*, in WATER QUANTITY/QUALITY MANAGEMENT AND CONFLICT RESOLUTION: INSTITUTIONS, PROCESSES AND ECONOMIC ANALYSES 167, 173–74 (Ariel Dinar & Edna Loehman eds., 1995). However, the negative environmental impact of upstream development could have effects throughout the Nile system as new dam projects, irrigation and diversion schemes, and other uses come online in various riparian states. For a discussion of the prospects for upstream development, see *infra* Part IV.

82. Abdul-Karim Sadik & Shawki Barghouti, *The Water Problems of the Arab World: Management of Scarce Resources*, in WATER IN THE ARAB WORLD: PERSPECTIVES AND PROGNOSIS 1, 15–16 (Peter Rogers & Peter Lydon eds., 1994); Theroux, *supra* note 75, at 21–22; KLIOT, *supra* note 13, at 46–47.

83. Yahia Abdel Mageed, *The Central Region: Problems and Perspectives*, in WATER IN THE ARAB WORLD: PERSPECTIVES AND PROGNOSIS, *supra* note 82, at 101, 112–18; Tadros, *supra* note 3, at 1091 nn.3 & 8; Theroux, *supra* note 75, at 17.

84. Theroux, *supra* note 75, at 8. See also Laki, *supra* note 79, at 291 (cataloguing the negative effects on the Delta). The danger to the Delta has been recognized publicly within Egypt. See Abas al-Tarabili, Editorial, *Delta in Danger*, CAIRO AL-WAFD, June 10, 1999 (warning of an "imminent danger menacing the Egyptian nation" through the destruction of the Nile Delta).

levels of water loss through seepage and evaporation, contributing to increased soil salinity along the course of the river.⁸⁵

Water quality is especially important to Egypt because it is so dependent upon the Nile for agricultural production. Although Egypt has, over the last thirty years, substituted food imports (funded massively by the United States) for indigenous production,⁸⁶ it remains true that without a secure and clean water supply from the Nile, poorer Egyptians would starve. This outcome is not currently likely for any other Nile riparian. Even in Ethiopia, with its fast-growing population, "food supply . . . is not much affected by Nile flow."⁸⁷ Of course, Ethiopia has not previously exploited the Nile to support food production, depending instead upon rain based agriculture. That trend is likely to change in the short term, as Part IV discusses, so by expanding production and attempting to create more stable food supplies, Ethiopia may become more reliant on the Nile than is currently the case.⁸⁸

The greatest use of water from the Nile, especially within Egypt, is irrigation for agricultural production. "The Nile Basin is water-scarce not because of too many people but because of too much agriculture relative to water supply. Agriculture here, as just about anywhere else in the world, accounts for upward of 80% of all water use."⁸⁹ The principal reason underlying unsustainable agriculture is not inefficient "traditional" methods,⁹⁰ but long-

85. Laki, *supra* note 79, at 291; KLIOT, *supra* note 13, at 45-46.

86. *Policies*, *supra* note 13, at 386.

87. J. A. Allan, *Evolving Water Demands and National Development Options*, in *THE NILE: SHARING A SCARCE RESOURCE*, *supra* note 13, at 301, 303-04 [hereinafter *Demands*].

88. See, e.g., Kendie, *supra* note 3; Sisay Befekadu, *Ethiopia: Taking a Lowly Option*, *REPORTER*, Aug. 3, 1999.

89. Waterbury & Whittington, *supra* note 68, at 162. Other sources place the worldwide consumption of water for irrigation at about 70% of total use. See, e.g., Kempf, *supra* note 21. For a thorough, if somewhat dated, review of irrigation issues in the Nile Basin, see Vujica Yevjevich, *The Nile River Basin: Hardcore and Softcore Water Projects*, 8 *WATER INT'L* 23 (1983). Throughout the Middle East, agriculture consumes between 65 and 90% of all freshwater supplies. Shapland, *supra* note 6, at 315. For a discussion of unsustainable water use in agriculture globally, see J. W. Maurits la Rivière, *Threats to the World's Water*, 261 *SCI. AM.*, Sept. 1989, at 80 (detailing waste, over-irrigation, pollution of water sources through salination and chemical leaching, etc.). See also Pamela LeRoy, *Troubled Waters: Population and Water Scarcity*, 6 *COLO. J. INT'L ENVTL L. & POL'Y* 299, 303 (1995) (noting that around the globe, roughly 69% of all water withdrawals is used for agriculture, mostly for irrigation). In the late 1970s, Waterbury had already warned that downstream from the Aswan High Dam the Nile was being turned into an "enormous irrigation ditch." JOHN WATERBURY, *HYDROPOLITICS OF THE NILE VALLEY* 40 (1979).

These comments on unsustainable agriculture should not lead to a conclusion that irrigation has been a uniformly bad practice. Indeed, observers have suggested that "[m]ore than half of the increase in the world's agricultural productivity during the last few decades has come from irrigation." This increase in productivity has helped enormously in feeding rapidly growing populations in many parts of the world. But there are costs—significant costs—that now have to be addressed, and alternative forms of irrigation technology are being developed to combat problems of pollution, salination, and waste. Pierre R. Crosson & Norman J. Rosenberg, *Strategies for Agriculture*, 261 *SCI. AM.*, Sept. 1989, at 128, 129-35. See also SANDRA POSTEL, *PILLAR OF SAND—CAN THE IRRIGATION MIRACLE LAST?* *passim* (1999) (discussing modern forms of "resource-renewing" irrigation); Maurits la Rivière, *supra* note 89, at 90-94 (discussing micro-irrigation schemes).

90. Though some commentators have argued that Egyptian agriculture (especially irrigation practice) is inefficient, others have suggested that traditional approaches are relatively efficient, given climatic conditions. See Stoner, *supra* note 80, at 199-200; Babatunde, *supra* note 5, at 124-25 (discussing the

standing government policy supporting increasingly fictitious and costly efforts at "food security."⁹¹ This emphasis upon indigenous food supply helps to explain why, within the water sector, irrigation and drainage projects represented the largest part of World Bank loans to Egypt from 1960 to 1992.⁹² Massive irrigation schemes have been favored despite research indicating that throughout Africa such schemes "have tended to benefit a small minority . . . while destroying local production systems, such as floodwater farming and fisheries, that are vital to the poorer majority."⁹³ Unsustainable water consumption has also been promoted by the introduction of seemingly more efficient high-yielding crop varieties that demand much more water than traditional crops.⁹⁴ Shapland argues that the emphasis on national food security that characterizes public policy throughout the Middle East is unlikely to change, especially as agricultural exports (usually involving water intensive crops) are a major source of foreign currency for cash-strapped governments. In addition, investments in agriculture have the spin-off effect of keeping at least some of the population "down on the farm," reducing population pressure in over-crowded and under-served urban areas.⁹⁵ Interestingly, however, Egypt may have more flexibility to reduce reliance upon water for agriculture because it is already deeply committed to import substitution, and has previously reduced water allocations for certain crops, such as rice in 1988.⁹⁶ Egypt is probably less committed to domestic food production than any other Nile riparian. Less positively, Allan argues that Egypt has been "living beyond its water means" since the early 1970s, and

inefficiencies of Egyptian agriculture); J.A. Allan, *Overall Perspectives on Countries and Regions*, in *WATER IN THE ARAB WORLD*, *supra* note 82, at 65, 79 ("Egypt's agricultural water re-use practices are exceptional, but this is due very much to favorable soil, and hydraulic conditions which enable efficient water re-use.").

91. Waterbury & Whittington, *supra* note 68, at 163. See also KLIOT, *supra* note 13, at 78; John Waterbury, Speech at the Nile 2002 Conference (Feb. 26, 1996) (transcript on file with the Harvard International Law Journal). Support for agriculture consumes heavy government resources even though the sector is decreasing in economic importance throughout the basin. *Demands*, *supra* note 87, at 302; Mageed, *supra* note 83, at 112 (citing statistics indicating that agriculture's portion of Egyptian GDP declined from 34.3% in 1955 to 20% in 1990).

92. See BERKOFF, *supra* note 78, at 5.

93. Sandra Postel, *Saving Water for Agriculture*, in L. BROWN, ET AL., *STATE OF THE WORLD 1990: A WORLDWATCH INSTITUTE REPORT ON PROGRESS TOWARDS A SUSTAINABLE SOCIETY* 39, 47 (Linda Starke ed., 1990) (citing the work of Thayer Scudder on irrigation in Africa). The Egyptian Government still appears committed to "giant national projects." See *infra* Part IV. See comments of the Egyptian Minister of Public Works reported in *Egypt, Sudan Discuss Water Cooperation in Cairo*, MENA, 30, May 1998 ("Top priority must be given to the giant national projects launched by the two nations").

94. Vidal, *supra* note 4, at 13.

95. Shapland, *supra* note 6, at 315-17.

96. *Id.* at 318. See also *Policies*, *supra* note 13, at 386. It is reported that Egypt currently imports grain worth more than \$3 billion annually. Shapland, *supra* note 6, at 318; Kendie, *supra* note 3. But see Z. Abate, *The Integrated Development of Nile Basin Waters*, in *THE NILE: SHARING A SCARCE RESOURCE*, *supra* note 13, at 227, 233 (doubting that "food self-sufficiency" will remain a policy option anywhere in the region, in the light of current levels of population growth).

that it has solved this problem by "subordinating its regional position to the United States" and relying on commodity support to fill the "food gap."⁹⁷

All of these geographical and hydrological factors, taken together, suggest a classic case of international resource competition, especially given Egypt's high level of dependence upon the waters of the Nile. As will be shown, the competitive environment has been intensified by historical and legal factors, and by changing political dynamics affecting development options throughout the basin. These factors and dynamics have also shaped the social and economic geography of the region, influencing the "physical" conditions described above.

IV. THE SOCIAL AND POLITICAL CONTEXT: HISTORIC PATTERNS OF COMPETITION AND CONTROL

To a significant degree, the political context in the Nile Basin is conditioned by the region's colonial history and the strategic concerns of its colonial powers. Control over, and competition for, the waters of the Nile were central colonial preoccupations, pursued either through efforts to gain direct control over key areas, or through treaties designed to establish legal control over the Nile. The colonial patterns of competition and quest for control were subsequently replicated by the newly independent states in the region and the influence of a competitive legal environment continues to be felt.

Egypt's case exemplifies the tension between the desire for control and the reality of interdependence that underpins much of the geopolitics in the Nile Basin. An old saw runs "Egypt is the Nile and the Nile is Egypt."⁹⁸ The phrase is as misleading as it is accurate. While it encapsulates Egypt's dependence on the Nile and its aspirations for control over its waters, it fails to acknowledge the import of the Nile for other basin states. Throughout its long history, Egyptian civilization has fed on the lifeblood of the Nile. As noted in Part III, contemporary Egypt remains strikingly dependent on Nile water for its very survival. Yet the same historical claim is made for Sudan; for despite being comparatively less dependent on the Nile than Egypt, Sudan still confers crucial importance on the River. Seventy-seven percent of Sudan's water originates outside its borders and most of that is carried into the country by the Nile system.⁹⁹ The Nile and its sources also have profound effects on at least seven other countries.¹⁰⁰ So, while the Nile may, in a

97. *Policies*, *supra* note 13, at 385. See also Tony Allan, *Water in International Systems: A Risk Society Analysis of Regional Problemsheds & Global Hydrologies*, Mar. 6, 1999, <http://www.up.ac.za/academic/libarts/polsci/awirur/> [hereinafter *Risk Society*] (speaking of the "virtual water" that can help make up for shortfalls in local water supplies and using the example of grain import, to note, "[e]ach tonne of grain has over 1000 tonnes of 'virtual water' embedded in it").

98. Marcus, *supra* note 68, at 1. The original phrasing was more felicitous: "Egypt is an acquired country, the gift of the Nile." ALAN MOOREHEAD, *THE BLUE NILE* 3 (1962) (quoting Herodotus). See also Huband, *supra* note 75 (quoting Egypt's Deputy Prime Minister, Youssef Waly).

99. *Conflict*, *supra* note 6, at 103 tbl. 4.

100. It may be that the Congo, although a source of some Nile water, is not as actively concerned

very real sense, *be* Egypt, the Nile is also *more than* Egypt. However, a major part of the historical story of resource competition is framed by hegemonic claims for the protection of Egyptian interests, claims offered first on behalf of Egypt by the British, and more recently by Egyptians themselves.

As colonial "protector," Britain undertook a series of initiatives to ensure the almost unimpeded flow of Nile waters into Egypt. Indeed, it was the British who imposed a basin-wide regime to the benefit of Egypt, a regime only now undergoing significant change.¹⁰¹ Although the hegemonic aspect of the regime is deeply problematic, it had the virtue of treating the entire Nile Basin as a unit, a feature that the modern "ecosystem approach" to water management seeks to recreate, albeit for fundamentally different reasons.¹⁰² Believing initially that the main supply of Nile water came from the East African tropical lakes, Britain's first initiatives were concentrated in Central and Eastern Africa, particularly Uganda. Concern over secure water supplies in Egypt in part explains the massive British colonial engagement in East Africa in the mid to late nineteenth century.¹⁰³ Under British patronage, the Egyptian and Ugandan colonial governments reached a series of agreements allowing the damming of Lake Victoria so as to raise water flow rates to buttress Egyptian hydroelectric needs and to provide for year-round regulation of water flow.¹⁰⁴ Egyptian engineers were stationed at Owens Falls to oversee implementation, and remain there to this day.¹⁰⁵

British efforts to protect the White Nile flow continued into the twentieth century with a 1906 British-Belgian agreement guaranteeing water flow from the Congo into the Nile Basin, and similar agreements with Italy and France regarding their colonial territories.¹⁰⁶ The most far-reaching agree-

with the fate of the Nile as are the other riparians.

101. See MAHMOUD AHMED, MA'ARIK AL-MIYAH AL-MUQBILLAH FI AL-SHARQ-AL-ASWAT: RU'YAH MUSTAQBALIYAH HAWLA AHAMMIYAT AL-MIYAH KA-'AMIL SILM AW HARB FI AL-SANAWAT AL-QADIMAH [FUTURE WATER BATTLES IN THE MIDDLE EAST: A FUTURISTIC VISION ABOUT THE IMPORTANCE OF WATER AS A FACTOR IN PEACE OR WAR IN THE COMING YEARS] 26-28 (1991); John Waterbury, *Transboundary Water and the Challenge of International Cooperation in the Middle East*, in WATER IN THE ARAB WORLD: PERSPECTIVES AND PROGNOSSES, *supra* note 82, at 39, 43 [hereinafter *Cooperation*]; Babatunde, *supra* note 5, at 220. The style of British colonialism in Africa also allowed some forms of local hegemony to arise, for example, the so-called "Egyptian Equatorial African Empire" under Khedive Ismail in the 1860s-70s. This "Empire" was in part inspired by a desire to encourage total Egyptian control over the sources of the Nile. See EL-ATAWY, *supra* note 73, at 5, 14-40 (providing a detailed discussion of the British role in the Nile Valley in the nineteenth and twentieth centuries). For a fascinating, if anachronistic, account of the Victorian era of Nile exploration, see ALAN MOOREHEAD, *THE WHITE NILE* (1960) and MOOREHEAD, *supra* note 98.

102. See, e.g., *Ecosystem Law*, *supra* note 6, at 70-75.

103. EL-ATAWY, *supra* note 73, at 14-15.

104. P. Howell, *East Africa's Water Requirements: the Equatorial Nile Project and the Nile Waters Agreement of 1929*, in THE NILE: SHARING A SCARCE RESOURCE, *supra* note 13, at 81, 82-84 [hereinafter *East Africa*]. See also John Ntambirweki, *Colonial Treaties and the Legal Regime of the Nile Valley: Rethinking the Legal Framework into the 21st Century*, Nile 2002 Conference (Feb. 26-29, 1996) at 9-11 (on file with the Harvard International Law Journal).

105. EL-ATAWY, *supra* note 73, at 38.

106. Agreement Between Great Britain and His Majesty King Leopold II, Sovereign of the Independent State of the Congo, modifying the Agreement signed at Brussels on May 12, 1894, May 9, 1906, 24

ment was the 1929 Nile Waters Agreement, a colonial treaty involving Britain, as the governing power in Sudan, and Egypt.¹⁰⁷ The Treaty specifically granted priority to Egyptian water needs and forbade any construction on the Nile in Sudan that would restrict Nile flow.¹⁰⁸ Further, Britain granted Egypt the right to veto any future hydroelectric project in any of the British colonies along the Nile.¹⁰⁹

Finally understanding the central importance of flow from the Ethiopian highlands to overall Nile water flow, Britain concluded a treaty with the Italian colonialists in 1891 to preclude the building of any structures that would impede the flow of the Atbara River into the Nile.¹¹⁰ When the Ethiopians succeeded in expelling the Italians and claiming the eastern banks of the White Nile, the British and Egyptians again seized control of Sudan in 1898, putting down the Mahdist rebellion and at the same time ensuring their control over the river.¹¹¹ Then, in 1902, King Edward VII sent an emissary to Addis Ababa to negotiate a treaty with Emperor Menelik II, recognizing Sudan's borders and governing the use of the Blue Nile.¹¹² Article III of the 1902 Anglo-Ethiopian Treaty contained an undertaking by the Ethiopian Emperor "not to construct or allow to be constructed, any works across the Blue Nile, Lake Tana or the Sobat, which could arrest the flow of their waters into the Nile" without the prior consent of the British

HERTSLET'S COMMERCIAL TREATIES 344, art. 3. See Majdi al-Naim Hussein, *Mushkilat al-Miah fi al-Sudan [The Problem of Water in the Sudan]*, in MUSHKILAT AL-MIYAH FI AL-SHARQ AL-AWSAT, *supra* note 74, at 345, 357. See also Lisa M. Jacobs, *Sharing the Gifts of the Nile: Establishment of a Legal Régime for Nile Waters Management*, 7 TEMPLE INT'L & COMP. L.J. 95, 106-08 (1993).

107. Jacobs, *supra* note 106, at 108-10.

108. See Joseph Dellapenna, *Rivers as Legal Structures: The Examples of the Jordan and the Nile*, 36 NAT. RESOURCE J. 217, 241 (1996). The key clause regarding the waters of the Nile and its tributaries in the agreement reads: "Save with [sic] the previous agreement of the Egyptian Government no irrigation or power works or measures are to be constructed or taken which would, in such a manner as to entail prejudice to the interests of Egypt, either reduce the quantities of water arriving in Egypt, or modify the date of its arrival, or lower its level." Jacobs, *supra* note 106, at 109.

109. EL-ATAWY, *supra* note 73, at 37.

110. *Protocols Between the Governments of Great Britain and Italy, for the Demarcation of Their Respective Spheres of Influence in Eastern Africa*, Protocol No. 2, Apr. 15, 1891, 83 BRIT. & FOR. STATE PAPERS 19, at 21, ¶ 3. See also EL-ATAWY, *supra* note 73, at 20-21. Jacobs notes that this agreement was concluded before the Blue Nile, which remained under Italian influence, was identified as the major source of Nile water. Jacobs, *supra* note 106, at 106. Okidi argues that this agreement became void with the termination of Italian and British colonial rule in the region. O. Okidi, *History of the Nile and Lake Victoria Basins through Treaties*, in THE NILE: SHARING A SCARCE RESOURCE, *supra* note 13, at 321, 323-24. See also KLIOT, *supra* note 13, at 86 (suggesting that international water law's emphasis on equitable apportionment would undermine a claim to validity for the colonial treaties). But see S. Ahmed, *Principles and Precedents in International Law Governing the Sharing of Nile Waters*, in THE NILE: SHARING A SCARCE RESOURCE, *supra* note 13, at 351, 355-57 [hereinafter *Principles*]; AHMED, *supra* note 101, at 29-30 (arguing that all the colonial era treaties relating to territorial status are still in force and binding on successor states). A full discussion of the many problems associated with state succession as to colonial treaties is beyond the scope of this paper.

111. EL-ATAWY, *supra* note 73, at 21.

112. Kendie, *supra* note 3.

and the Government of Sudan.¹¹³ This concession facilitated British recognition of Ethiopian independence.

Ethiopia later repudiated the Anglo-Ethiopian agreement of 1902. In an *Aide Memoire* of September 1957, the Ethiopian Government asserted that it "has the right and obligation to exploit its water resources for the benefit of present and future generations of its citizens."¹¹⁴ Similarly, in 1958, the independent Sudan, prompted in large measure by a desire to undertake a dam project at Roseires, rejected the 1929 Treaty with Egypt concluded on Sudan's behalf by Britain, exacerbating border tensions between Egypt and Sudan.¹¹⁵ Major diplomatic efforts were undertaken to avoid war.¹¹⁶

In 1959, Egypt and Sudan concluded a treaty to replace the 1929 Treaty, which Sudan had long found unpalatable.¹¹⁷ The 1959 version was not, however, markedly different from the 1929 Treaty,¹¹⁸ although it did implicitly repudiate the provision in the 1929 Treaty that granted Egypt complete control over the Nile, and it did permit Sudan to go ahead with the Roseires dam project.¹¹⁹ The 1959 Treaty did not address broader issues such as water quality, flood control, or environmental protection.¹²⁰ Rather, it established fixed quotas on water distribution between Egypt and Sudan—quotas rooted in the two states' "acquired rights" under the 1929 Treaty and therefore highly favorable to Egypt.¹²¹ Moreover, the Treaty contained no provision for renegotiation or automatic alteration in the face of changing physical or political conditions.¹²² Another problem with the 1959 Treaty, one that is the root of much regional tension, is that while it is purely bilateral, it seeks to apportion the entire flow of the Nile to Egypt

113. *Treaties Relative to the Frontiers Between the Sudan, Ethiopia, and Eritrea*, May 15, 1902, 23 HERTSLET'S COMMERCIAL TREATIES 1-2, art. 3. See also FATHI ALI HUSSEIN, AL-MIYAH WA-AWRAQ AL-LU'BAH AL-SIYASIAH FI AL-SHARQ AL-ASWAT [WATER AND THE POLITICAL GAME IN THE MIDDLE EAST] 79 (1997); Hussein, *supra* note 106, at 357.

114. Kendie, *supra* note 3. See also the discussion of the current legal status of the agreement in Okidi, *supra* note 110, at 324 (arguing that Ethiopia is not bound by the treaty for a variety of technical and political reasons).

115. Jacobs, *supra* note 106, at 110.

116. See, e.g., HUSSEIN, *supra* note 113, at 68-69; Okidi, *supra* note 110, at 326-29.

117. Agreement Between the Republic of the Sudan and the United Arab Republic for the Full Utilization of the Nile Waters, Nov. 8, 1959, 453 U.N.T.S. 51 [hereinafter 1959 Nile Treaty].

118. OMER ALI MOHAMED, PROPOSAL FOR A NILE WATERS TREATY 9 (1986). For a detailed discussion of the Egypt-Sudan negotiations and resulting treaties of 1929 and 1959, see L. TECLAFF, WATER LAW IN HISTORICAL PERSPECTIVE 433-36 (1985).

119. Tadros, *supra* note 3, at 1095.

120. Greta Goldenmann, *Adapting to Climate Change: A Study of International Rivers and Their Legal Arrangements*, 17 *ECOLOGY L.Q.* 741, 755 (1990).

121. 1959 Nile Treaty, *supra* note 117, art. 2(1). Under art. 1(1) and (2), the quotas were established on the basis of "acquired rights" and set at "48 Millions (billion) of cubic meters" per year for Egypt and four Millions for Sudan. In addition, art. 2(3) and (4) provides for division between Egypt and Sudan of the "net benefits" from water storage by the Aswan High Dam. See also Conflict, *supra* note 6, at 110; Krishna, *supra* note 3, at 28; Okidi, *supra* note 110, at 333-34.

122. While no provision is made for adjustments to the quotas, Article 2(5) of the agreement does provide that the allocation of net benefits from the Aswan High Dam "shall be the subject of revision by the two parties." 1959 Nile Treaty, *supra* note 117. However, since no amendment or adjustment process is set out in the agreement, any such revision would require a negotiated solution.

and Sudan, excluding the interests of any other riparian, notably Ethiopia.¹²³ Bilateral treaties can certainly consider the needs of third parties under the concepts of good faith and reasonableness. However, the 1959 Treaty fails to do so, implicitly supporting a "prior appropriation" approach to water apportionment favorable to downstream states.

The conclusion of the 1959 Treaty provided Egypt with the security it needed to undertake the construction of the Aswan High Dam¹²⁴ and established a political basis for the construction of the long-envisioned Jonglei Canal. The Canal would channel the waters of the White Nile past the South Sudanese swamps, preventing significant water loss.¹²⁵ In the 1959 Treaty, Egypt agreed to pay half of the cost of the project and negotiated for up to 50% of the resulting water savings.¹²⁶ It is now more likely that, if the project ever moves forward, the Sudanese themselves will need to exploit any water gains.¹²⁷

The Jonglei Canal Project was finally launched in 1978, but was suspended in 1984.¹²⁸ It was controversial from the start, not only because of arguments over potential environmental damage, but also because Southern Sudanese have considered the scheme a pawn in the hands of Northerners who seek to dominate the South and extract the advantages of the project without bearing its costs.¹²⁹ It has even been argued that the project helped ignite a civil war in Sudan, which has been fought since the 1980s.¹³⁰ However, in recent years, the leader of the Southern rebellion, Dr. John Garang, has stated publicly that the Jonglei Canal Project should go forward as long as guarantees are provided that the local population and wildlife will be protected. As these statements were made on an "official visit" to Cairo, where Garang was soliciting Egyptian support for his cause,¹³¹ it is hard to assess

123. See *id.*, pmbli., art. 1. See also LeRoy, *supra* note 89, at n.75 (discussing Ethiopian antipathy toward the 1959 Treaty); East Africa, *supra* note 104, at 100 (discussing the East African rejection of supposed third party effects of the 1959 Treaty).

124. For a detailed discussion of the Aswan High Dam project, see Elhance, *supra* note 68, at 74-79.

125. It has been estimated that approximately half of the White Nile flow is lost through evaporation and transpiration in the Sudd. J.V. SUTCLIFFE & Y.P. PARKS, *THE HYDROLOGY OF THE NILE* (1999). See also Robert O. Collins, *The Jonglei Canal: Illusion or Reality?*, 13 WATER INT'L 144, 144 (1988) (noting that Sir William Garstin, between 1899 and 1903, "observed that nearly 60% of the water entering the [Sudd] was lost by evaporation and transpiration"); KLIOT, *supra* note 13, at 52, tbl. 1.10. The canal was to reduce evaporation in the Sudd swamps and to mitigate the effects of floods. It also was to generate hydroelectric power for Sudan and Egypt and provide irrigation for farming in Sudan. See Elhance, *supra* note 68, at 72.

126. 1959 Nile Treaty, *supra* note 117, art. 3.

127. See Waterbury & Whittington, *supra* note 68, at 161.

128. See Donald T. Hornstein, *Environmental Sustainability and Environmental Justice at the International Level: Traces of Tension and Traces of Synergy*, 9 DUKE ENVTL. L. & POL'Y E. 291, 296-97 (1999), for a discussion of the Jonglei Canal Project. See also KLIOT, *supra* note 13, at 52-58.

129. See, e.g., Francis M. Deng, *Northern and Southern Sudan: The Nile*, in 85 CULTURE AND NEGOTIATION: THE RESOLUTION OF WATER DISPUTES (Guy Olivier Faure & Jeffrey Z. Rubin eds., 1993); Jacobs, *supra* note 106, at 119; KLIOT, *supra* note 13, at 56.

130. See George T. Lako, *The Jonglei Canal Scheme as a Socio-Economic Factor in the Civil War in the Sudan*, in AFRICAN RIVER BASINS AND DRYLAND CRISES 45, 47, 56 (M. B. K. Darkoh ed., 1992).

131. See Sudan: Garang on Nile Water, Sudan's Unity, CAIRO MENA, Nov. 30, 1997, FBIS-NES-97-

his sincerity. Whatever the real opinion of key actors, the war in Sudan has effectively halted the Jonglei Project, although it is rhetorically resurrected in ministerial pronouncements from time to time.¹³² Given the relative weakness of the Sudanese economy and the country's continuing diplomatic isolation, it seems unlikely that internal or external resources will be available in the foreseeable future for any major water works on the Nile unless they are funded by Egypt.¹³³ Furthermore, given the potential environmental effects of the project on other basin states, its implementation would require their cooperation.¹³⁴

The more immediate threat to the hegemonic aspirations of Egypt over the Nile is posed by Ethiopia.¹³⁵ Ethiopia has never recognized the validity of the 1959 Sudanese-Egyptian Apportionment Treaty.¹³⁶ Ethiopian distrust of Egypt has been strong almost since the time of Ethiopian independence, so much so that rumors of Egyptian policies of destabilization toward Ethiopia circulate widely.¹³⁷ In 1988, Ethiopia launched the first phase of an ambitious hydroelectric scheme called the Tana Beles Project. The goal was to double hydroelectric production in Ethiopia and to provide irrigation for new settlements with up to 200,000 farmers. Water was to be taken from Lake Tana to the Beles River, where five dams were to be built. Egypt was deeply concerned about the potential effect of the scheme on the flow of the Blue Nile and in 1990 it blocked a loan provision for the project that Ethiopia had requested from the African Development Bank.¹³⁸ This action

334. But it may be important that Dr. Garang is himself an agricultural economist who received his Ph.D. in 1981 from Iowa State University, having written a dissertation on aspects of the Jonglei Project. Hornstein, *supra* note 128, at 296.

132. See the hopeful comments of the Egyptian Minister of Public Works and Water Resources, in *Egypt Rules Out Disputes Over Nile Water*, XINHUA NEWS AGENCY, Mar. 19, 1999. Egypt is expected to continue to press for the completion of the Jonglei Canal, even though it would probably be more cost effective for Sudan to concentrate on small-scale projects on the Blue Nile. See KLIOT, *supra* note 13, at 71. However, Sudan may be forced into the right choices, despite otherwise powerful Egyptian pressure, because of significant resource limitations.

133. See Swain, *supra* note 2, at 692. The Sudanese ambitions, laid out by Knott and Hewitt, therefore possess a sad air of unreality. David Knott & Rodney Hewitt, *Future Water Development Planning in the Sudan*, in *THE NILE: SHARING A SCARCE RESOURCE*, *supra* note 13, at 205. Most commentators agree that the Sudanese are generally deferential to Egyptian interests in the Nile in order to maintain whatever unity and stability the country now possesses, since it lacks the capacity to challenge and needs Egyptian support, or at least benign neglect. See, e.g., LOWI, *supra* note 70, at 72.

134. See Elhance, *supra* note 68, at 73–74 (referring to potential impact on regional climate and rainfall patterns, and to potential flooding and environmental effects in upstream states as a result of the canal backing up the water flow of tributary rivers).

135. See *Policies*, *supra* note 13, at 386–88; Krishna, *supra* note 3, at 33. As Waterbury states, Egypt is not a true hegemon because it cannot simply impose its desired solutions, but “it can coax and threaten its neighbors convincingly.” *Cooperation*, *supra* note 101, at 53.

136. J. A. Allan, *Nile Basin Water Management Strategies*, in *THE NILE: SHARING A SCARCE RESOURCE*, *supra* note 13, at 313.

137. For a recent example of allegations of Egyptian malfeasance involving support for the Eritrean independence struggle and for other efforts promoting instability in Ethiopia, see Daniel Kendie, *Egypt and the Hydro-Politics of the Blue Nile River: Part II*, ADDIS TRIB., Aug. 13, 1999.

138. See Joseph W. Dellapenna, *The Nile as a Legal and Political Structure*, in *THE SCARCITY OF WATER: EMERGING LEGAL AND POLICY RESPONSES* 121, 131–32 (Edward Brans et al. eds., 1997); Swain, *supra*

prompted anger among other riparian states and led to complaints that Egyptian hegemonic goals had replaced the nineteenth-century British hegemony, and led to a view of Egypt as an indigenous colonialist.¹³⁹

Despite the recurring problems of drought and poor water distribution that have made Ethiopian famines a source of world concern since the 1980s, massive hydroelectric and irrigation schemes appear to be out of favor with the Ethiopian government. Environmental and developmental concerns, combined with prohibitive costs, have made such projects less attractive. However, greater political stability and a modestly growing economy have allowed Ethiopia to plan two smaller hydroelectric projects and a series of micro-dam projects, largely for irrigation.¹⁴⁰ The micro-dam projects could reduce the flow of the Blue Nile and the Atbara, both of which flow into the Nile proper within Sudan. Creating new agricultural land will be increasingly important for the Ethiopians, as traditional farming in the highlands is adversely affected by environmental destruction, especially soil erosion due largely to deforestation.¹⁴¹

Meanwhile, Egypt has gone ahead with ambitious irrigation plans of its own. Work is said to be underway on the Salaam Canal, designed to carry 12.5 million cubic meters of water per day from Lake Nasser to the northern Sinai in support of a huge resettlement scheme, which will eventually bring some three million new inhabitants to the region.¹⁴² The parallel New Valley Project will pump 4.94 billion cubic meters of water a year from Lake Nasser to irrigate up to 250,000 hectares in new settlement areas in the Western Desert outside the Nile Valley, the traditional home to almost all of Egypt's population.¹⁴³ In his address inaugurating construction of the project, which coincided with the thirty-seventh anniversary of the inauguration of the Aswan High Dam project, President Mubarak referred to the New Valley scheme as a "giant national project," part of a plan to open up Egypt "outside the boundaries of the Nile Valley."¹⁴⁴

There simply is not enough water in the Nile to complete the irrigation plans of both Ethiopia and Egypt, much less to satisfy the ambitions of all the Nile riparians.¹⁴⁵ Waterbury and Whittington suggest that even with

note 2, at 688; Ibrahim, *supra* note 74, at 329.

139. See, e.g., Tadros, *supra* note 3, at 1097-98. The benign view is that this regional hegemony has also caused stability, virtually eliminating the possibility of military confrontation. See Jacobs, *supra* note 106, at 118.

140. *Ethiopian Prime Minister Calls for Changes in Nile Waters Agreement*, AL-HAYAT (London), Apr. 10, 1998 (BBC Summary of World Broadcasts); Waterbury & Whittington, *supra* note 68, at 156; Swain, *supra* note 2, at 692; Marcus, *supra* note 68, at 1.

141. See, e.g., Whittington et al., *supra* note 81, at 167-68.

142. Kendie, *supra* note 137. There is some dispute over whether the Egyptian government has actually begun construction.

143. Waterbury & Whittington, *supra* note 68, at 159; Huband, *supra* note 75; Marcus, *supra* note 68, at 1.

144. Hosni Mubarak, *Inauguration of the New Delta Project*, Cairo Arab Republic of Egypt Radio Network Broadcast, Jan. 9, 1997, FBIS-NES-97-007.

145. Marcus, *supra* note 68, at 1.

zero use by upstream riparians, the Egyptians would have to "find" roughly five billion cubic meters of water a year to meet the requirements of the New Valley Project.¹⁴⁶ Egyptian planners suggest that this water can come from more efficient use of existing supplies, but such projections are naively optimistic. Moreover, Egyptian projections are based on the continuing availability of the portion of Nile flow accorded to Egypt under the 1959 Treaty with Sudan. Such an assumption is untenable, given the rising need and capacity of Ethiopia to exploit its own water resources.¹⁴⁷

Given these social and political realities, combined with the physical limitations noted in Part III, it is no surprise that, until recently, the regime governing water apportionment and use in the Nile Basin has been purely competitive. There exists a myriad of other factors inhibiting cooperation. Aside from concerns over water per se, there is a range of border disputes and political disagreements that have undermined cooperation among Nile riparians. For example, Sudan and Egypt have never agreed on the eastern border north and south of the twenty-second parallel, nor have Sudan and Kenya agreed on the Ilemi Triangle. Kenyan and Ugandan support for the rebel SPLA in southern Sudan has prompted tension, as has Sudanese support for the Lord's Day Army fighting Ugandan authorities in the northern parts of that country. Sudanese assistance to Islamic fundamentalists in Ethiopia has caused the Ethiopian government great concern, with similar issues clouding Egyptian-Sudanese relations.¹⁴⁸ Sudan was implicated in the assassination attempt on Egyptian President Mubarak during his 1995 visit to Ethiopia.¹⁴⁹ In turn, Egypt is said to have fostered regional instability, such as the most recent Ethiopian-Eritrean border conflict, in order to maintain its position of strength among Nile Basin states.¹⁵⁰

Political pressures within the Nile states also discourage cooperative approaches. The regional distrust of Egypt and its hegemonic claims has already been mentioned. But the distrust is mutual. For instance, in one of the weekly opposition newspapers in Cairo, an article appeared in 1998 claiming that the United States and World Bank were about to loan \$2.5 billion to Ethiopia "for the establishment of four giant dams on the Blue Nile . . . thus threatening the flow of water to Egypt and Sudan."¹⁵¹ The article inaccurately reported the Ethiopian plans and the support that might be derived

146. Waterbury & Whittington, *supra* note 68, at 159.

147. *Id.* at 159–60.

148. See Tadros, *supra* note 3, at 1098; Jacobs, *supra* note 106, at 117–78 (discussing interference in the affairs of neighboring states throughout the region).

149. See, e.g., Jonathan Wright, *Egypt Tells Sudan to Learn Lesson of U.N. Vote*, REUTERS, Feb. 1, 1996 (discussing Security Council's demand that Sudan extradite to Egypt the three accused of the assassination attempt).

150. See *Nile River Politics: Who Receives Water?*, Aug. 10, 2000, <http://www.stratfor.com/MEAF/commentary>; *Conflict Spreads in Horn of Africa*, Apr. 21, 1999, <http://www.stratfor.com/services/giu/042199.asp>.

151. Salah'Azzazi, *\$2.5 Billion from America to Ethiopia to Deprive Egypt and Sudan of 85 Percent of Nile Water*, CAIRO AL-ARABI, Mar. 2, 1998, FBIS-NES-98-064.

from external agencies. Finally, at a structural level, it is important to note that, until recently, states along the Nile displayed few integrative activities or interests. Their economies were largely disconnected, with trade patterns related to colonial connections and the desire to link with developed countries of the North, rather than with other poor regional economies. As is obvious from the listing of endemic conflicts in this paragraph, there are no strategic alliances centered on the Nile or its basin.¹⁵²

Finally, a variety of additional reasons for non-cooperative behavior arise in the context of water distribution and use. First, interest in the Nile at a political level is highly disparate, with Egyptian reliance prompting intense strategic interest and all other states manifesting attitudes ranging from modest engagement to indifference.¹⁵³ The disconnection from the debate is so great for some states in the basin that, quite apart from arguments over the binding force of colonial treaties, they simply do not see themselves as strongly implicated in any of the existing Nile agreements.¹⁵⁴ Second, given limited resources and generally scarce technical expertise within water ministries, national water plans tend to be designed in a vacuum, with little provision for basin-wide activities or even for information gathering.¹⁵⁵ Even within riparian states, water issues typically fall within the purview of a range of ministries and agencies, undermining effective planning and cross-border cooperation.¹⁵⁶ Third, until recently, the same resource and expertise problems ensured that many states along the Nile simply did not know what their water needs would be, and few had any clear understanding of available water resources within their countries.¹⁵⁷ Lack of knowledge on the ground also exacerbates latent distrust, especially vis-à-vis the Egyptians, who possess much more extensive technical capacity and can therefore dominate negotiations.¹⁵⁸ Distrust has traditionally extended even to "technical" initiatives designed to foster collaboration on hydrological monitor-

152. *Demands*, *supra* note 87, at 301.

153. See C. Mallat, *Law and the Nile River: Emerging International Rules and the Shari'a*, in THE NILE: SHARING A SCARCE RESOURCE, *supra* note 13, at 365, 366; *Demands*, *supra* note 87, at 301, 309. However, Babatunde is correct in noting that water issues tend to be managed in a centralized fashion throughout the region with little room left for the operation of civil society in discussions of water planning and distribution. Babatunde, *supra* note 5, at 1–2.

154. KLIOT, *supra* note 13, at 90 (arguing that Kenya, Uganda, and Tanzania fall into this category).

155. See J. S. A. Brichirieri-Colombi, Speech at the Nile 2002 Conference (Feb. 26, 1996) (on file with the Harvard International Law Journal). See also KLIOT, *supra* note 13, at 37–39; *Demands*, *supra* note 87, at 307.

156. See, e.g., Leon Ntondo Lumuka Nantole, Zaire Country Paper, Nile 2002 Conference, Kampala, Uganda (Feb. 26–29, 1996) (on file with the Harvard International Law Journal).

157. See Imeru Tamrat, Problems and Prospects for Cooperation in the Nile Basin—Legal and Institutional Perspectives, Nile 2002 Conference (Feb. 26–29, 1996) (on file with the Harvard International Law Journal). *Contra Demands*, *supra* note 87, at 304 (arguing that the "political leaders of the Nile countries . . . have a very sophisticated knowledge" of scientific issues and the rate of water consumption). Allan is probably correct as concerns the Egyptians, and increasingly the Sudanese and Ethiopians, but Tamrat's analysis is applicable to the other riparian state governments.

158. Interview with Aly Shady, Senior Policy Advisor, Canadian International Development Agency, (May 10, 2000; May 17, 2000) (transcripts on file with the Harvard International Law Journal).

ing. Especially in the case of Ethiopia, the need to address a local audience has often prompted confrontational rhetoric, and internal political constraints have limited different riparians' ability to engage in cooperative ventures regarding the Nile.¹⁵⁹ Fourth, the historical pattern of bilateral agreements ignoring third party interests has bred legal confusion and has compounded the distrust among the Nile states.¹⁶⁰

The unsettled and contradictory state of international water law over the last thirty years has also served to exacerbate competitive attitudes along the Nile. The evolution of the legal regime governing shared freshwater is discussed in Part VI, but it is important to note here that the long unresolved tension and continuing coexistence of two seemingly incompatible legal principles, "equitable use" and "no significant harm," have allowed states to make entirely self-interested arguments, often in bad faith.¹⁶¹ Recent changes and improvements in this "legal endowment," changes that begin to address the fundamental conflicts between upstream and downstream states,¹⁶² are one of the reasons for a new, more cooperative spirit in Nile Basin relationships.

V. TOWARD COOPERATION ALONG THE NILE

So far, the story told has the ring of a classical realist account of international relations. It is a story of self-interest, mutual distrust, and unbridled competition; hegemonic accounts of state behavior also play a role. However, there is another, more intriguing, story to be told, a story of nascent regime change and growing cooperation. The transition from one story to another is complex and important even outside the Nile Basin. The narrative casts doubt upon the predictive value of realist IR theory, and supports a role for legal norms in persuading states to alter well established relationships. This Part tells the new story in detail, and then Part VI traces its implications for an understanding of international law and international relations.

159. *Id.*

160. Mallat, *supra* note 153, at 366. See also *infra* Part VI; Statement of Mr. El Rasheed Mohamed-Ahmed (Sudan), U.N. GAOR 6th Comm., 41st Sess., 40th mtg. ¶ 44, U.N. Doc. A/C.6/41/SR.40 (1986) (discussing the International Law Commission's (ILC) work on international watercourses and arguing in favor of continued bilateralism and against the creation of a framework agreement on shared freshwater). A year later, the Tanzanian delegate offered an opposing point of view, emphasizing the need for multilateral legal agreement. See Statement of Mr. Kateka (Tanzania), U.N. GAOR 6th Comm., 42d Sess., 46th mtg. ¶ 83, U.N. Doc. A/C.6/42/SR.46 (1987). Egypt maintained that "[a]ny framework convention must leave intact the validity of existing watercourse agreements," rather than impose a new binding agreement. See Statement of Mr. Soliman (Egypt), U.N. GAOR 6th Comm., 48th Sess., 25th mtg. ¶ 7, U.N. Doc. A/C.6/48/SR.25 (1993).

161. Waterbury & Whittington, *supra* note 68, at 163; Shapland, *supra* note 6, at 307. See also S. McCaffrey, *International Organizations and the Holistic Approach to Water Problems*, 31 NAT. RESOURCES J. 139, 161 (1991) (discussing the self-interested "legal" arguments offered by states in their interpretations of the work of the ILC on international watercourse law).

162. Tamrat, *supra* note 157, at 186; Shapland, *supra* note 6, *passim*; Schwabach, *supra* note 74, *passim* (discussing the inevitable and highly contentious disagreements between upper and lower Nile riparians).

As noted briefly in the introduction, the last few years have witnessed a remarkable shift in the tone and substance of state-to-state relationships along the Nile. From dire predictions of inevitable "water wars" to pronouncements of fraternal bonds and cooperative activity, from unilateralism to multilateral institutional development, the regime governing the waters of the Nile is evolving in surprising ways—that is, surprising if one relies on self-interest and relative power as exclusive causal variables in explaining the behavior of states. The outlines of the new regime are emerging from patterns of interaction that have been fostered both by Nile states and external agents over the last two decades.

A. Overlapping Initiatives

The story of change begins in the early 1980s, with a series of overlapping initiatives.¹⁶³ As an offshoot of the Egypt-Sudan Permanent Joint Technical Commission (PJTC),¹⁶⁴ and based on a 1967 agreement among Egypt, Sudan, Kenya, Tanzania, and Uganda, with support from the United Nations Development Program (UNDP), and the World Meteorological Organization,¹⁶⁵ a series of hydrometeorological studies (the Hydromet Project) was re-launched in the early 1980s. The goal was to provide a baseline set of measurements of water availability and future needs affecting the White Nile in and around lakes Victoria, Kyoga, and Albert.¹⁶⁶ It was hoped that shared information would prompt joint planning, but this desire proved illusory, especially since political disruptions in some basin states ensured that the necessary follow-up activities never took place. For example, in Uganda, the meteorological service came close to collapse during the dark years of Amin and Obote.¹⁶⁷ However, despite the political crises in the region, a treaty was concluded in 1977,¹⁶⁸ to which Uganda acceded in 1981, creating a basin-wide management regime for the Kagera River, which ex-

163. Earlier initiatives did not succeed in fostering significant cooperation, despite modest attempts at coordination in committees such as the East African Nile Waters Coordination Committee. See *East Africa*, *supra* note 104, at 86; EL-ATAWY, *supra* note 73, at 44. The Egypt-Sudan Permanent Joint Technical Commission was set up under the terms of the 1959 Treaty and its 1960 Protocol to observe activities on the Nile and to promote cooperation. 1959 Nile Treaty, *supra* note 117, art. 4, ¶ 1. It was hoped that all Nile riparians might eventually participate, but Ethiopia and Kenya have participated only sporadically. The Commission has no formal authority, especially as to the eight riparians other than Egypt and Sudan, and little cooperative activity has resulted. See, e.g., Tadros, *supra* note 3, at 1098; *Demands*, *supra* note 87, at 307.

164. See *Principles*, *supra* note 110, at 358.

165. See Okidi, *supra* note 110, at 335–36.

166. EL-ATAWY, *supra* note 73, at 50; Caponera, *supra* note 67, at 655; Elhance, *supra* note 68, at 80.

167. See B. Kabanda & P. Kahangire, *Irrigation and Hydro-power Potential and Water Needs in Uganda—an Overview*, in *THE NILE: SHARING A SCARCE RESOURCE*, *supra* note 13, at 217, 221–22.

168. Agreement for the Establishment of the Organization for the Management and Development of the Kagera River Basin (The Rusumo Treaty), Aug. 24, 1977, Rwanda-Burundi-Tanz., 1089 U.N.T.S. 165.

tends the Nile Basin in the south-westerly direction and which drains Burundi, Rwanda, Tanzania, and Uganda.¹⁶⁹

The more ambitious UNDUGU—meaning “brotherhood” in Swahili¹⁷⁰—group was founded at Egypt’s behest in 1983, drawing together all Nile riparians except, again, Ethiopia and Kenya. As has been typical of all but the most recent attempts at furthering basin-wide cooperation, these two states participated only as observers.¹⁷¹ UNDUGU’s unrealistic goal was to foster economic, social, cultural, and technical ties among the Nile riparians, leading to the foundation of a permanent sub-regional economic organization. The group brought together high level political actors, including Ministers of Foreign Affairs, usually annually.¹⁷² From an Egyptian perspective, the group was probably imagined as an exercise in hegemonic influence.¹⁷³ From a Pan-African perspective, UNDUGU was part of the failed drive toward “self-reliance and African inter-dependence.”¹⁷⁴ UNDUGU engaged the support of the UNDP in the late 1980s to undertake fact-finding designed to further the goal of comprehensive joint economic planning, including planning for water resource development.¹⁷⁵ The creation of UNDUGU has not, in and of itself, led to significant concrete interaction among the riparian states, much less to coordinated economic initiatives. However, the call for a plan of action on economic development, including shared water, was to be addressed in other processes during the following decade. Although UNDUGU’s achievements are few, it at least ensured a forum for information sharing. UNDUGU served as an institutional locus for sharing expertise and as a group accustomed to treating the Nile as a whole, not as less than the sum of its national parts.¹⁷⁶

Perhaps in an attempt to circumvent the effects of the perceived political dominance of Egypt in UNDUGU and to broaden the coordinating activities undertaken under the auspices of the Egypt-Sudan PJTC, an intergovernmental technical cooperation committee for the promotion of development and environmental protection on the Nile (TECCONILE) was established in 1992.¹⁷⁷ Even with the strong technical focus, Ethiopia and Kenya

169. Okidi, *supra* note 110, at 322, 338.

170. Ibrahim, *supra* note 74, at 334.

171. *Id.*

172. AHMED, *supra* note 101, at 95–96.

173. Waterbury argues that UNDUGU and other related Egyptian initiatives were part of a strategy (rooted in Egyptian hegemonic aspirations) that sought to create “multi-good bargaining situations” more likely to result in agreement than negotiations purely devoted to water issues. *Cooperation*, *supra* note 101, at 51–52.

174. For a detailed discussion of the activities of the UNDUGU group, see *Principles*, *supra* note 110, at 360–63.

175. See *id.* at 361.

176. See Jacobs, *supra* note 106, at 121–22 (commenting on the Egyptian-Sudanese PJTC and its related activities).

177. See Shady et al., *supra* note 12, at 80 (noting that TECCONILE could be the vehicle for channeling the external support agencies’ support). TECCONILE stands for “Technical Co-operation Committee for the Promotion of the Development and Environmental Protection of the Nile Basin,” an ini-

again refused to join as members because they deemed the framework for the organization to be inadequate since it did not address the fundamental equitable concerns of water apportionment.¹⁷⁸ A perception of Egyptian dominance persisted, which troubled the Ethiopians in particular.¹⁷⁹ It is indeed likely that the Egyptians have viewed such "technical" initiatives as a way of demonstrating their good will and expertise, which might lead to greater influence.

Whatever the motivations of individual states, TECCONILE meetings from 1993 to 1995 did result in the creation of a Nile River Basin Action Plan. All Nile Basin states were involved in the development of this plan,¹⁸⁰ which the Council of Ministers for Water Affairs of all the Nile Basin states formally approved in February 1995.¹⁸¹ It envisioned twenty-two projects, grouped into five categories of activities ("components"), with an estimated cost of \$100 million.¹⁸² Within component "D" on "Regional Cooperation," the Action Plan contemplated "the establishment of a basin-wide, multidisciplinary framework for legal and institutional arrangements" (Project D-3).¹⁸³ However, very little implementation occurred under the Action Plan

initiative agreed to by ministers responsible for water affairs in the Nile Basin countries at a meeting in Kampala, Uganda in December 1992. Its main long-term objectives were to "assist participating countries in the development, conservation, and use of the Nile Basin water resources in an integrated and sustainable manner, through basin-wide cooperation for the benefit of all" and to "assist participating countries in the determination of the equitable entitlement of each riparian country to the use of Nile waters." See TECCONILE, NILE RIVER BASIN ACTION PLAN (1995), at 1 [hereinafter *NRBAP*].

178. Imeru Tamrat, Comments at the Nile 2002 Conference (Feb. 26–28, 1996) (on file with the Harvard International Law Journal). Eritrea and Burundi also failed to participate, but their reasons were not so transparent.

179. Swain, *supra* note 2, at 691. Note, however, that in 1993, Egypt and Ethiopia concluded an agreement on the Framework for General Co-operation. Framework for General Co-operation, *supra* note 7. In Article 2, the two states declared themselves "committed to the consolidation of mutual trust and understanding." In Article 8, they undertook to "endeavor towards a framework for effective cooperation among countries of the Nile Basin for the promotion of common interest in the development of the basin."

180. Fathy El-Gamal, Water Resources Management Strategies and Action Programs in the Nile Basin: The Nile River Basin Action Plan, Nile 2002 Conference 6–9 (Feb. 26–28, 1996) (on file with the Harvard International Law Journal). El-Gamal describes the process, including two workshops, that led to finalization of the Plan.

181. *NRBAP*, *supra* note 177, *Executive Summary* at v (providing a history of the process). Egypt, Rwanda, Sudan, Tanzania, Uganda, and Zaire (now the Congo) participated in TECCONILE as members; Burundi, Eritrea, Ethiopia, and Kenya participated as observers.

182. The five "components" were: A. Integrated Water Resources Planning and Management; B. Capacity Building; C. Training; D. Regional Cooperation; and E. Environmental Protection and Enhancement. *Id.* at vi–viii.

183. *Id.* at vii. Work on Project D-3 was accorded "high priority" (as opposed to "medium" or "low" priority) in the ranking of projects for action and was to be "implemented under direct supervision of the Council of Ministers." *Id.* at 22, 25. As conceived in the Action Plan, the project was to "include a comprehensive study and documentation of processes and institutional frameworks that have been used successfully in other international basins, and principles utilized in other international situations, as well as the Nile Basin." *Id.* at 16. The project also was to "propose alternative institutional frameworks, principles and processes." *Id.* The *NRBAP* observes that to achieve basin-wide cooperation, it "is advisable, in the long term, to have an international agreement on water management. An agreement would assure all countries that development of waters in any particular country would not result in a conflict over water management with other Nile Basin countries." *Id.* at 9.

as originally conceived,¹⁸⁴ in part because of resource constraints, and in part because of continuing competitive behavior among the basin states. The Action Plan was subsequently reviewed and, in 1999, it was superseded by a revised program, the Nile River Basin Strategic Action Program. In the same year, the Nile Basin Initiative (NBI) was launched to replace TEC-CONILE.¹⁸⁵

Before turning to the NBI and the most recent developments, it is worth describing the "Nile 2002 Conferences," a further process designed to promote basin-wide cooperation on shared freshwater.¹⁸⁶ This process, when linked to an evolving normative framework, has played an important role in changing the political climate along the Nile. The first conference was held in 1993 in Aswan, Egypt, and yearly conferences have been held since in various basin states.¹⁸⁷ The conferences have been organized around the theme of comprehensive cooperation, and typically take the form of sessions devoted to individual papers canvassing issues of urgency, followed by the presentation of "country papers" sharing information on the challenges faced by each of the riparians.¹⁸⁸ In addition, time is allotted for open discussion.¹⁸⁹ All basin states have sent participants to the conferences, though for some time Burundi, Eritrea, Ethiopia, and Kenya insisted that they were merely "observers."¹⁹⁰ Within the informal processes of the Nile 2002 conferences, the "status" of participation is irrelevant. One cannot discern any appreciable difference in the forms of engagement of the participants from "member" or "observer" delegations. All sit together, present papers, enter into discussion, and participate in the drafting of joint statements by Nile Basin countries.¹⁹¹ One of the central advantages of the Nile 2002 series is its relative independence from immediate political calculations. In the closing session of the 1996 conference in Kampala, one delegate noted that the process had not been "captured" by governments. The discussions were therefore more "direct and open" than would have been the case if the sessions were formally conceived of as negotiations.¹⁹² It should be noted that

184. But note that work on Project D-3, the "Co-operative Framework," has been ongoing with UNDP funding. NBI Overview, *supra* note 18.

185. See *id.* See also *infra* notes 204–223 and accompanying text.

186. The process had the backing of the Canadian International Development Agency (CIDA), as well as the UNDP and the World Meteorological Organization.

187. Shady et al., *supra* note 12, at 77, 80.

188. *Id.* at 77.

189. *Id.*

190. Swain, *supra* note 2, at 691. See *infra* note 203.

191. Toope was privileged to participate as an academic observer at the Nile 2002 Conference in Kampala, Uganda (Feb. 26–28, 1996).

192. Comments from the Floor, Nile 2002 Conference (Feb. 26–28, 1996) (on file with the Harvard International Law Journal). It may be more accurate to say that the conferences have not been "captured" by Ministries of Foreign Affairs or by Offices of Prime Ministers and Presidents. Although most of the delegates are from government, they are mostly from ministries and agencies devoted expressly to issues of water development and environmental protection. The shared background of most of the delegates goes some way to explaining the progress made in the Nile 2002 Conference series.

discussions at the first and second Nile 2002 Conferences fed into the TEC-CONILE process, helping to structure the Nile River Basin Action Plan.¹⁹³

The Nile 2002 series has also provided a forum for reflection upon the possibilities of sub-regional organization within the Nile Basin. Indeed, sub-regional approaches have been central topics for discussion.¹⁹⁴ Waterbury has suggested that cooperation across the basin would be difficult because of the diversity of interests of the ten riparian states, and because negotiated solutions would produce winners and losers.¹⁹⁵ Although this Article argues below that basin-wide initiatives are now more likely than Waterbury suspected, the idea of sub-regional agreements holds some attraction and need not be contrary to a basin-wide framework. For example, more local arrangements for the White Nile and the Blue Nile could be established within the context of a basin-wide framework. To that end, Egypt, Ethiopia, and Sudan agreed in 1999 to form an East Nile Joint Committee to further cooperative hydroelectric development on four rivers originating in Ethiopia, including the Blue Nile.¹⁹⁶ This initiative is linked to a broader agreement on potential Nile cooperation within the framework of the World Bank-sponsored NBI, discussed below.¹⁹⁷

Although the Nile 2002 series was conceived as a "technical" forum, its discussions assumed a decidedly normative turn. Papers often canvassed the legal status of riparian relationships (including the continued vitality of "colonial treaties"), and issues concerning the proper legal framework for apportionment (equitable utilization versus avoidance of harm) were raised in public debate.¹⁹⁸ The prevalence of normative issues has not always been well received. At the 1996 conference in Kampala, an Egyptian delegate complained early in the sessions that Nile 2002 was supposed to be about technical issues, so why was there so much talk about law, even from non-lawyers? This concern was echoed, on the last day of the Conference, by the Sudanese delegation.¹⁹⁹ Such reactions were predictable, as these discussions were taking place just as the international law framework for apportionment

193. El-Gamal, *supra* note 180, at 6. At the eighth Nile 2002 Conference, experts from nine riparian states (all except Eritrea) called for the implementation of the Nile River Basin Action Plan "to progress towards their goals of equitable sharing of the resources and benefits of the Nile in line with their commitment in 1999 to the achievement of the Nile Basin Initiative." Ghion Hagos, *Experts Want Nile River Basin Action Plan Implemented*, PANA, June 30, 2000, <http://allafrica.com/stories/200006300006.html>. With respect to the Nile Basin Initiative, see *infra* notes 204–223 and accompanying text.

194. Much of the discussion on the floor at the 1996 Conference was devoted to sub-regional themes.

195. See *Cooperation*, *supra* note 101, at 39–40, 49.

196. *Joint Committee Set Up With Sudan, Egypt on Nile Hydroelectric [sic] Projects* (Ethiopian Television broadcast, May 17, 1999), BBC SUMMARY OF WORLD BROADCASTS, May 25, 1999. See also *Minister Says Agreement Reached on Fair Utilization of Nile Waters* (Walra Information Centre, June 23, 1999), BBC SUMMARY OF WORLD BROADCASTS, June 29, 1999; *Ethiopia, Sudan, Egypt to Join Hands in Water Project*, XINHUA NEWS AGENCY, Sept. 16, 1999.

197. See *infra* text accompanying note 212.

198. Assessment is based on observation by Stephen Toope, who attended the conference. See *supra* note 191.

199. Comments of an Egyptian and a Sudanese delegate, Nile 2002 Conference (Feb. 26–28, 1996) (on file with the Harvard International Law Journal).

of shared freshwater was being actively debated in other fora and the stakes were therefore high.²⁰⁰

B. The Nile Basin Initiative

Thus far, the story of change along the Nile would appear to be decidedly lacking in drama. This Article has traced various processes, none of which can be said to have led to a breakthrough from competition to cooperation. Until 1999, one could claim nothing more than a modest improvement in communications and a broader rhetorical commitment to cooperative behavior. Even the Nile 2002 Conferences had few tangible results. There was no joint management, or even coordinated planning and development, of Nile water resources. What may prove to have been a breakthrough was the creation of the NBI in February 1999 and the official launching of its secretariat in Entebbe, Uganda, in September 1999.²⁰¹ The key development is active Ethiopian involvement in the Initiative. Long a careful bystander or active critic of efforts at coordination, Ethiopia's increasing engagement signals real hope for joint water planning and management along the Nile.²⁰² Significantly, unlike any of the previous initiatives, the NBI has engaged all key state actors in the Nile Basin. Moreover, the Initiative is consciously designed to engage parallel technical and political processes, with regular communication between the two.²⁰³ While retaining the confidence-building benefits of informal exchange among technical experts, the engagement of political actors can be significant in two ways. First, it can lend an added sense of confidence to the technical discussions: politicians are aware of the proceedings and at least tacitly support them. Second, it can pave the way for knowledgeable politicians to make decisions in response to the growing body of shared technical understanding.

As noted earlier, the NBI and its Nile River Basin Strategic Action Program have superseded TECCONILE and the Nile Basin Action Plan, respectively. The need for resources with which to ensure implementation of the 1995 Action Plan and to assist in the operation of TECCONILE had led the Nile Basin states to approach various external support agencies, including the World Bank. In 1997 and 1998, pursuant to a proposal by the World Bank and with the support of an international advisory group, the Action

200. See *infra* notes 269–275 and accompanying text.

201. See *Ethiopia, Sudan, Egypt to Join Hands in Water Project*, *supra* note 16. See also NBI Overview, *supra* note 18; *Nile Basin Initiative Launched at Ceremony in Uganda*, *supra* note 17.

202. This trend is confirmed when one links the NBI to the sub-regional East-Nile Joint Committee discussed in *supra* text accompanying note 196. Egypt, Sudan, and Ethiopia are now collaborating under the auspices of the NBI's Eastern Nile Subsidiary Action Program (ENSAP), while Burundi, the Democratic Republic of Congo, Egypt, Kenya, Rwanda, Sudan, Tanzania, and Uganda are engaged through the Nile Equatorial Lakes Region Subsidiary Action Program (NELSAP). See NBI Overview, *supra* note 18.

203. See the timeline of meetings presented in NBI, *History of the Nile Basin Initiative*, <http://www.nilebasin.org/nbihistory.htm>. The authors discussed communication between technical and political levels with participants who wish to remain anonymous.

Plan underwent a review, ultimately leading to the establishment of the NBI and the Strategic Action Program.²⁰⁴ The World Bank, CIDA, and the UNDP are the main donors for the NBI and work as its partner organizations.²⁰⁵

The NBI is intended to promote "sustainable socio-economic development through the equitable utilization of, and benefit from, the common Nile Basin water resources,"²⁰⁶ and hopes have been raised that a comprehensive Nile treaty, replacing the 1959 Egyptian-Sudanese agreement, might emerge. Indeed, the NBI is viewed as a "transitional mechanism" to facilitate basin-wide discourse until a "permanent cooperative framework" is put in place.²⁰⁷ To this end, the NBI's Strategic Action Program comprises a "Shared Vision Program" which is designed to provide a basin-wide framework for action, and "Subsidiary Action Programs" which are to generate joint development projects at the sub-basin level.²⁰⁸ The NBI places greater emphasis on sub-basin initiatives than the 1995 Action Plan, which acknowledged the need for sub-basin activities in specific cases but clearly emphasized a basin-wide process.²⁰⁹ The Strategic Action Program is guided by the belief that "real action on the ground" is key to the success of the NBI and that basin-wide cooperation is best promoted by "taking decisions at the lowest appropriate level."²¹⁰ Notwithstanding the emphasis on subsidiarity, the NBI's Shared Vision Program does encompass, in its revised form, most of the basin-wide components of the earlier plan. The five broad action themes, designed to promote the shared vision, are: cooperative framework; confidence building and stakeholder involvement; socio-economic, environmental, and sectoral analyses; development and investment planning; and applied training.²¹¹

The "cooperative framework" theme of the Shared Vision Program, supported by UNDP, is in fact the continuation of the earlier plan's "Project D-3" on legal and institutional matters.²¹² Until that framework is established,

204. See *id.* See also Christina M. Carroll, *Past and Future Legal Framework of the Nile River Basin*, 12 GEO. INT'L ENVTL. L. REV. 269, 298-99 (1999).

205. See NBI, Nile Basin Initiative Partner Organisations, <http://www.nilebasin.org/nbipartners.htm>. Additional support is provided by the U.N. Food and Agriculture Organization, with specific funding from Italy. *Id.* The Netherlands, Finland, the United Kingdom, Germany, Norway, Sweden, Denmark, and the United States have also pledged support for the NBI. See *Nile Basin Initiative Secretariat Launched at Ceremony in Uganda*, *supra* note 17.

206. This is the "Shared Vision" pursued by the NBI. NBI Overview, *supra* note 18. See also NBI, *Nile Basin Initiative Program*, <http://www.nilebasin.org/nbiprocess.htm>.

207. See NBI Overview, *supra* note 18.

208. *Policy Guidelines for the Nile River Basin Strategic Action Program*, Council of Ministers of Water Affairs of the Nile Basin States, <http://www.nilebasin.org/Documents/TACPolicy.html> [hereinafter *NBI Policy Guidelines*].

209. NRBAP, *supra* note 177, at 9.

210. *NBI Policy Guidelines*, *supra* note 208, Item 3 (The Shared Vision). See also M.B.A. Saad, *The Nile River Basin: A Vision for Development*, in RIVER BASIN MANAGEMENT—PROCEEDINGS OF THE INTERNATIONAL WORKSHOP (THE HAGUE, OCT. 27-29, 1999) 231, 239 (E. Mostert ed., 2000).

211. *NBI Policy Guidelines*, *supra* note 208, Item 5 (Shared Vision Program).

212. *Id.* In the shorter term, the goal of the cooperative framework is to attain a regional framework

sub-basin activities under the NBI are governed by a "common understanding" of the basin states regarding several implementation guidelines. These include guidelines on the need for involvement of all affected parties in the planning of sub-basin initiatives, and on the need to build on "principles of equitable utilization, no significant harm, and cooperation."²¹³ The guidelines also call for "solutions both that have benefits for all involved and distribute benefits, costs, and risks equitably as well as use resources efficiently and protect the environment."²¹⁴

Work by a panel of experts on the highly sensitive issues arising in the context of the framework has been proceeding quietly over the last few years, with little information being publicly available. Nonetheless, there are indications that significant progress is being made. In early August 2000, the water resources ministers from all ten Nile Basin states, including Eritrea as an observer, met in Khartoum, Sudan, to review the panel of experts' final report on the framework.²¹⁵ At the conclusion of the meeting, Osman el Tom, vice-chairman of Sudan's water resources authority, reported "remarkable convergence toward future cooperation." He noted that the panel of experts had reached consensus on many of the framework's parts. Disagreements remained "mainly on the principle of prior notification of planned measures and the state of the existing agreements under the new cooperative framework."²¹⁶

Notwithstanding the unresolved issues in the cooperative framework text, decisive progress was made with respect to a package of cooperative projects in the Nile Basin. In March 2001, the Nile Council of Ministers of Water Affairs endorsed several basin-wide Shared Vision Program projects and several sub-basin projects, the latter to be undertaken within the NBI's Eastern Nile (ENSAP) and Nile Equatorial Lakes (NELSAP) sub-programs.²¹⁷ According to the Ethiopian Water Affairs Minister, this development constitutes a "watershed agreement" and "reflects the new spirit of cooperation

"acceptable to all Basin countries"; in the longer term, the goal is to "pave the way for milestones which would determine net equitable entitlements for each riparian country for the use of the Nile waters." See UNDP, *The Nile River Basin Cooperative Project*, <http://www.undp.org/seed/water/region/nile.htm>.

213. NBI *Policy Guidelines*, *supra* note 208, Item 6 (Subsidiary Action Programs), Guidelines 2, 4.

214. *Id.* Item 6 (Subsidiary Action Programs), Guideline 6.

215. See UNDP, *supra* note 212 (noting that work on the cooperative framework has been ongoing since 1997). See also World Bank Group, *Nile Basin Initiative: Overview*, <http://www.worldbank.org/afr/nilebasin/overview.htm>. See generally *Nile Basin Ministers Discuss Water Development*, *supra* note 19.

216. On the question of the status of the existing agreements, some states appear to envisage the cooperative framework superseding all previous agreements between member states, while others seem to prefer a "harmonisation between the existing agreements" and the new framework. See *Nile Basin Ministers Discuss Water Development*, *supra* note 19.

217. For the membership of ENSAP and NELSAP, see *supra* note 202. The cooperative projects include confidence-building, stakeholder involvement, efficient water use for agriculture and hydropower interconnection, and watershed management. See Press Release, NBI, Nile Basin Ministers of Water Achieve Agreement on Cooperative Projects as Historic Meeting Wraps Up (Mar. 29, 2001), <http://nilebasin.org/pressreleases.htm> [hereinafter *Nile Basin Ministers*]; News Release, Council of Ministers of Water Affairs, http://www.nilebasin.org/news_page.htm. See also *Nile Basin Cooperative Projects Launched*, TOMRIC NEWS AGENCY [DAR ES SALAAM], Apr. 4, 2001, <http://www.allafrica.com/stories>.

between the countries of the Nile."²¹⁸ Building on the agreement reached on the cooperative projects, a new International Consortium for Cooperation on the Nile (ICCON) met for the first time in June 2001. ICCON is led by the Nile Council of Ministers and is intended to be "a forum for dialogue on the options and opportunities for management and development of the Nile Basin."²¹⁹ It brings together "the riparian countries of the Nile, the international donor community, public and private lenders, as well as other interested parties such as civil society, professional organizations, and NGOs" to work in support of the NBI.²²⁰ A consultative group of interested donors, a sub-group of ICCON organized by the World Bank at the request of the Nile Council of Ministers, was also launched.²²¹ The consultative group approved an initial grant of \$140 million, while further financial assistance for the NBI's Shared Vision Program in the amount of \$3 billion is contemplated.²²² Expectations run high about this latest step in the development of the NBI. Participants in the June 2001 meeting, while mindful of the instability in the region, expressed the hope that the NBI might show how shared waters can become a catalyst for cooperation, rather than conflict.²²³

C. Toward Cooperation: Non-Legal Factors

The obvious question is: what prompted this promising set of developments, particularly the significant change of attitude on the part of previously reluctant participants, such as Ethiopia? Various explanations can be offered, not singular answers, but rather a constellation of influences promoting changing patterns of behavior. The interest of this Article is in demonstrating the distinctive explanatory force of law, without failing to acknowledge the importance of other factors with which legal norms co-exist and interact. Therefore, to set the context for the discussion of law's influence in the next Part, this Part now canvasses other factors prompting movement toward a more cooperative Nile Basin regime. To reiterate, these factors do not suggest the inevitability of cooperation but merely a current trend in that direction. Some of the factors tending toward competition²²⁴ persist and could still derail cooperative efforts.

First, the status quo on Nile water use is recognized widely as unsustainable, largely because of population growth and growing irrigation.²²⁵ In the

218. *Nile Basin Ministers*, *supra* note 217.

219. See NBI, *supra* note 20.

220. See NBI, *Strategic Action Program Overview Document—Chapter 2—ICCON*, http://www.nilebasin.org/iccon_overview.htm [hereinafter ICCON].

221. See NBI, *supra* note 20.

222. See *id.*; *Donors Pledge US \$140 Million for Nile Basin Projects*, U.N. REGIONAL INFORMATION NETWORK, June 29, 2001, <http://www.allafrica.com/stories/printable/200107010106.html>; Chris Mburu, *West Pledges \$140 Million to Kick Off Nile Basin Projects*, THE EAST AFRICAN (Nairobi), July 23, 2001, <http://www.allafrica.com/stories/printable/200107270015.html>.

223. See NBI, *supra* note 20.

224. *Supra* Part IV.

225. See, e.g., Whittington et al., *supra* note 81, at 167–68 (emphasizing population growth and in-

words of Aly Shady, a Nile expert and senior policy advisor to CIDA, "[m]ore people will die very soon if [the basin states] don't start to cooperate. The water those states receive is less than they need to live on, and this pattern has been so since the 1950s."²²⁶ This recognition has prompted increasing political pressures in countries such as Ethiopia, Sudan, and Uganda for a comprehensive regime to regulate the Nile.²²⁷ Also, Ethiopia's relative political stability and economic strength have led to a realization that more substantial water use by that state is inevitable, because economic growth is more likely and because effective planning can now be undertaken. Barring an Egyptian invasion of Ethiopia, which is highly unlikely,²²⁸ the Egyptian water situation will deteriorate; and the longer the Nile Basin countries lack a new water sharing agreement, the weaker Egypt's bargaining position will become.²²⁹ Waterbury and Whittington argue that "of all the riparian states, Egypt has the most to gain from the establishment of a basin-wide framework for water resources development. It can ill afford a future in which upstream riparians take unilateral action with respect to water development projects."²³⁰ Egypt's longstanding policy of import substitution for food reveals a recognition of this reality, although its commitment to mega-projects such as the New Valley scheme flies in the face of real resource limitations, which are only likely to grow more severe.²³¹

A third set of reasons prompting cooperative impulses relates to the fact that not all action on the Nile creates winners and losers. The plethora of studies undertaken over the last twenty-five years has revealed significant points of overlapping interest. Some developments, particularly at the technical level, could provide shared benefits. The most obvious is action to protect water quality. Although prevalent water pollution is only a factor in Egypt thus far,²³² specific problems are more widespread. For example, the uncontrolled infestation of water hyacinth in upstream states, such as Uganda, could have significant downstream consequences. Egypt, therefore, has been active in supporting pollution control efforts across the basin.²³³ A less obvious, but even more important, example of potential shared benefits is hydroelectric development. Ethiopia has the potential to produce far more hydroelectric power than it needs, and Egypt could benefit markedly from

creasing demand for irrigation in Egypt, Sudan, and Ethiopia as factors promoting a new Nile agreement).

226. Huband, *supra* note 75, at 3.

227. See Marcus, *supra* note 68, at 1.

228: Egypt's armed forces are probably not strong enough to undertake such an endeavor, and Egypt is probably not politically and economically independent enough to withstand contrary pressure from the United States and other funders of the existing regime. See *supra* note 6 and accompanying text.

229. Marcus, *supra* note 68, at 1.

230. Waterbury & Whittington, *supra* note 68, at 161.

231. See *supra* notes 76–80 and accompanying text (explaining the increasing limitations on Egypt's water resources).

232. See *supra* text accompanying notes 81–85.

233. See, e.g., *Egypt Appreciates Cooperation with Nile Countries*, XINHUA ENGLISH NEWSWIRE, Mar. 22, 1999.

hydropower production in its neighboring state.²³⁴ A final example of technical issues prompting cooperation is the problem of evaporation from storage reservoirs.²³⁵ Lake Nasser has one of the highest rates of evaporation loss of any reservoir in the world; by moving storage upstream into Uganda and Ethiopia, water loss could be cut from 12% to 3%, thus benefiting all riparians.²³⁶

In light of these assessments, a particularly important component of the NBI's approach, expressed in the "development and investment" theme of its shared vision program, is the search for win-win solutions.²³⁷ The list of cooperative projects approved by the Council of Ministers and endorsed by ICCON's donor group illustrates that this approach will involve a basket of activities extending beyond water issues to include other areas of interest, including regional power generation, trade, and transportation infrastructure.²³⁸ Because the Nile Basin states have virtually no economic ties among themselves,²³⁹ a broader basket of cooperative activities would likely generate social and economic benefits for Nile riparians that far exceed the benefits of cooperation on water alone.

A fourth factor promoting regime change is the active engagement of multilateral and bilateral donors. Although it has been argued that "induced cooperation" is inherently unstable,²⁴⁰ the outcome may depend on the nature of the inducements. In some circumstances, external support (financial, technical, and moral) lends stability to a process of change that is otherwise desired or at least recognized as necessary by the participants.²⁴¹ Indeed, in

234. Abate, *supra* note 96, at 229–31.

235. See, e.g., M. Hulme, *Global Climate Change and the Nile Basin*, in *THE NILE: SHARING A SCARCE RESOURCE*, *supra* note 13, 139, 159 (noting that climate change may increase evapotranspiration).

236. See Kendie, *supra* note 137 (noting that cooperation in reducing evaporation loss would benefit Egypt, Ethiopia, and Sudan).

237. *NBI Policy Guidelines*, *supra* note 208, § 5.

238. See NBI Overview, *supra* note 18; ICCON, *supra* note 220.

239. See *supra* text accompanying note 152 (noting that there have been virtually no economic ties between the Nile Basin states). See also Rafik Hirji & David Grey, *Managing International Waters in Africa: Process and Progress*, in *INTERNATIONAL WATERCOURSES: ENHANCING COOPERATION AND MANAGING CONFLICT—PROCEEDINGS OF A WORLD BANK SEMINAR*, 77, 90, 98 (Salman M. A. Salman & Laurence Boisson de Chazournes eds., 1998) (noting that the identification of opportunities for mutual benefits is a central part of the World Bank's strategy for promoting cooperation in the management of shared waters).

240. See John Waterbury, Remarks at the Nile 2002 Conference in Kampala, Uganda (Feb. 26–28, 1996) (notes on file with the Harvard International Law Journal). Waterbury has long argued that the role of the international community in promoting new, more cooperative, agreements on the Nile is "rather modest." Whittington et al., *supra* note 81, at 176. For a somewhat more positive assessment of the role of third parties, though one based upon negative conditionalities rather than inducements, see *Cooperation*, *supra* note 101, at 44. What is ultimately required is a recognition on the part of riparian states that a new approach is simply necessary. However, there is also a role for external actors in helping to foster that recognition through processes of mutual reflection and learning.

241. See Shlomi Dinar, *Negotiations and International Relations: A Framework for Hydropolitics*, 5 *INT'L NEGOTIATION* 375, 396 (2000) (noting that external actors can play a mediating role and can help shape or even change "the perceptions and behaviors of the concerned parties" by "facilitating a cognitive change among the parties by creating a problem solving atmosphere and facilitating a partnership atmosphere rather than an adversarial atmosphere").

the case of the Nile, the World Bank and UNDP were catalysts in moving the interaction of the basin states from mere exchanges of views toward structured discourse with the capacity to produce plans of action.²⁴² This pattern serves as an instructive example of how external actors may promote cooperative norms and provide support for initiatives recognizing such norms.²⁴³ Part of that support may lie in financial incentives, as is certainly the case with the NBI. If the inducements are purely coercive, however, and are not related to internal shifts of identity and interest, it is likely that the political situation will degenerate. There is no evidence that external actors are forcing change in the Nile regime. They are carefully allowing the riparians to make independent decisions, as demonstrated by the long and patiently executed processes leading to the creation of the Nile Basin Action Plan, the NBI, and the ongoing development of a cooperative framework, discussed above.²⁴⁴ Externally funded processes, such as Nile 2002 and the NBI, have promoted learning among governmental representatives. The learning relates to three distinct, but interrelated, aspects of the Nile situation: (1) recognition of increasing resource limitations caused by population growth, environmental degradation, and the need to share water more widely; (2) exploration of various modalities for cooperation that are not susceptible to hegemonic control; and (3) understanding the changing normative framework that both renders past positions untenable and promotes

242. See Ariel Dinar & Senai Alemu, *The Process of Negotiation Over International Water Disputes: The Case of the Nile Basin*, 5 INT'L NEGOTIATION 331, 353–54 (2000). They conclude that the Nile 2002 process, while building consensus on the desirability of regional cooperation, did not show a trajectory of progress toward actual agreement on what Dinar and Alemu identified as the three key negotiation issues: regional cooperation, out-of-basin transfers, and water allocation. *Id.* at 353. However, they note in the final paragraph of their article that the introduction of the World Bank and other external actors represents a significant change in the process, which may require them to extend their analysis. *Id.* at 354. Note also that the World Bank's approach to transboundary water issues is designed explicitly to move riparian actors from dialogue to action. See Hirji & Grey, *supra* note 239, at 97–98.

243. See Dinar, *supra* note 241, at 397 (observing, in pointing to the role of the UNDP in the Mekong River negotiations, that external actors can be “more than just a resource that encourages states to act consistently with the norms but rather the force behind the transformation of interests and identities”).

244. It does seem that some donors are putting basic cooperative conditions on any potential support for individual projects within the framework of the Action Plan. See Huband, *supra* note 75, at 58. Forms of induced cooperation long have been in place for international financial institution funding of water projects. For example, the World Bank's Operational Policy 7.50 (OP 7.50) for “Projects on International Waterways” provides that “where differences remain unresolved between the state proposing the project (beneficiary state) and the other riparians, prior to financing the project the Bank normally urges the beneficiary state to offer to negotiate in good faith with the other riparians to reach appropriate agreements or arrangements.” 2 WORLD BANK, OPERATIONAL MANUAL § 7.50, Operational Policy ¶ 3 (June 2001), <http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/OPolw/5F511C57E7F3A3DD8525672C007D07A2?OpenDocument>. OP 7.50 requires potential borrowers, whether upper or lower riparians, “formally to notify the other riparians of the proposed [sic] project and its Project Details.” *Id.* ¶ 4. Should “other riparians raise objections to the proposed project, the Bank in appropriate cases may appoint one or more independent experts to examine the issues” *Id.* ¶ 6. Objections do not necessarily block the execution of a project. “[S]hould the Bank decide to proceed with the project despite the objections of the other riparians, the Bank informs them of its decision.” *Id.* For a detailed discussion of World Bank policies on lending for water development projects, see R. Krishna, *International Watercourses: World Bank Experience and Policy*, in WATER IN THE MIDDLE EAST: LEGAL, POLITICAL AND COMMERCIAL IMPLICATIONS, *supra* note 6, at 29.

positions that are more reflective of the basin states' collective concerns. It is the last of these elements of learning that the next Part explores in some detail.

VI. THE ROLE OF LEGAL NORMS

As the preceding Parts have illustrated, a spectrum of non-legal factors has promoted both cooperation and competition over Nile waters. The discussion now turns to an assessment of legal factors that have helped to construct Nile Basin competition and, more recently, a shift toward cooperation. This Article opened with an observation that international law's actual or potential contributions to promoting cooperation in the Nile Basin tend to be seen as limited at best. Specifically, the treaties that do apply to the Nile are perceived as having neither addressed water problems in the basin nor defused the potential for conflict.²⁴⁵ Further, the United Nations Watercourses Convention,²⁴⁶ adopted in 1997 to provide a global normative framework for shared freshwater, is viewed by many observers as unsuited to resolving the issues that arise in the Nile Basin.²⁴⁷ Finally, while policy-makers in the region have been contemplating the development of a basin-wide legal framework, its role tends to be seen largely as one of formalizing pre-existing agreements and enshrining states' entitlements.²⁴⁸ This Part addresses each of these assessments, reviewing the effects of the historic Nile treaties, of recent shifts in the framework of international water law, and of various informal processes that have served to nurture the normative framework pertaining to the Nile Basin. Legal norms have been influential in molding the evolving Nile Basin regime, but the influence until recently has been such that conflictual rather than cooperative behavior has been promoted. Within the last decade, legal norms have been recast and the contemporary pattern seems more oriented to the promotion of cooperation. The argument, drawing upon the interactional understanding of law outlined earlier in this Article, posits that law's influence derives from three interrelated characteristics. First, like all norms, law has the power to shape the individual and collective identities of states. Second, it both enables and constrains international discourse by establishing what counts as persuasive argument or rhetoric. Third, its inherent and specific form of legitimacy

245. See Carroll, *supra* note 204, at 281–82; Valentina Okaru-Bisant, *Institutional and Legal Frameworks for Preventing and Resolving Disputes Concerning the Development and Management of Africa's Shared River Basins*, 9 COLO. J. INT'L ENVTL. L. & POL'Y 331, 349 (1998); Tadros, *supra* note 3, at 1094–1101; Kukk & Deese, *supra* note 6, at 42–46.

246. Watercourses Convention, *supra* note 31.

247. See, e.g., Carroll, *supra* note 204, at 286–91; Okaru-Bisant, *supra* note 245, at 353. See Joseph W. Dellapenna, *The Customary International Law of Internationally Shared Freshwaters*, in SHARED WATER SYSTEMS AND TRANSBOUNDARY ISSUES WITH SPECIAL EMPHASIS ON THE IBERIAN PENINSULA 79, 127 (2000) [hereinafter SHARED WATER SYSTEMS] (observing that the "[c]onvention is hardly the definitive word on the problem that one might hope to see available to those who must cope with the looming global water crisis").

248. Interview with Shady, *supra* note 158. See also Carroll, *supra* note 204, at 300.

enhances the persuasiveness of legal conclusions. The following Section on historic treaties sets the stage for the examination of these characteristics by discussing all three in detail. To avoid repetition, the balance of this Part simply highlights the relevance of the three characteristics at various points in the discussion of the role of international water law and of the different informal processes in the region.

A. *The Effect of the Historic Treaties*

The effect of the historic treaties is first studied by turning to the capacity of norms to shape identity. Wendt notes that norms and other intersubjective structures have the capacity either to "inhibit or facilitate the emergence of dynamics of collective identity formation."²⁴⁹ Wendt goes on to argue that:

[C]onflicts are also intersubjective phenomena, partly in virtue or [*sic*] rules shared by the parties . . . but especially in virtue of shared *perceptions* of issues and threat The greater the degree of conflict in a system, the more the states will fear each other and defend egoistic identities by engaging in relative gains thinking and resisting the factors that might undermine it.²⁵⁰

Drawing on cognitive psychology, other constructivists suggest that, even absent objective conflict and competition, language and the categories it employs can promote the formation of distinct identities. According to Kowert, "even when no obvious grounds for categorizing exist, people will invent them In other words, one need do little more than divide people into groups for distinct identities to begin to emerge."²⁵¹ In this vein, to the extent that norms articulate "categories," they can contribute to the formation or hardening of separate, competitive identities. By the same token, norms can promote the construction of collective identities and collective definitions of interests by framing processes that foster mutual understanding. Through interaction, actors can learn "to see themselves as others do," and through cooperation, they can gradually change their beliefs about themselves and "internalize" their new, collective identity.²⁵² According to Wendt, the potential for collective identity formation increases with growing interdependence.²⁵³ A rise in interdependence can result either from in-

249. Wendt, *supra* note 34, at 389. See also Roderick A. Macdonald, *The Design of Constitutions to Accommodate Linguistic, Cultural and Ethnic Diversity*, in DUAL IMAGES: MULTICULTURALISM ON THE TWO SIDES OF THE ATLANTIC 2, 52, 55–56 (Kalman Kulcsar & Denis Szabo eds., 1996).

250. Wendt, *supra* note 34, at 389.

251. Paul Kowert, *Agent Versus Structure in the Construction of National Identity*, in INTERNATIONAL RELATIONS IN A CONSTRUCTED WORLD, *supra* note 43, at 101, 106. See also H. PATRICK GLENN, LEGAL TRADITIONS OF THE WORLD: SUSTAINABLE DIVERSITY IN LAW 31 (2000).

252. Wendt, *supra* note 34, at 390.

253. Wendt argues that rising interdependence weakens the rationale for the maintenance of egoistic identities and increases incentives to identify with others. *Id.* at 389–90.

creased "dynamic density" of interactions or from the emergence of a "common Other," such as a common ecological threat.²⁵⁴ It is important to emphasize, however, that the formation of collective identities is not inevitable. Even where collective identities have emerged, actors will continue to be motivated by egoistic loyalties.²⁵⁵ Moreover, actors' social identities are typically multiple,²⁵⁶ varying "by issue, time, and place, and by whether they are bilateral, regional, or global."²⁵⁷

Seen from this standpoint, the historic treaties regarding the Nile display a variety of features that limit their ability to foster cooperation in the basin. The discussion in Part IV confirms the prevailing view that these treaties have not addressed the water problems in the region and are ill-suited to guide future relations among basin states. This conclusion is not surprising, given the strategic concern that prompted past treaty-making with respect to the Nile: securing control over or access to its waters. The argument, however, goes further: The various treaties have served not only to entrench the competitive attitudes described above, but, more fundamentally, have reinforced, even encouraged, separate and competitive identities among the Nile Basin states.

A first salient feature of the existing treaty-based law is the pattern of bilateral treaty-making. This pattern has undercut the emergence of basin-wide shared understandings and the evolution of a collective identity of the riparian states as basin states. This effect is due in part to the fact that bilateral treaty-making did not provide opportunities for basin-wide interaction and trust-building. Second, the treaty terms, focused as they were upon allocation of states' shares in Nile waters, actually served to foster the distinct and egoistic identities of the Nile states. Essentially, the various treaties could be said to have established different "categories," to use Kowert's term, of Nile states and their interests. This classification certainly applies to the relations between those states that had concluded agreements and those that remained excluded. Since the treaty terms ultimately served to articulate separate or even competing interests, it would seem to be equally true for the relations between treaty parties. This reading applies with particular force to the 1959 agreement between Egypt and Sudan, which sought to enshrine acquired rights of the parties. Third, the lack of provision for adaptation of the various Nile treaties' terms to changing circumstances forestalled opportunities for the transformation of the shared competitive understandings of the parties. Similarly, the very limited procedural frameworks,

254. *Id.*

255. *Id.* at 386. Wendt stresses that the presence of a collective identity does not mean that "the motivational force of egoistic identities among states can be eliminated." *Id.* Rather, "actors normally fall between the extremes, motivated by both egoistic and solidaristic loyalties." *Id.* at 387.

256. *Id.* See also MICHAEL WALZER, SPHERES OF JUSTICE (1983); MICHAEL J. SANDEL, LIBERALISM AND THE LIMITS OF JUSTICE (2d ed. 1998) (on the implications of multiple identities).

257. Wendt, *supra* note 34, at 388.

such as technical cooperation committees, established by these treaties provided little opportunity for fostering mutual learning and understanding.

Similar to law's influence on identity formation, law's control over what counts as persuasive argument has also played out in essentially negative terms within the Nile Basin. The legal positions of various Nile riparians concerning international water law have echoed the conflictual patterns just described. The bilateral treaties have permitted the adoption of legal rhetoric that is entirely self-serving, fostering competition rather than cooperation. The central Egyptian claim to its current Nile water draw has been based upon reliance and historical usage. For generations, the Egyptian government has stressed in various intergovernmental fora that states are entitled "to the quantities of water which they customarily took from that watercourse" and that the "extent of their dependence on the watercourse" should be the critical factor in apportioning draws among riparian states.²⁵⁸ A related argument is that the "sunk costs" already expended by Egypt in harnessing the Nile accord it a veritable "property right to the resource."²⁵⁹ To bolster these arguments, Egypt has continued to build new projects, despite the objections of neighboring states, to create "facts on the ground" that will make it harder to limit Egyptian access later because of its heavy reliance on the resource.²⁶⁰ These claims are categorically rejected by all other Nile riparians,²⁶¹ with the exception of Sudan, linked as it is to Egypt in the symbiotic (if unequal) relationship defined by the terms of the 1959 bilateral treaty. A key provision of the 1959 agreement calls upon the two parties to adopt a common negotiating position vis-à-vis all other Nile Basin states.²⁶² As a downstream state like Egypt, Sudan has itself embraced claims of historical use and reliance to resist the limitation of its access that might result from water projects in Ethiopia.²⁶³

The failure of the historic treaties to foster cooperation is further explained by their lack of legitimacy, the third characteristic of persuasive law. Legal legitimacy depends upon congruence with underlying social practice and internal characteristics of fair process. Obviously, the mere fact that all of the treaties are bilateral, and in no way coordinated, means that they can-

258. U.N. GAOR 6th Comm., 38th Sess., 48th mtg. ¶ 1, U.N. Doc. A/C.6/58/SR.48 (1983) (statement of Mr. Ramadan of Egypt, discussing the ILC's work on international watercourses). See also U.N. GAOR 6th Comm., 41st Sess., 34th mtg. ¶ 26, U.N. Doc. A/C.6/41/SR.34 (1986) (statement of Mr. El-Araby of Egypt, discussing the ILC's work on international watercourses).

259. Waterbury & Whittington, *supra* note 68, at 156.

260. *Id.*

261. See, e.g., U.N. GAOR 6th Comm., 48th Sess., 28th mtg. ¶ 40, U.N. Doc. A/C.6/48/SR.28 (1993) (statement of Mr. Nega of Ethiopia, articulating the Ethiopian position, and arguing for the preeminence of "the sovereign right . . . to optimal utilization" of water within the territorial jurisdiction of a state).

262. 1959 Nile Treaty, *supra* note 117, art. 5.

263. See *Sudan Plans to Build Three New Hydroelectric Dams across the Nile*, AFRICA NEWS SERVICE, INC., Sept. 4, 1998 (quoting the Sudanese Irrigation and Water Resources Minister, Sharif al-Tuhami, as saying "Sudan, especially north of Khartoum, and Egypt have built all their civilization and agriculture on the Nile for 7,000 years or more, so these people have priority.").

not legitimately be seen to govern all of the Nile waters. Moreover, an assessment of legitimacy within the framework of interactional international law confirms this conclusion and points to other delegitimizing factors affecting the Nile Basin regime. For example, the Egyptian-Sudan Treaty of 1959 asks the entirely unreasonable by purporting to divide all of the flow of the Nile between only two of the ten riparians. Also, because it contained no provision for reconsideration of the water allocation, at some point in time, the Treaty terms would come to ask the impossible, for the flow cannot match the assigned quotas. Furthermore, the regulation of a shared resource crossing many boundaries, by a series of bilateral treaties, undercuts the notion of transparency, because there is no framework for multilateral information sharing. Even more pointedly, actors with clear interests in decisions on activities that affect Nile waters are simply excluded from the regime. For generations, claims have been made that the colonial era treaties are not binding upon riparian states. These claims are also rooted in legitimacy concerns. Inevitably, a treaty negotiated by a colonial power has trouble meeting the test of social congruence because the "real" parties are not present at the negotiations. To the extent that any "shared understandings" evolved, they are not shared by post colonial governments, let alone by the citizenry of newly emerging states.

B. The Effect of International Water Law

The framework of international water law has reinforced separate and competitive identities among Nile Basin states. It has also served to reinforce self-interested, and ultimately unconvincing, legal arguments.²⁶⁴ Until recently, the unresolved relationship between two core principles of international water law, "equitable utilization" and "no significant harm," has allowed states to maintain irreconcilable positions. In brief terms, the basic approach of international water law has been rooted in these core rules and in the underlying idea of mutual limitation of sovereign rights. Under the principle of equitable utilization, riparian states are entitled to use international watercourses in an "equitable and reasonable" manner.²⁶⁵ What is reasonable and equitable must be determined in each individual case and depends upon various factors, none of which has inherent priority. These factors range from the geography, hydrology, and climate of the basin, to economic, social, and demographic factors, to existing uses or availability of alternative resources.²⁶⁶ The mutual limitation approach also dictates the rule that a state's right to use its territory is limited by the duty not to cause significant harm to another state.²⁶⁷ This rule not only is part of interna-

264. See *Ecosystem Law*, *supra* note 6, at 53-54. See also *Regime Building*, *supra* note 22, at 40-41.

265. Watercourses Convention, *supra* note 31, art. V ¶ 1.

266. *Id.* art. VI.

267. *Id.* art. VII.

tional water law but also constitutes a cornerstone of international environmental law.²⁶⁸

Although specific geographical, political, and economic contexts no doubt shape legal discourse, the equitable utilization principle is typically advanced by upper riparians, such as Ethiopia, looking to alter or increase the uses of an international watercourse. Lower riparians, such as Egypt, have tended to argue that the right to equitable utilization finds its limitation in the duty not to cause significant transboundary harm.²⁶⁹ Upper riparians, in turn, countered that this argument would amount to a system of prior appropriation and effectively preclude their own development. Therefore, the argument goes, it is the principle of equitable utilization that ultimately takes priority, with downstream harm being merely one factor to be considered in the determination of what is equitable and reasonable.²⁷⁰

This Part will not add to the long-standing debate on the two principles and their relationship.²⁷¹ Nevertheless, it is useful to note that questions regarding both the content of each principle and their relationship vexed the International Law Commission (ILC) throughout more than two decades of work on the law of non-navigational uses of international watercourses.²⁷² The same questions, and the familiar, incompatible, legal positions advanced by various states also dominated the work of the U.N. General Assembly's Sixth Committee on the finalization of a global convention on the law of non-navigational uses of international watercourses. The typical upper and lower riparian positions regarding the equitable utilization and no harm principles found expression in the interventions of the Nile states. For ex-

268. See *Declaration on the Human Environment*, U.N. Conference on the Human Environment, 17th mtg. at Principle 21, U.N. Doc. A/CONF.48/14 (1972). See also *Rio Declaration on Environment and Development*, U.N. Conference on Environment and Development, Agenda Item 9 at Principle 2, U.N. Doc.A/CONF.151/5/Rev. 1 (1992).

269. See, e.g., Schwabach, *supra* note 74, at 260–64. It has also been argued that environmental concerns deserve special consideration and that significant environmental harm should not be justifiable on the grounds of equitable utilization. See, e.g., Günther Handl, *The International Law Commission's Draft Articles on the Law of International Watercourses (General Principles and Planned Measures): Progressive Development or Retrogressive Development of International Law?*, 3 COLO. J. INT'L ENVTL. L. & POL'Y 123, 131–32 (1992).

270. For a summary of the various opinions, see *Ecosystem Law*, *supra* note 6, at 61–63.

271. See, e.g., Charles Bourne, *The International Law Commission's Draft Articles on the Law of Non-Navigational Uses of International Watercourses: Principles and Planned Measures*, 3 COLO. J. INT'L ENVTL. L. & POL'Y 65 (1992); Handl, *supra* note 269. For recent reviews, see Ximena Fuentes, *Sustainable Development and the Equitable Utilization of International Watercourses*, 69 BRIT. Y.B. INT'L L. 119 (1998); Delapenna, *supra* note 108.

272. The ILC was assigned the task of "progressive development and codification" of the law of international watercourses by the U.N. General Assembly in 1970. See G.A. Res. 2669, U.N. GAOR, 25th Sess., U.N. Doc. A/RES/2669 (1971). The Commission's work concluded with the submission, in 1994, of the final version of the Draft Articles on the Law of the Non-Navigational Uses of International Watercourses to the U.N. General Assembly. *Report of the International Law Commission on the Work of Its Forty-Sixth Session*, U.N. GAOR, 49th Sess., Supp. No. 10, *passim*, U.N. Doc.A/C.49/10 (1994). For a review of the course of the debate on the two principles, see André Nollkaemper, *The Contribution of the International Law Commission to International Water Law: Does it Reverse the Flight from Substance?*, 27 NETH. Y.B. INT'L L. 39, 49–60 (1996).

ample, Ethiopia insisted that according primacy to the no harm rule would render meaningless the right to equitable and reasonable utilization and would disrupt the balance of the regime.²⁷³ Rwanda similarly disapproved of primacy being accorded to the no harm rule.²⁷⁴ By contrast, Egypt expressed reservations about "making the two principles equivalent" and noted that the no harm rule, was "the cornerstone of any legal regime on international watercourses."²⁷⁵

The United Nations Watercourses Convention was adopted in 1997. It is important for the purposes of this Article not because it takes the form of a treaty, but because it includes the latest attempt to grapple with the relationship between the two principles.²⁷⁶ In any event, it is not yet in force. The provisions on the equitable utilization (Articles 5, 6) and no harm (Article 7) rules, inevitably, were a delicate compromise. While Article 7(1) does require states, in utilizing an international watercourse in their territories, "to prevent the causing of significant harm to other watercourse States," this duty is merely one of due diligence.²⁷⁷ Further, Article 7(2) suggests that, where significant harm is caused by diligent conduct, it is lawful so long as it results from activities that remain within a state's right to reasonable and equitable use under Article 5. So, in the vast majority of cases, issues of significant harm will ultimately be resolved through a balancing of interests under the equitable utilization rules. This result, in turn, is tempered by a requirement that the state causing the harm consult with the affected state "to eliminate or mitigate such harm, and where appropriate, discuss the question of compensation."²⁷⁸

273. See U.N. GAOR, 6th Comm., 51st Sess., 16th mtg. ¶ 37, U.N. Doc. A/C.6/51/SR.16 (1996). In the General Assembly, Ethiopia later abstained from voting on the resolution to adopt the draft convention stating that it "falls short of achieving the required balance ... in safeguarding the interests of upper riparian States." It noted that, *inter alia*, the provision on the no harm rule "put an onerous burden on upper riparian States." U.N. GAOR, 51st Sess., 99th plen. mtg. at 9, U.N. Doc. A/51/PV.99 (1997).

274. See U.N. GAOR, 6th Comm., 51st Sess., 62nd mtg. ¶ 28, U.N. Doc. A/C.6/51/SR.62 (1997). Two other states in the upper Nile Basin approved of the draft provisions on equitable utilization. See U.N. GAOR, 6th Comm., 51st Sess., 15th mtg. ¶ 39, U.N. Doc. A/C.6/51/SR.15 (1996) (comments for Kenya); U.N. GAOR, 6th Comm., 51st Sess., 15th mtg. ¶ 51, U.N. Doc. A/C.6/51/SR.15 (1996) (comments for Tanzania). Rwanda subsequently abstained from a vote on the no harm provision because it did not approve of the provision's relationship with the equitable utilization rules. See U.N. GAOR, 6th Comm., 51st Sess., 62nd mtg. ¶ 28, U.N. Doc. A/C.6/51/SR.62 (1997). Tanzania abstained from voting on the final text because it believed the Convention did not "represent a balance of interests between riparian States insofar as the equitable use of watercourses was concerned." See U.N. GAOR, 6th Comm., 51st Sess., 62nd mtg. ¶ 40, U.N. Doc. A/C.6/51/SR.62/Add.1 (1997).

275. U.N. GAOR, 6th Comm., 51st Sess., 62nd mtg. ¶ 10, U.N. Doc. A/C.6/51/SR.62/Add.1 (1997). For these reasons, among others, Egypt abstained from voting on the resolution to adopt the draft convention. *Id.*

276. Watercourses Convention, *supra* note 31, *passim*.

277. The Watercourses Convention requires states to "take all appropriate measures." Watercourses Convention, *supra* note 31, art. 7(1).

278. Article 7(2) of the Watercourses Convention, *supra* note 31, reads in full:

Where significant harm is nevertheless caused to another watercourse State, the State whose use causes such harm shall, in the absence of agreement to such use, take all appropriate measures having due regard for the provisions of articles 5 and 6, in consultation with the affected State, to eliminate or mitigate such harm, and where appropriate, discuss the question of compensation.

At first glance, the Watercourses Convention would seem to perpetuate the competitive paradigm. Its substantive core rules remain grounded in the mutual limitation of sovereign rights. The focus is not on identifying and promoting shared understandings or common interests but on demarcating individual, separate entitlements. As a result, the Convention's terms may promote the maintenance, or even the reinforcement, of the separate identities of riparian states. This assessment is true to the extent that the Convention fails to offer a sufficiently developed alternative conceptual framework that could facilitate the formation of collective identities.²⁷⁹

Nonetheless, rather than perpetuate the old paradigm, the Convention may in fact accomplish the opposite. The Convention's terms effectively 'neutralize' the previously competing rules. Given the circular nature of the regime established by Articles 5 and 7, which ties the equitable utilization and no harm rules together without resolving the priority issue, neither rule can any longer be argued as overriding. The Watercourses Convention deprives each side of convincing legal arguments for the priority of their claims. Upper and lower riparians are forced to re-examine their entrenched positions and to engage with one another to find fair solutions to their disagreements. It is true that, through its deliberately open-ended equitable utilization framework, the Convention provides little in the way of substantive guidance for the necessary balancing processes.²⁸⁰ It is equally true that the provisions of the Watercourses Convention cannot resolve the issues that arise in the Nile Basin.²⁸¹ Nonetheless, the Convention makes an important contribution toward cooperation in the basin. Ironically, this contribution is that the Watercourses Convention undercuts the very riparian rights-based approach to water law that it was intended to codify and progressively develop and thus allows, though admittedly does not directly facilitate, process-based approaches to find common ground.²⁸²

279. The assessment in the text remains true despite the Convention's procedural provisions: Articles 8, 9, 11, 12, 15–18, and 24. While designed to promote various forms of cooperation, the procedural provisions are limited by the substantive framework. Furthermore, this assessment holds irrespective of the fact that the Convention does contain a number of provisions that alert states to common concern: Articles 20–23 contain various environmental and ecosystem protection obligations. Watercourses Convention, *supra* note 31, arts. 20–23. Albeit tentatively, these provisions do move the Convention beyond the "mutual limitation" paradigm. The ecosystem protection duties in Articles 20 and 22 and the duty to protect the marine environment in Article 23 arise regardless of interferences with another riparian's sovereign rights. Nonetheless, given the predominance of the regime framed by Articles 5 to 7, it is not clear that the Convention's environmental protection provisions can significantly change the flavor of riparian relations that it otherwise models. *See also Ecosystem Law*, *supra* note 6, at 58–65 (commenting on the Draft Articles).

280. *See, e.g.*, Nollkaemper, *supra* note 272, at 44–48 (criticizing the "indeterminacy" of the equitable utilization paradigm). *See also* Ellen Hey, *The Watercourses Convention: To What Extent Does it Provide a Basis for Regulating Uses of International Watercourses?*, 7 REV. EUR. COMM. & INT'L ENVTL. L. 291, 294 (1998) (commenting on the lack of substantive standards).

281. *See supra* note 247 and accompanying text.

282. *See* Stephen C. McCaffrey & Mpazi Sinjela, *The 1997 United Nations Convention on International Watercourses*, 92 AM. J. INT'L L. 97, 101–02 (1998) (arguing that the ILC's approach to Articles 5 and 7 was to establish a *process* for reconciling competing uses, and that this is "not only preferable but also

This view finds support in the fact that, to the extent that the Nile Basin states participated at all, the majority abstained from voting on the Watercourses Convention or voted against it.²⁸³ The explanations offered were, in part, that Articles 5 and 7 of the Convention failed to balance properly the equitable utilization and no harm rules.²⁸⁴ If neither upper riparians, such as Ethiopia, Rwanda, or Tanzania, nor Egypt as the lower riparian believed that the Convention sufficiently protected their seemingly oppositional "rights," the Convention may have actually succeeded in canceling out—or balancing—the competing legal arguments. Neither side was left with any convincing way to promote the legal priority of their position. Further, the "coincidental" timing between the vote on the Watercourses Convention, in May 1997,²⁸⁵ and the growing momentum in the work on the NBI is remarkable. In June 1997, the World Bank accepted the invitation to take the lead role among external agencies supporting Nile Basin cooperation, and in November of the same year the review of the Nile River Basin Action Plan was launched (culminating in the NBI in 1999).²⁸⁶ The language of the NBI appears to follow the lead of the Watercourses Convention in drawing together the equitable utilization and no harm principles so as to neutralize both principles. The shared vision of the NBI is the achievement of "sustainable socio-economic development through the equitable utilization of, and benefit from, the common Nile Basin water resources."²⁸⁷ At the same time, any subsidiary action programs in the basin are to "build on principles of equitable utilization, no significant harm and cooperation."²⁸⁸

Before the Watercourses Convention, international water law allowed for the construction of legal arguments that undermined the legitimacy of its rules. Although it might have been possible to reconcile the rules of "no significant harm" and "equitable utilization," the normative framework contained no principles to guide states toward such reconciliation. This failure

closer to what will usually happen in practice"); Paolo Canelas de Castro, *The Future of International Water Law*, in SHARED WATER SYSTEMS, *supra* note 247, at 149, 168 (noting that the confrontational, rights-based logic is being supplanted by a recognition of the importance of management-oriented approaches that are geared toward win-win solutions); Benvenisti, *supra* note 36, at 402–04, 414 (highlighting the importance of open-ended legal norms, rather than rights-based rules, in encouraging parties to negotiate). But see Scott L. Cunningham, *Do Brothers Divide Shares Forever: Obstacles to the Effective Use of International Law in Euphrates River Basin Issues*, 21 U. PA. J. INT'L ECON. L. 131, 154 (2000) (arguing that one of the Watercourses Convention's primary deficiencies is its lack of clarity and determinacy, which is manifested in the failure to resolve the priority issue and to clarify what constitutes significant harm or reasonable use and "contributes to the weakness of international law").

283. See U.N. GAOR, 51st Sess., 99th plen. mtg. at 7–8, U.N. Doc. A/51/PV.99 (1997). In favor: Kenya and Sudan. Against: Burundi. Abstentions: Egypt, Ethiopia, Rwanda, and the United Republic of Tanzania.

284. See *supra* notes 270–272 and accompanying text.

285. The vote took place on May 21, 1997. See U.N. GAOR, 51st Sess., 99th plen. mtg. at 7–8, U.N. Doc. A/51/PV.99 (1997).

286. See NBI Overview, *supra* note 18.

287. *Id.* But note that the long-term goal is to arrive at "net equitable entitlements for each riparian country." See UNDP, *supra* note 212.

288. See NBI Policy Guidelines, *supra* note 208.

is manifest in the longstanding and inconclusive "priority" debate already noted. Effectively, the two rules precluded the structuring of a legal framework that was internally consistent. Instead, states were permitted to offer up arguments that were incapable of coordination and reconciliation. The legal framework encouraged contradiction and invited abusive claims to rights. The contradiction in the two fundamental principles has been effectively erased through their melding in the Watercourses Convention. As the most recent authoritative statement of international water law, the Convention has helped undermine the principles' capacity to structure opposing arguments. Of course, the influence of the traditional rules cannot be erased overnight.²⁸⁹ Therefore, the new challenge to legitimacy will be to foster social practices along the Nile that have the capacity to generate adherence to emerging cooperative principles of water law, such as sustainable development, precaution, and intergenerational equity.²⁹⁰

The Watercourses Convention did not go far enough in promoting these cooperative principles. Even if it had, the next Section argues that these principles are not yet rooted in the practice of the Nile riparian states. They are not yet congruent with shared understandings, but remain "alien constructions" of legal knowledge.²⁹¹ But there are processes in place that are beginning to encourage discourse, learning, and identity change that promise to weave these cooperative principles into the fabric of social interaction on the Nile.

C. Informal Interaction Among Basin States

Finally, this Section evaluates the various informal processes that have taken place in the Nile Basin since the 1980s. Superficially, endeavors such as TECCONILE, the Nile 2002 Conferences, the Nile River Basin Action Plan, and the NBI might seem to suggest a move away from law. Conventional wisdom among many policy-makers in the region and academic observers has been that law has no constructive contribution to make at this stage. Rather, lawyers and legal arguments have been seen by many as hindering progress.²⁹² Law's moment, then, tends to be seen as coming at the

289. Indeed, in July 2001, unnamed Nile experts were quoted in the press as saying, "[w]hether Egypt is legally willing to abandon its claims of an untouchable share of the Nile water . . . and whether Ethiopia is willing to accept sharing the Nile on an equitable basis, regardless of its increasing needs, remains to be proven through a binding international agreement . . ." See Mburu, *supra* note 222.

290. This discussion of the U.N. Watercourses Convention focuses only upon the impact of the framework established in its Articles 5 and 7. This focus is not intended to deny that some of the Convention's more technical or procedural provisions could play a role as textual blueprints for similar provisions in the Nile Co-operation Framework. Evidently, to the extent that legal text is available that matches the shared expectations of the riparian states on a given issue, resort to models can obviate the need for detailed negotiation over precise wording.

291. *Risk Society*, *supra* note 97, at 5 (discussing the processes through which "new water knowledge," frequently introduced by foreign consultants or scientists, can become "mutual" or shared within a specific regional context).

292. For example, one observer with long-standing involvement in the Nile Basin noted that the tra-

end of a successful negotiation process when law is called upon to formalize the agreed outcome and render it "binding."²⁹³ From an interactional perspective, this view is plainly wrong. The "final" legal framework is already emerging in the patterns of interaction among the riparians. These patterns are gradually re-shaping basin states' identities, shifting the parameters of persuasive argument and, crucially, promoting enhanced legitimacy for emerging legal norms.

When law is conceived within this interactional framework, the various informal processes in the Nile Basin have been very much about law. The point is not that the informal processes of interaction are themselves "legal" institutions, but rather that the cooperative frameworks they engender are part of what helps law emerge. At the same time, existing and crystallizing legal norms affect the interaction of states and other actors within informal processes. Law is both generative of changes in interaction and generated by further interaction. The informal Nile processes have aspired to promote the kind of interaction, trust-building, and mutual learning that are crucial to the emergence of shared understandings, which in turn must underlie any effective normative evolution. For example, how can the Nile 2002 series of conferences be characterized? Not formally inter-governmental, and certainly not negotiating sessions, the conferences bring together experts in water resources from the riparian states, observers and experts from other states, and representatives of external supporting agencies.²⁹⁴ The conferences therefore reveal traits of what have been called epistemic communities, that is groupings of people with specific technical or scientific expertise.²⁹⁵ Together such groups learn about the problems they face collectively and individually in doing their jobs, and they develop common positions that come to influence policy-makers within their domestic governments.

Alternatively, because the conference participants are mainly drawn from ministries charged with the development and protection of freshwater resources, they could be described in Slaughter's terms as "intergovernmental issue networks." In Slaughter's work, such networks often serve not only as vehicles for the transfer of expertise and knowledge, but also as fora for the promotion of particular normative goals, often on the part of a dominant player.²⁹⁶ It is interesting that in the Nile context, the Nile 2002 series has

ditional legal approach had failed and that there was a need to "maximize the emotional side" and "minimize the legal side." Interview with Shady, *supra* note 158.

293. *Id.*

294. The funding agency representatives are far from passive in the process; they appear to play a key role in working behind the scenes to promote dialogue between sometimes mistrustful delegations and to cobble together the joint statements that result from the meetings.

295. For a discussion of the roles of epistemic communities, see, for example, Peter M. Haas, *Do Regimes Matter? Epistemic Communities and Mediterranean Pollution Control*, 43 INT'L. ORG. 377 (1989).

296. Anne-Marie Slaughter, *Governing the Global Economy through Government Networks*, in THE ROLE OF LAW IN INTERNATIONAL POLITICS, *supra* note 23, at 177, 185, 189-93 (noting, for example, the dominating role of the U.S. Securities and Exchange Commission in the International Organization of Securities Commissioners).

not permitted what has been described as "norm entrepreneurship" in favor of the interests of one or more states.²⁹⁷ Rather, the conferences appear to have fostered genuine mutual learning and the evolution of previously entrenched positions, thereby helping to create an environment in which the parallel TECCONILE, Nile River Basin Action Plan, and NBI processes could evolve. It was in the NBI process that new norm entrepreneurs emerged—the World Bank and UNDP; but they have exercised this role with sensitivity to state concerns and to the need for regional commitment to normative evolution.²⁹⁸ So informal processes, whether conceived as nurturing epistemic communities or building intergovernmental networks, have functioned to allow the sharing of normative knowledge and to build the confidence that permitted the establishment of more formal legal structures for further interaction.

The NBI process and the work on the "Cooperative Framework" do seem to mark a breakthrough on the path toward cooperation in the Nile Basin. Although promises of new development funding from the World Bank and other donors are relevant material inducements toward greater cooperation, dollars alone would not have been enough to prompt regime change. The developments culminating in the NBI evidence the emergence of modest shared understandings and norms that have helped to prompt concrete regime evolution. For example, the aforementioned initiatives are all grounded in the notion of basin-wide cooperation. While the commitment to this approach was tentative initially, it is now the very underpinning of the NBI and its shared vision. This commitment is significant not just for hydrological reasons but also because it can help shape a collective identity of the Nile states as basin states and promote the identification of collective interests.²⁹⁹

By the same token, the emergence of a basin identity and shared understandings as to basin-wide interests will serve to constrain Nile states from making entirely self-interested arguments. This process can be further assisted by norms that serve to recast perceived reasons for conflict or competition as reasons for cooperation. For example, under the longstanding mutual limitation paradigm of international water law, water scarcity in the Nile Basin was a matter of competing sovereign interests, whereas it is now beginning to be recognized as requiring cooperation. A significant contribution to overcoming the competitive approach was made by the drawing together of the equitable utilization and no harm principles, as now reflected

297. On "norm entrepreneurship," see, for example, MARGARET KECK & KATHRYN SIKKINK, *ACTIVISTS BEYOND BORDERS* (1998). It may be that there are norm entrepreneurs at play, but if so, they are not from riparian states, but rather from the funding agencies. Their role is described briefly *supra* note 241. It is fair to say that these entrepreneurs are largely disinterested in specific outcomes, their entrepreneurship being directed purely to the notion of cooperation. That such actors have managed to allay fears of bias in the suspicious climate of the Nile Basin is a testament to their cultural awareness and integrity.

298. See *supra* notes 241–244 and accompanying text.

299. On the formation of collective identities, see *supra* notes 252–257 and accompanying text.

in the NBI. In addition, concepts such as sustainable development, benefit sharing, or environmental protection provide important normative guidance by directly focusing upon positive outcomes, best achieved through cooperation, not competition. These emerging norms, all reflected in the NBI, help guide the interaction of the basin states by rendering purely competitive arguments, even in the context of water scarcity, untenable or, at least, unconvincing.

Inclusiveness and transparency of process are the hallmarks of recent Nile Basin initiatives. Indeed, the main goal of each of the processes, at least initially, was to involve all riparians in discourse. ICCON goes further by seeking to involve "civil society and NGOs" in basin-wide discussions. The subject matter was less important, although there was an explicit avoidance of discussions rooted in assertions of rights. An important thread in all gatherings was the principle of equal access and equal participation, furthering the goals of both inclusiveness and transparency. All states had access to information, ideas, and perspectives. The result: "shared knowledge." On the basis of this shared knowledge, it became possible to discuss concepts such as sustainable development without viewing them as foreign impositions, bargaining chips, or ploys. The processes of discussion were imbued with legitimacy that enhanced the persuasiveness of the products of discussion. As a crucial further step, regular ministerial-level meetings complemented the technical discussions within the NBI. Special effort was expended to ensure that the technical discussions were shared with all relevant ministries and then fed into the inter-state negotiations. Thus, legitimacy generated at the technical level radiated into the political arena. In turn, as political leaders were convinced of the need for cooperation, their commitment reinforced the technical processes.

A further key development was the recognition, through the NBI process, that only a shared basin-wide set of normative principles would legitimize particular project activities by ensuring a perspective that was inclusive of the identities and interests of all basin states. At the same time, the states recognized that regional or sub-basin projects were more likely than basin-wide projects to generate concrete results that would, in turn, lend greater legitimacy to the governing principles by showing them to be effective. In sum, it was not possible to promote "action on the ground" before a shared framework of principles had been elaborated and inclusive processes of discussion had been created. But to insist on basin-wide cooperation on all issues and projects was unrealistic, if not impossible. So, perhaps ironically, it was a basin-wide, completely inclusive process of normative evolution that cut the Gordian knot to allow Nile states to move toward concrete cooperative projects, many of which will be undertaken at the sub-basin level.

The recent informal processes of discussion on the Nile cannot be appropriately characterized as either "cheap talk" or purely strategic bargaining

processes. Rather, they have begun to involve genuine arguments, geared toward reaching common understandings and reasoned consensus.³⁰⁰ They are interactional processes of lawmaking, contributing simultaneously to shaping state identities and building legitimacy.³⁰¹ Law's contribution is not simply formal, adding "legal varnish" to a pre-established strategic bargain, nor does it solely provide "bindingness" at the end of the day.³⁰² Law has already helped to make agreement possible and has generated the sense of adherence to mutually constructed norms that serve as the basis of their persuasiveness.

VII. CONCLUSION

To answer the question posed in the title of this Article: emphatically, yes, law matters. However, law's effects on the Nile Basin regime are not adequately captured in the descriptions of positivist lawyers, of most IR theorists, or even of some Nile negotiators. The Article's goal is to show how an interactional understanding of law illuminates both the promise and the limitations of law as a factor that influences the evolution of the Nile Basin regime. In using the Nile Basin as the setting in which to examine the explanatory power of the interactional model of law, this Article focuses on a complex case that illustrates how legal norms and evolving legal regimes can in fact assist political change toward greater cooperation.

The Nile Basin provides a good test case for these arguments precisely because the states in the region have been enmeshed in competitive behavior for generations. They will have to achieve deep cooperation if they are going to cooperate at all. Historical practice is so rooted in resource competition that weak forms of cooperation are not likely to produce much effect. Fundamental alterations to behavior will be required, involving sacrifices and pushing the riparians significantly beyond "business as usual."³⁰³ Rationalist

300. See Risse, *supra* note 45, at 8–9. Risse views "rhetoric" in the limited sense of "strategic." The need for participants to "argue," in Risse's terms, rather than bargain, resonates with Fuller's assertion that:

The good negotiator [in the negotiation of a complex agreement] must not only make a genuine effort to understand the declared aims of the opposing party, but must be capable of some sympathetic participation in those aims To serve his principal well he must identify himself with the opposing party In this reconciliation of altruism and self-interest there is revealed . . . a more mature conception of morality

Lon Fuller, *Irrigation and Tyranny*, 17 STAN. L. REV. 1021, 1034 (1965).

301. On legal legitimacy in an interactional framework, see *International Law and Constructivism*, *supra* note 27, at 66.

302. See Fuller, *supra* note 300. He concludes:

Problems concerned with the sharing of water supplies and the joint utilization of river systems are inherently unsuited to adjudicative solution, involving as they do a complex interplay of diverse interests. Only those who know those interests intimately, who can feel their way to the best reciprocal adjustment of them, are competent to find a truly satisfactory solution. If this is not the easiest way to hydraulic peace, it is surely the best.

Id. at 1042.

303. See George W. Downs et al., *Is the Good News About Compliance Good News About Cooperation?*, 50 INT'L ORG. 379, 382–83 (1996).

analysis would conclude that such deep cooperation cannot be promoted or maintained without appropriate material incentives or disincentives to correct actors' interest assessments.³⁰⁴

This Article does not suggest that law is a fully autonomous, let alone controlling, influence in international society. As Part V notes, a variety of factors, including factors relating to a reassessment of material interests, interact to prompt regime change. The claim is simply that law is one of these factors, and that it possesses independent explanatory and normative force that should not be ignored. Therefore, law's persuasive influence is neither inevitable nor inevitably positive.

However, the claim that law is not effective, or that other factors alone can explain behavioral change, is superficial and easy. This claim is often based on a limited or even mistaken conception of law and its role in international society. As illustrated through the analysis of the various strands of the evolving Nile Basin legal framework, law has exerted influence because of its ability to shape the identities of states and to guide international discourse by demarcating what counts as persuasive argument. Law's ability to generate its own adherence and to persuade Nile states depends upon the extent to which it meets specific, internal standards of legitimacy and is congruent with the shared understandings and practices in the basin.³⁰⁵ When these conditions are not present, law cannot fulfill its constructive role.

Finally, an assessment of the various informal processes in the Nile Basin illustrates that norms can generate adherence even if they are not formally binding. This is not to suggest that all attempts to create such formally binding rules, through the negotiation of explicit agreements, are misguided. In fact, in a setting such as the Nile, it ultimately may be necessary to craft formal rules of apportionment and other rights. However, such formal rules must be rooted in interactional processes that frame persuasive argument, that help construct identities and legitimacy, and that involve all relevant actors.³⁰⁶ Binding law can emerge only within settings where actors

304. *Id.*

305. According to a recent piece by George Downs and colleagues, Brunnée and Toope are among a group of "Transformationalists," who are said to believe that participation in regimes that reflect certain design principles induces "a mutually reinforcing series of normative and cognitive shifts among member states because states in effect are socialized by the regime." See George W. Downs et al., *The Transformational Model of International Regime Design: Triumph of Hope or Experience?*, 38 COLUM. J. TRANSNAT'L L. 465, 471 (2000). This article lists the following four "transformational" design principles: universal or nearly universal regime membership, emphasis on non-binding or low-threshold commitments in early stages of regime formation, consensus-based decision-making, and promotion of compliance through managerial approaches. See *id.* at 471, 477–88. The interactional conception of law outlined above provides a much fuller understanding of how and why actors may be "transformed" by regimes and norms than the design principles listed by authors. It would also largely address the authors' concern that "Transformationalism" does not provide a coherent explanation of "how the Transformational process operates." See *id.* at 466, 477. Indeed, the elements of interactional theory help explain why certain "design principles" are particularly conducive to guiding regime participants toward cooperation.

306. Some of Brunnée and Toope's previous work has been misunderstood in this respect. For exam-

have agreed upon parameters for their interaction and have developed certain basic understandings about what they hope to achieve together. It follows that law cannot, by simply declaring a formal rule, ensure adherence.

The insights drawn together in this Article help explain the limitations of the older Nile treaties and the possible contributions of the law of international watercourses. Most significantly, however, they help explain why the slowly evolving processes in the Nile Basin, such as those embedded in Nile 2002 Conferences or the NBI, are crucial to the emergence and evolution of legal norms. Moreover, the interactional view of law that the Article sketches illuminates that law's role in the Nile Basin is confined neither to formalizing agreements previously reached through purely strategic bargaining, nor to establishing explicit entitlements. Rather, emerging legal norms, such as those related to sustainable, basin-wide management of the Nile, already serve to articulate common understandings and to influence—not control—the evolution of previously entrenched positions.

Along the impermanent Nile, law has played a significant role for generations, often in negative ways, by reinforcing competition and conflict. Law's persuasive influence has shifted recently, both through the elaboration of a less oppositional regime of international water law, and through the creation of various processes that have fostered regional collaboration. These processes have encouraged environmental learning, have begun to build a basin-wide identity among Nile riparians, and have re-oriented normative discourse. Normative frameworks to promote cooperation have greater legitimacy today than at any time in the Nile's recent history. If law continues to play its current facilitative role in shaping interaction, prospects are good for the elaboration of a comprehensive approach to Nile management.

ple, in *Regime Building*, *supra* note 22, at 58–59, Brunnée and Toope argued, *inter alia*, for an approach to freshwater regime building that draws upon the framework-protocol model of regime building, which has been successful in international environmental law. The approach was not to be an exclusively “soft approach to obligations,” as some commentators have concluded. *See* Fuentes, *supra* note 271, at 175. Rather, emphasis upon the elaboration of binding rules may not be appropriate or beneficial in the *early* stages of regime building. Indeed, an initial contextual regime, such as a framework agreement, and the soft principles that it articulates, is usually an essential precursor for the development of binding rules. Fuentes, therefore, misses the point when she critiques Brunnée and Toope's argument by stating: “What would be Mexico's reaction if the obligation assumed by the United States to deliver 1,500,000 acre-feet of water from the Colorado were to be characterized as ‘soft?’” *Id.* at 175. Binding apportionment rules may well be needed, but this need is not necessarily best addressed through the immediate enactment of formally binding rules.