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The Rise of Risk in International Law

Stephen Townley*

Abstract

Risk analysis—a coping mechanism for the uncertainties we see everywhere around us—is on the rise, including at the international level. It now informs, for instance, the work of the Security Council and human rights law and practice. While the story of how risk analysis has inflected international environmental law is frequently told, there has been little attention paid to the way in which risk is increasingly relevant to other areas of international law, including through “due diligence” standards. This Article fills this gap, describing risk’s propagation across different international legal fields. It also offers a taxonomy of the ways in which risk is relevant. This Article distinguishes, for instance, between the way risk sometimes authorizes the state to take an action and situations where the existence of risk obligates the state to react. Finally, this Article seeks to explain potential reasons for risk’s rise and indicate some of the consequences thereof, both salutary (such as greater participation in international legal decision-making) and less so (such as greater horizontal fragmentation of international law).

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I. INTRODUCTION

Risk has become a preoccupation of states,¹ businesses,² and individuals.³ What once was the subject of a Tom Cruise science fiction film⁴ is now before the U.S. Supreme Court.⁵ There is even an emergent theory of “proactive law” that seeks broadly to “shift[] the focus of attention from dispute-resolution to . . . legal risk management.”⁶ In the U.N. Security Council, we may be seeing a third generation of sanctions—not sanctions that apply with a broad brush to entire states, nor even measures that apply to designated individuals, entities or items, but sanctions triggered when a state believes that an individual, entity or item poses a particular risk; a similar point can be made with respect to U.N. peacekeeping missions, which are increasingly authorized to protect civilians at risk. More broadly, at the U.N., the new Secretary-General, in his first briefing of the Security Council, stressed the critical role of prevention,⁷ which, in turn, requires a framework for assessing the risk of conflict or atrocities occurring.⁸

¹ JACQUELINE PEEL, SCIENCE AND RISK REGULATION IN INTERNATIONAL LAW 34 (2010) (“Risk . . . has become a central concern of advanced regulatory states over the last few decades.”); *see generally* Monika Ambrus et al., *Risk and International Law*, in RISK AND THE REGULATION OF UNCERTAINTY IN INTERNATIONAL LAW 1, 5 (Monika Ambrus et al. eds., 2017) (discussing the “dialectical relation between law and uncertainty”); ULRICH BECK, RISK SOCIETY: TOWARDS A NEW MODERNITY (1992).

² *See, for example*, Susannah Snider, *Explore Five Hot Jobs for MBA Graduates*, U.S. NEWS (Mar. 20, 2017), <https://perma.cc/KUL2-J7SN> (opining that “an increasingly complicated, always-changing regulatory environment continues to boost demand for compliance officers”).

³ This includes everything from health risks, *see, for example*, Gretchen Reynolds, *Should a Simple Fitness Check Be Part of Your Checkup?*, N.Y. TIMES (Nov. 30, 2016), <https://www.nytimes.com/2016/11/30/well/move/should-a-simple-fitness-check-be-part-of-your-checkup.html>, to the risk of being attacked by terrorists, *see, for example*, Paul Sullivan, *Taking a Rational Look at the Risk of Threats*, N.Y. TIMES (Nov. 20, 2015), <https://www.nytimes.com/2015/11/21/your-money/taking-a-rational-look-at-the-risk-of-threats.html>.

⁴ MINORITY REPORT (Dreamworks Pictures 2002).

⁵ *Cf.* Adam Liptak, *Sent to Prison by a Software Program’s Secret Algorithms*, N.Y. TIMES (May 1, 2017), <https://www.nytimes.com/2017/05/01/us/politics/sent-to-prison-by-a-software-programs-secret-algorithms.html> (discussing Supreme Court review of a case where at sentencing the judge considered a statistical report that purported to show that the defendant posed “a high risk of violence, high risk of recidivism, high pretrial risk”).

⁶ Gerlinde Berger-Walliser & Paul Shrivastava, *Beyond Compliance: Sustainable Development, Business, and Proactive Law*, 46 GEO. J. INT’L L. 417, 438 (2015); *see also* George J. Siedel & Helena Haapio, *Using Proactive Law for Competitive Advantage*, 47 AM. BUS. L.J. 641, 656–67 (2010).

⁷ U.N. Secretary-General, Secretary-General’s Remarks to the Security Council Open Debate on ‘Maintenance of International Peace and Security: Conflict Prevention and Sustaining Peace’ (Jan. 10, 2017), <https://perma.cc/24ER-9GF9> (discussing early warning).

⁸ *Cf. generally* UNITED NATIONS, FRAMEWORK OF ANALYSIS FOR ATROCITY CRIMES: A TOOL FOR PREVENTION (2014), <https://perma.cc/9VM2-8UB4>.

Risk, of course, can mean different things in different contexts. In this Article, I use “risk” in two specific ways: what might be termed “known” and “unknown” risk, or “risk” and “uncertainty.”⁹ “Known” risk is the probability of occurrence of an event coupled with the magnitude of the resulting harm.¹⁰ “Known” risk thus entails a certain measurability. Examples might be the risk presented by Russian roulette, where there is a known one-in-six chance of death,¹¹ or the risk of car crashes entailed by particular highway driving conditions, which insurance companies have been able to assess based on statistical analyses.¹² “Unknown” risk is more inchoate *potential* peril about which we lack information either on the likelihood of the harm materializing or knowledge of the effect it would have if it did. An example might be the potential effect of introduction of an invasive species into a new ecosystem.¹³ Of course, this division into categories is something of an oversimplification, since risk operates along a quantifiability continuum.¹⁴ I also count “threats” as a form of “known” risk. Threats—at least as that term is used in this Article—are risks that tend to be assessed on an individual, qualitative basis rather than as a statistical measure. An example might be the threat that a particular individual will commit a terrorist attack.¹⁵

Risk is distinct from, and antecedent to, harm. That is, the existence of risk may permit or require a state to act before harm has occurred. For instance, those who support the legal availability of anticipatory self-defense argue that a state

⁹ Cf. Jose Luis Bermudez & Michael S. Pardo, *Risk, Uncertainty, and ‘Super Risk’*, 29 NOTRE DAME J.L. ETHICS & PUB. POL’Y 471, 473 (2015) (“Decisions under risk involve circumstances in which the probabilities and costs associated with possible outcomes can be quantified; whereas decisions under uncertainty involve circumstances in which the probabilities and costs associated with possible outcomes are not amenable to quantification.”).

¹⁰ See Arie Trouwborst, *Prevention, Precaution, Logic and Law: The Relationship Between the Precautionary Principle and the Preventative Principle in International Law and Associated Questions*, 2 ERASMUS L. REV. 105, 117 (2009). Cf. *Glossary*, in UNDERSTANDING RISK: INFORMING DECISIONS IN A DEMOCRATIC SOCIETY 215–16 (Paul C. Stern & Harvey V. Fineberg eds., 1996) (defining risk).

¹¹ See NICOLAS DE SADELEER, ENVIRONMENTAL PRINCIPLES: FROM POLITICAL SLOGANS TO LEGAL RULES 74–75 (2002).

¹² See René Ureña, *Risk and Randomness in International Legal Argumentation*, 21 LEIDEN J. INT’L L. 787, 790–91 (2008).

¹³ See Rosie Cooney & Andrew T.F. Lang, *Taking Uncertainty Seriously: Adaptive Governance and International Trade*, 18 EUR. J. INT’L L. 523, 525 (2007).

¹⁴ Both “known” and “unknown” risk are, however, different from risk in the sense of individualized reasonable suspicion, which I exclude. Reasonable suspicion—and similar such standards—does not turn on the likelihood of a hazard materializing, but rather on whether there is sufficient information to deem that a hazard *has materialized* (even if it later turns out that it has not).

¹⁵ While Professor Nicholas Tsagourias has suggested conceptual differences between risk and threat, he acknowledges that the two are merging in some contexts. See Nicholas Tsagourias, *Risk and the Use of Force*, in RISK AND THE REGULATION OF UNCERTAINTY IN INTERNATIONAL LAW, *supra* note 1, at 13, 15.

may use force even before an armed attack has occurred where the attack is believed to be imminent.¹⁶ Likewise, the International Court of Justice (ICJ) and the Seabed Disputes Chamber of the International Tribunal for the Law of the Sea (ITLOS) have recently asserted that states have an obligation to conduct environmental impact assessments (EIAs)¹⁷ where there is sufficient risk of environmental harm, but before the relevant action has been taken.

Risk in these senses is taking off at the international level, and not just at the U.N. In particular, the last few years have been characterized by ever greater expansion of the field of application of prevention rules—rules requiring efforts to prevent harm, often by seeking to mitigate “known risks of harm”¹⁸—and due diligence obligations, or “best efforts” obligations of conduct.¹⁹ Prevention and due diligence are related, as due diligence is generally the relevant standard of conduct for the implementation of prevention rules.²⁰ That is, even if a state has an obligation to prevent harm when a certain quantum of risk of that harm materializing exists, the obligation is seldom absolute. Rather, it more frequently takes the form of an obligation to take measures to mitigate the risk of the harm materializing. That prevention rules and due diligence obligations have risen to

¹⁶ Compare Matthew C. Waxman, *Regulating Resort to Force: Form and Substance of the UN Charter Regime*, 24 EUR. J. INT'L L. 151, 157 (2013) (explaining that those who reject “anticipatory self-defense” believe that the “legality of resort to force . . . should operate as an on-off switch, flipped by the manifestation of readily identifiable factual preconditions”), with *id.* at 158 (explaining that those who support anticipatory self-defense prefer something more akin to a balancing test, one that would include the probability of an anticipated attack materializing and the consequences thereof—in other words, a risk assessment). See also Noam Lubell, *The Problem of Imminence in an Uncertain World*, in THE OXFORD HANDBOOK OF THE USE OF FORCE IN INTERNATIONAL LAW, 1, 18–21 (Marc Weller ed., 2014). In a widely-cited paper regarding self-defense against non-state actors, former U.K. Legal Adviser Daniel Bethlehem included “the probability of an attack” among the relevant factors that might justify anticipatory action. Daniel Bethlehem, *Principles Relevant to the Scope of a State's Right of Self-Defense Against an Imminent or Actual Armed Act by Nonstate Actors*, 106 AM. J. INT'L L. 1, 6 (2012); see also Brian Egan, *International Law, Legal Diplomacy and the Counter-ISIL Campaign*, U.S. DEPT OF ST. OFF. LEGAL ADVISER (Apr. 1, 2016), <https://perma.cc/E5D4-295Q>.

¹⁷ See *Pulp Mills on the River Uruguay (Arg. v. Uru.)*, Judgment, 2010 I.C.J. Rep. 113, ¶ 204 (Apr. 20) [hereinafter *Pulp Mills*]; *Certain Activities Carried Out By Nicaragua in the Border Area (Costa Rica v. Nicar.) and Construction of a Road in Costa Rica Along the San Juan River (Nicar. v. Costa Rica)*, Judgments, 2015 I.C.J. Rep. 665, ¶ 104 (Dec. 16) [hereinafter *Costa Rica v. Nicar.*]; *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area (Request for Advisory Opinion submitted to the Seabed Disputes Chamber)*, Case No. 17, Advisory Opinion of Feb. 1, 2011, 11 ITLOS Rep. 10, ¶ 145 (Seabed Disputes Chamber).

¹⁸ Trouwborst, *Prevention, Precaution, Logic and Law*, *supra* note 10, at 117.

¹⁹ Timo Koivurova, *Due Diligence*, in MAX PLANCK ENCYCLOPEDIA OF INTERNATIONAL LAW ¶ 1 (2010), <https://perma.cc/BP2E-A9TM>.

²⁰ See *id.* at ¶ 2 (describing due diligence as focusing on “preventive measures expected of a State”).

prominence at the same time is thus no surprise.²¹ These concepts are now being applied broadly, including to business activities,²² cyberspace,²³ and assistance to

²¹ The precautionary approach, *see, for example*, U.N. Conference on Environment and Development, *Rio Declaration on Environment and Development*, U.N. Doc. A/CONF.151/26/Rev.1 (Vol. I), annex I (Aug. 12, 1992) [hereinafter *Rio Declaration*], is also ever more salient (or at least ever more discussed), although I count that as a form of prevention applicable under conditions of uncertainty. *See* ARIE TROUWBORST, *EVOLUTION AND STATUS OF THE PRECAUTIONARY PRINCIPLE IN INTERNATIONAL LAW* 39 (2002) [hereinafter *EVOLUTION AND STATUS*]; JACQUELINE PEEL, *THE PRECAUTIONARY PRINCIPLE IN PRACTICE: ENVIRONMENTAL DECISION-MAKING AND SCIENTIFIC UNCERTAINTY* 64 (2005). As Professor Arie Trouwborst has succinctly put it, “[i]f the environmental effects of a particular activity are known, measures to avoid them may be termed preventative. If such effects are uncertain, the same measures may also be labelled precautionary.” Trouwborst, *Prevention, Precaution, Logic and Law*, *supra* note 10, at 116. The lack of clarity regarding the precise contours of the precautionary approach, and its principal role (at least in my view) as a decision-making tool rather than an obligation or authorization, makes it however only an ancillary focus of this Article. Where I do address it, I use the terms “precaution” or “precautionary approach” rather than the term “precautionary principle,” although I mean what is often described in the literature as the latter. *Cf.* Jacqueline Peel, *Precaution—A Matter of Principle, Approach or Process?*, 5 MELB. J. INTL L. 483, 485 (2004).

²² *See, for example*, Office of the High Commissioner for Human Rights, *Guiding Principles on Business and Human Rights: Implementing the United Nations ‘Respect, Protect and Remedy’ Framework* at 18–22, U.N. Doc. HR/PUB/11/04 (2011) [hereinafter *Guiding Principles*] (asserting the need for human rights due diligence and measures to mitigate risk). I recognize that businesses are not subjects of international law. That said, given the prominence of the U.N. *Guiding Principles on Business and Human Rights*, I include discussion of how those Principles are being understood and implemented. *Cf.* Kenneth W. Abbott & Duncan Snidal, *Hard and Soft Law in International Governance*, 54 INT’L ORG. 421, 422 (2000) (discussing the salience of certain non-binding commitments).

²³ *See, for example*, TALLINN MANUAL ON THE INTERNATIONAL LAW APPLICABLE TO CYBER WARFARE 27 (Michael N. Schmitt ed., 2013); Michael N. Schmitt, *In Defense of Due Diligence in Cyberspace*, 125 YALE L.J. FORUM 68, 70 (2015) (“[E]xperts unanimously agreed that states shoulder a due diligence obligation with respect to both government and private cyber infrastructure on, and cyber activities emanating from, their territory.”); David E. Graham, *Cyber Threats and the Law of War*, 4 J. NAT’L SEC. L. & POL’Y 87, 93–94 (2010); Karine Bannelier-Christakis, *Cyber Diligence: A Low-Intensity Due Diligence Principle for Low-Intensity Cyber Operations?*, 14 BALTIC Y.B. INT’L L. 1, 8 (2014) (“Does due diligence imply an obligation for States to monitor cyber activities on their territory? The answer to this question is positive because, as it will be seen later, due diligence implies not only an obligation to react but also to prevent. Vigilance and monitoring thus go hand in hand.”); Jeffrey T.G. Kelsey, Note, *Hacking Into International Humanitarian Law: The Principles of Distinction and Neutrality in the Age of Cyber Warfare*, 106 MICH. L. REV. 1427, 1445 (2008) (arguing that “[t]he international community could adopt such a test to govern cyber warfare: the neutral state could satisfy its duty under IHL as long as it had applied the means at its disposal to detect and repel a belligerent’s incursions”); Beatrice A. Walton, Note, *Duties Owed: Low-Intensity Cyber Attacks and Liability for Transboundary Torts in International Law*, 126 YALE L. J. 1460, 1502 (2017) (“[W]here attribution to a state is impossible, but attribution to private entities operating within a state’s territory or via infrastructure located in a state is possible, an attack should only give rise to liability if the state failed to act diligently in preventing it. That is, the applicable standard of care imposed upon states in these cases should be due diligence.”); Katharina Ziolkowski, *General Principles of International Law as Applicable in Cyberspace, in PEACETIME REGIME FOR STATE ACTIVITIES IN CYBERSPACE* 135, 135, 169 (Katharina Ziolkowski, ed., 2013) [hereinafter *PEACETIME REGIME*]; Daniel Ortner, Comment, *Cybercrime and Punishment:*

states and armed groups during armed conflict.²⁴ Legal regimes predicated upon threats, too, are gaining increasing significance in international law, and not just the question of self-defense. Thus, for instance, the Security Council has begun to require states to take measures to halt the proliferation threat that certain items or transactions may pose.²⁵

While there is robust literature on the role of risk in various areas of domestic law,²⁶ and while certain risk-related international law topics such as prevention²⁷ (and the precautionary approach) have been considered exhaustively, scholarship on those topics has generally remained within topical silos. Prevention, for instance, has principally been discussed in the context of international environmental law.²⁸

Other aspects of risk, such as due diligence, not only suffer from a deficit of cross-cutting analysis, but are also under-studied.²⁹ Risk also remains under-

The Russian Mafia and Russian Responsibility To Exercise Due Diligence To Prevent Trans-Boundary Cybercrime, 2015 B.Y.U. L. Rev. 177, 208 (2015) (“[T]he government should independently seek to measure and evaluate its progress by conducting impact assessments.”); see also Benedikt Pirker, *Territorial Sovereignty and Integrity and the Challenges of Cyberspace*, in PEACETIME REGIME, *supra*, at 189, 208 (asserting that there “may be a certain minimum standard of control over cyber activities that needs to be respected”). Cf. Joshua E. Kastenberg, *Non-Intervention and Neutrality in Cyberspace: An Emerging Principle in the National Practice of International Law*, 64 A.F. L. REV. 43, 47, 56 (2009) (discussing a neutral state’s obligation of due diligence and what a belligerent might do if the neutral state fails to take action).

²⁴ See, for example, INTERNATIONAL COMMITTEE OF THE RED CROSS, COMMENTARY ON THE FIRST GENEVA CONVENTION: CONVENTION (I) FOR THE AMELIORATION OF THE CONDITION OF THE WOUNDED AND SICK IN ARMED FORCES IN THE FIELD 150 (2d ed. 2016) [hereinafter ICRC REVISED COMMENTARY] (advancing a new interpretation of Common Article 1 that states have “a general duty of due diligence to prevent and repress breaches of the Conventions by private persons over which a State exercises authority . . . This is an obligation of means, whose content depends on the specific circumstances, in particular the foreseeability of the violations and the State’s knowledge thereof, the gravity of the breach, the means reasonably available to the State and the degree of influence it exercises over the private persons.”).

²⁵ See, for example, S.C. Res. 2094, ¶¶ 11, 15 (Mar. 7, 2013) (requiring states to “prevent the provision of financial services . . . that could contribute to the DPRK’s nuclear or ballistic missile programmes” and not to provide financial support for trade with the DPRK “where such financial support could contribute” to the DPRK’s prohibited programmes or activities); S.C. Res. 2270, ¶¶ 8, 17, 27, 35, 36 (Mar. 2, 2016); S.C. Res. 1929, ¶ 13 (June 9, 2010).

²⁶ Compare CASS R. SUNSTEIN, LAWS OF FEAR: BEYOND THE PRECAUTIONARY PRINCIPLE (2005), with Dan M. Kahan et al., *Fear of Democracy: A Cultural Evaluation of Sunstein on Risk*, 119 HARV. L. REV. 1071 (2006) (book review).

²⁷ In this Article, I use the terms “prevention,” “preventive principle” and “preventative principle” interchangeably.

²⁸ For instance, an interesting recent volume on risk in international law addresses a number of topics separately. See Ambrus et al., *supra* note 1.

²⁹ See Michael N. Schmitt, *In Defense of Due Diligence in Cyberspace*, 125 YALE L.J.F. 68 (2015). Perhaps the most robust study of due diligence was that conducted by the International Law Association, which formed a study group on the subject that produced two thorough reports: *Study Group on Due*

theorized in the sense that there has been little analysis of the variety of *roles* risk can play in legal regimes. By “role” I mean the effect the existence of the risk has on state conduct. For instance, risk could be either *obligating* or *authorizing*. The Security Council sanctions regimes I have briefly described above are examples of “risk as obligation”: that is, if there is sufficient risk, the state is obligated to freeze the assets or stop the transaction. On the other hand, with respect to anticipatory self-defense, risk (or threat) provides a legal *authorization* for a state to use force.³⁰ What a state is obligated or authorized to do may also vary. Thus, for instance, a prevention obligation might require a state to undertake an environmental impact assessment. This would be a *procedural* obligation (like an obligation to negotiate or cooperate in good faith), in the sense that it does not speak to the ultimate legality of the proposed activity. By contrast, anticipatory self-defense is a *substantive* authorization, in that it renders the actual use of force lawful, subject to necessity and proportionality.³¹ Finally, risk can be judged on a *case-by-case basis*, or specific activities can be *categorized* as more or less risky in advance—that is, risk can be relevant either as applied (or contextually), or facially.³²

Risk analysis can also be scoped more broadly or more narrowly—for instance, is it the risk to one’s own citizens that matters, the risk to neighboring states or their citizens, or the risk to all states or their citizens?³³ Likewise, one

Diligence in International Law, 76 INT’L L. ASS’N REP. CONF. 947 (2014) [hereinafter *ILA Study Group, First Report*]; and *Study Group on Due Diligence in International Law*, 77 INT’L L. ASS’N REP. CONF. 1062 (2016) [hereinafter *ILA Study Group, Second Report*]. Joanna Kulesza’s recent monograph on due diligence is a useful source regarding the ILC’s work, see JOANNA KULESZA, *DUE DILIGENCE IN INTERNATIONAL LAW* (2016), and Monica Hakimi’s work on state responsibility for the acts of third parties is an excellent and important contribution, see Monica Hakimi, *State Bystander Responsibility*, 21 EUR. J. INT’L L. 341 (2010).

³⁰ See note 14, *supra*. This is not to say that there is a stark dichotomy here. Sometimes, a breach of an obligation to prevent a risk may give rise to an authorization on the part of another state to take action. I do not wish to engage debates regarding the relationship between obligations and rights. Rather, my claim is more descriptive—I classify risk as obligation or authorization based on where the legal focus has tended to lie.

³¹ See generally *Pulp Mills*, *supra* note 17, for distinction between procedural and substantive obligations. Cf. Stefan Talmon, *Jus Cogens after Germany v. Italy: Substantive and Procedural Rules Distinguished*, 25 LEIDEN J. INT’L L. 979, 984 (2012) (distinguishing procedural obligations from “procedural rules,” which do not address the lawfulness of the conduct at issue).

³² Two examples are the placement of species on lists, such as Appendix II of the Convention on International Trade in Endangered Species, Appendix II art. (2)(a), Mar. 3, 1973, 27 U.S.T. 1087 [hereinafter CITES], and the identification of specific wastes by the Bamako Convention on the Ban of Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes Within Africa, art. 2, Jan. 29, 1991, 30 I.L.M. 773.

³³ Cf. Consejo de Desarrollo Economico de Mexicali, AC v. United States, 438 F. Supp. 2d 1207, 1233 (D. Nev. 2006) (“Nothing in NEPA’s language suggests Congress intended NEPA to apply outside United States territory.”), *vacated* 482 F.3d 1157 (9th Cir. 2007).

could take account of more or fewer sources of risk. For instance, under what circumstances should risk presented by purely private conduct be relevant?

International law has increasingly begun to put these myriad forms of risk to use. As one commentator put it, prevention has “resurfac[ed] spectacularly.”³⁴ Likewise, while due diligence has a deep pedigree, it was not until the late 1980s and early 1990s that it began to be applied more broadly, in particular through human rights instruments and jurisprudence regarding violence against women.³⁵

On one level, a turn to risk analysis should not be surprising given the attractiveness of prevention over response in situations where the consequences of wrongful or injurious conduct are increasingly grave (or at least where our collective tolerance for such consequences continues to diminish). Moreover, it is a truism that the world is only growing more interdependent, and thus it makes sense that techniques developed in the context of transboundary environmental disputes are now being applied more broadly.³⁶ On a deeper level, however, while under domestic law risk analysis can sometimes be seen as anti-democratic (insofar as it may rely on experts rather than popular will),³⁷ at the international level, it may actually be a way to appeal to and involve an audience beyond other states. That is, if international law claims are increasingly directed not just to other states, but also to civil society and individual citizens, risk (and the empirical approach it can bring with it) may be an attractive tool. The turn to risk may also be of a piece with the growth of a “global administrative space.”³⁸

³⁴ Ilias Plakokefalos, *Prevention Obligations in International Environmental Law*, 2 (Amsterdam Ctr. for Int'l L., Working Paper No. 2013-12, 2013), <https://perma.cc/4N2D-FP99>; see also *Costa Rica v. Nicar.*, *supra* note 17, at 23, ¶¶ 4, 53–57 (separate opinion by Cançado Trindade, J.) (discussing developments that “bring to the fore the relevance of the preventive dimension in contemporary international law”). While precaution is also much discussed, its current status is somewhat uncertain. Cf. Alexander Gillespie, *The Precautionary Principle in the Twenty-First Century: A Case Study of Noise Pollution in the Ocean*, 22 INT'L J. OF MARINE & COASTAL L. 61, 70 (2007) (“[O]utside of the explicit adoption of the [precautionary] principle in some international texts, it has no general application.”); Appellate Body Report, *EC Measures Concerning Meat and Meat Products (Hormones)*, ¶ 123, WTO Doc. WT/DS26/AB/R (Jan. 16, 1998) (“The precautionary principle is regarded by some as having crystallized into a general principle of customary international environmental law. Whether it has been widely accepted by Members as a principle of general or customary international law appears less than clear.”) (emphasis added).

³⁵ See, for example, Comm. on the Elimination of Discrimination Against Women, General Recommendation No. 19: Violence Against Women, ¶ 24(a), U.N. Doc. A/47/38 (1993) (“States parties should take appropriate and effective measures to overcome all forms of gender-based violence, whether by public or private act.”) (emphasis added); Inter-American Convention on the Prevention, Punishment and Eradication of Violence Against Women, art. 7(b), June 9, 1994, 33 I.L.M. 1534 (“[A]pply due diligence . . .”).

³⁶ See, for example, Tsagourias, *supra* note 15, at 13.

³⁷ See Ureña, *supra* note 12, at 817 (citing sources).

³⁸ Cf. Nico Krisch & Benedict Kingsbury, *Introduction: Global Governance and Global Administrative Law in the International Legal Order*, 17 EUR. J. INT'L LAW 1, 1 (2006) (describing the global administrative

This Article seeks to unpack the rise of risk at the international level and make three contributions. First, it uses illustrative episodes, particularly from the history of prevention (and, to a limited extent, precaution³⁹) and due diligence, to sketch the story of this rise. It strives to go beyond the usual account, to look across disciplines, and to apply a more rigorous taxonomy to the *roles* risk has played. Second, it posits and seeks to illuminate a recent trend in favor of increasing use of risk in international law.

Third, and finally, the Article offers tentative explanations for this trend and thoughts on the potential consequences thereof. For example, one such consequence is that international courts and tribunals may not be well suited to reviewing risk analysis (or the decisions that flow from such analysis). A second consequence might be the potential for horizontal fragmentation (that is, the potential for differences of understanding of international law among states as they reach different conclusions about the risks presented by particular activities and hence the potential that state practice and *opinio juris* will begin to diverge, creating different “international laws”).

The Article proceeds in six parts. In Part II, I set the stage by describing the U.N. Security Council’s increasing use of risk-based approaches. In Part III, I go back in time to explain how we got to where we are today, focusing in particular on the development of the prevention and due diligence doctrines. In Section IV, I identify the broad range of areas and issues that are now addressed through the prism of risk, and use the taxonomy I have sketched above to describe them. In Part V, I offer potential reasons for why the use of risk may be increasing (and the consequences thereof), and in Part VI, I provide a brief conclusion.

II. THE U.N. SECURITY COUNCIL AND RISK

In this Part, I describe recent Security Council practice to give some sense of how prevalent risk-based approaches have become. The Security Council increasingly functions as a legislative or administrative body; at the same time, treaty-making has declined, making Council practice a useful lens for

space as one where “administrative functions are performed in often complex interplays between officials and institutions on different levels,” including the international level). On global governance generally, see the useful repository of papers at N.Y.U.’s Institute for International Law and Justice, www.iilj.org [<https://perma.cc/Y2SW-82X4>].

³⁹ Precaution, or the “precautionary approach,” is a term that is notoriously difficult to define. Many, however, cite the Rio Declaration as setting it forth in classical form. That declaration, in its Principle 15, states that “[i]n order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.” *Rio Declaration*, *supra* note 21. See generally *supra* note 21 and accompanying text.

understanding risk analysis.⁴⁰ I focus on two areas of Council practice in particular: sanctions and the related area of suppression of terrorist financing, and the protection of civilians. An analysis of these two areas shows how the Council is using risk in myriad ways: as obligation and as authorization, as process and as substance, and as a tool to be applied broadly or narrowly depending on the situation.

A. Sanctions

In this Section, I turn first to the ways in which the Security Council has made sanctions regimes more risk-based. The Security Council has traditionally used two principal tools in the sanctions space: (1) arms embargoes or other restrictions on transactions with or destined to a particular state; and (2) asset freezes or travel bans on identified individuals or entities.⁴¹ There are hybrid forms, such as the arms embargoes on particular individuals in Yemen⁴² and on individuals and entities associated with Al Qaeda,⁴³ but, at the risk of over-generalization, the former principally speaks to *what* is being transferred whereas the latter concerns *with whom* one is dealing. Moreover, the “what” and the “who” have tended to be predicated upon past conduct or an assessment of the current state of affairs.⁴⁴ The basis for imposing sanctions has not tended to be the likely future effect of a particular transaction or a person’s probable future conduct.⁴⁵

⁴⁰ See Stefan Talmon, *The Security Council as World Legislature*, 99 AM. J. INT’L L. 175, 175 (2005) (“As has recently been noted, the Security Council has entered its legislative phase.”).

⁴¹ These individuals or entities are commonly identified in an annex adopted as part of a Security Council resolution or in specific listing proposals that are then agreed upon by all Council members operating in the format of a Security Council sanctions committee.

⁴² S.C. Res. 2216, ¶ 14 (Apr. 14, 2015).

⁴³ S.C. Res. 2253, ¶ 2(c) (Dec. 17, 2015).

⁴⁴ We have begun to see self-judging assessments of whether individuals or entities should be subject to asset freezes or travel bans (in the sense that the freeze or the ban would apply to individuals or entities a state believes has engaged in sanctionable conduct, rather than to individuals or entities that have been identified by the Council). For instance, Resolution 2270 applied the DPRK asset freeze to entities a particular state deems associated with the DPRK WMD or missile programs. S.C. Res. 2270, *supra* note 25, at ¶ 32. And in Resolution 2178, the Council applied a travel ban to those about whom a state has credible information that provides reasonable grounds to believe he or she is seeking to enter their territory for the purpose of committing terrorist acts. S.C. Res. 2178, ¶ 8 (Sep. 23, 2014). Although these are important and novel developments in their own right, such approaches are not risk-based in the sense used by this Article insofar as they turn on a state’s understanding of the present state of affairs (that is, turning on questions such as whether a person is associated with a weapons program and what a person’s current intention may be), rather than a prediction regarding the future.

⁴⁵ At a more general level, of course, sanctions are meant to be preventative.

That recently changed.⁴⁶ Thus, for instance, the first sanctions resolution on the Democratic People's Republic of Korea (DPRK or North Korea), Resolution 1718,⁴⁷ took a relatively traditional approach, banning the export of certain identified items to the DPRK. But the next resolution, Resolution 1874, contained a provision calling upon states to prevent their nationals or entities organized under their laws from providing financial services that “could contribute” to the DPRK's weapons of mass destruction (WMD) or missile programs.⁴⁸ This was risk-based (most akin to a threat analysis), albeit hortatory. Only those services each state itself believed posed a sufficient risk of contributing to the DPRK's prohibited activities triggered the provision. Resolution 2094 went even further by making this provision binding.⁴⁹

The next DPRK sanctions resolution, Resolution 2270, added a new formulation—obligations triggered by a “determination” regarding whether items or services could contribute to activities of concern.⁵⁰ Thus, for instance, the resolution prohibits the sale or supply of “any item, except food or medicine, if the State determines that such item could directly contribute to the development of the DPRK's operational capabilities of its armed forces.”⁵¹

⁴⁶ There are some historical precedents for a risk-based approach, such as a travel ban on those “likely” to further or encourage Southern Rhodesian actions. *See* S.C. Res. 253, ¶ 5(b) (May 29, 1968). But, they are few and far between.

⁴⁷ I do not here describe Resolution 1695, which was somewhat unusual in structure. S.C. Res. 1695 (Jul. 15, 2006).

⁴⁸ S.C. Res. 1874, ¶ 18 (June 12, 2009); *see also id.* at ¶ 20 (applying the same standard to trade credits); *id.* at ¶ 28 (applying the same standard for training).

⁴⁹ S.C. Res. 2094, *supra* note 25, at ¶ 11. It also made binding an earlier non-binding provision regarding trade credits. *Id.* at ¶ 15. It further included a number of hortatory provisions regarding the prohibition of banking relationships, *id.* at ¶ 12, and the opening of representative offices, *id.* at ¶ 13, if the state had information that provided reasonable grounds to believe that these activities could contribute to the DPRK's prohibited activities. Unlike other ‘reasonable grounds’ type provisions, these *were* risk-based in that the question was not whether there was sufficient information to conclude that certain facts were true at the present, but whether there was a sufficient predicate to make a probability (risk) assessment.

⁵⁰ S.C. Res. 2270, *supra* note 25, at ¶ 8 (regarding items that could contribute to development of operational capabilities of DPRK armed forces); *id.* at ¶ 27 (regarding items that could contribute to WMD or missile programs). The resolution also requires states to close representative offices, subsidiaries or banking accounts in the DPRK if the state has credible information that provides reasonable grounds to believe these financial services could contribute to the DPRK's prohibited activities. *Id.* at ¶ 35; *see also id.* at ¶ 17 (requiring states to prohibit training of DPRK nationals that could contribute to proliferation sensitive activities); *id.* at ¶ 36 (prohibiting public or private financial support that could contribute to prohibited activities).

⁵¹ *Id.* at ¶ 8. There is an exception to this catch-all if the state further determines that the item would be exclusively for livelihood purposes. *Id.* An even more recent resolution, Resolution 2321, picked up on the precedent set by Resolution 2270 and provided for the imposition of certain measures *unless* the State determines that there is no risk. S.C. Res. 2321, ¶ 11 (Nov. 30, 2016) (emphasis added). That is, states are required to suspend scientific and technical cooperation involving persons

Measures of this form are not limited to the DPRK context. For instance, in Resolution 1929, the Council prohibited the transfer of items to Iran “if the State determine[d] they could contribute” to enrichment⁵² and prohibited the provision of financial services if the state had reasonable grounds to believe they could contribute to Iran’s proliferation-sensitive nuclear activities.⁵³

These resolutions not only are using risk, but using risk in different ways. A prohibition on transactions that pose a sufficient risk of contributing to prohibited programs relies on risk to impose a substantive obligation. Resolution 2270, on the other hand, which speaks of determinations regarding the sale or supply of certain items, is at least suggestive of a potential role for risk assessment procedures.⁵⁴

More broadly, the Security Council has increasingly imposed similar (albeit less reticulated) prevention and due diligence obligations on states with respect to terrorist financing. Thus, for instance, Resolution 1373 requires states to prevent and suppress the financing of terrorist acts.⁵⁵ Likewise, in the context of the Al Qaeda/ISIL asset freeze, states are required to prevent their nationals, individuals, and entities within their territory from making funds, financial assets, or economic resources available to designated individuals or entities.⁵⁶ As one commentator has put it:

Before the 9/11 terrorist attacks, states focused their compliance with the Terrorism Suppression Conventions almost exclusively on criminal law enforcement. . . . [I]ts application to terrorist offence is *post facto* and therefore not strictly preventive. Following 9/11 with the adoption of Security Council Resolution 1373 (2001) . . . states began to report on measures taken to prevent terrorists from gaining access to funds or from using their territories as a base of operations or indoctrination.⁵⁷

sponsored by or representing the DPRK unless “the State engaging in scientific or technical cooperation determines that the particular activity will *not* contribute to the DPRK’s proliferation sensitive nuclear activities or ballistic missile-related programmes.” *Id.* at ¶ 11(b) (emphasis added).

⁵² S.C. Res. 1929, *supra* note 25, at ¶ 13.

⁵³ *Id.* at ¶ 21; *see also id.*, at ¶¶ 23, 24.

⁵⁴ The exact import of this provision is not entirely clear—it could mean that states must make determinations (a procedural obligation) or the making of such a determination could trigger the obligation to prohibit the transaction (a substantive obligation) or some combination thereof.

⁵⁵ S.C. Res. 1373, ¶ 1(a) (Sept. 28, 2001).

⁵⁶ S.C. Res. 2253, *supra* note 43, at ¶ 2(a). The Security Council took a similar approach in Resolution 2178 on Foreign Terrorist Fighters, imposing not only a criminalization obligation, but also a prevention obligation. S.C. Res. 2178, *supra* note 44, at ¶ 5.

⁵⁷ KIMBERLEY M. TRAPP, STATE RESPONSIBILITY FOR INTERNATIONAL TERRORISM 76 (2011). There are limited risk-based provisions in some of the terrorism conventions. *See, for example*, International Convention for the Suppression of the Financing of Terrorism, art. 18(1)(b), Dec. 9, 1999, G.A. Res. 54/109, 39 I.L.M. 270.

My argument in this Section is not that this trend in Security Council sanctions practice means it has abandoned other tools. Of course, blunter approaches remain in the Security Council's arsenal. Thus, for instance, Resolution 2371 prohibited all trade with the DPRK in certain sectors (including, for instance, coal and iron). And, Resolution 2375 extended those prohibitions to natural gas and textiles, and imposed a cap on the amount of refined petroleum that could be sold to the DPRK. Indeed, as the crisis regarding the DPRK has deepened, and in particular in light of the way in which all sectors of the DPRK economy have some relationship to the DPRK's nuclear and ballistic missile programs, risk-mitigation measures may be insufficient. Rather, my argument here is that the Council has begun to use risk-based tools in its sanctions practice; and the Council will surely use them again in addressing threats for which they are appropriate.⁵⁸

B. Protection of Civilians

In this Section, I turn next to a second area of recent Security Council practice that has relied on risk assessments: protection of civilians mandates. In general, unlike the sanctions regimes I described in the prior Section, pursuant to which the Council imposed *obligations* on states where there was sufficient risk, these examples are of *authorizations* to take action on the basis of risk.⁵⁹

Historically, peacekeepers were expected to respond to outbreaks of violence when they occurred. The Brahimi report, for instance, suggested peacekeepers should be authorized to respond when they “witness violence against civilians.”⁶⁰ More recently, however, peacekeeping missions with protection-of-civilians mandates have been expected to analyze threats and prevent them from materializing.

Protection of civilians mandates are more and more common in contemporary peacekeeping missions,⁶¹ often taking the form of an authorization

⁵⁸ Cf. Section V.A, *infra*.

⁵⁹ Cf. Scott Sheeran & Catherine Kent, *Protection of Civilians, Responsibility to Protect, and Humanitarian Intervention: Conceptual and Normative Interactions*, in PROTECTION OF CIVILIANS 29, 56 (Haidi Willmot et al. eds., 2016) (“[W]hile mandates provide a right to use force, whether they imply an *obligation* as such is unclear.”); Siobhan Wills, *International Responsibility for Ensuring the Protection of Civilians*, in PROTECTION OF CIVILIANS, *supra*, at 224, 228–31. The U.N.’s human rights due diligence policy is an example of risk giving rise to an obligation in a related area.

⁶⁰ See U.N. Secretary-General, *Rep. of the Panel on United Nations Peace Operations*, ¶ 62, U.N. Doc. A/55/305-S/2000/809 (Aug. 21, 2000); see also S.C. Pres. Statement 1999/6 (Feb. 12, 1999).

⁶¹ Sheeran & Kent, *supra* note 59, at 42 (“A critical development in U.N. peacekeeping since the late 1990s has been the inclusion of the use of force to protect civilians as a mission task.”). The first peacekeeping mission to have such a mandate was the U.N. Mission in Sierra Leone in 1999. As of 2016, fourteen missions had such a mandate. *Id.* at 44.

to use force to protect (without prejudice to the primary responsibility of the territorial state) “civilians under threat of physical violence.”⁶² The way the Council has glossed such mandates makes clear that in the sense used here, “threat” is risk-based. For instance, the United Nations Multidimensional Integrated Stability Mission in Mali (MINUSMA) has been tasked with stabilizing “areas where civilians are at risk,” and protection of civilians is defined to include “active and effective patrolling in areas where civilians are at risk.”⁶³ Likewise, the United Nations Mission in South Sudan (UNMISS) has been mandated to identify threats against civilians “in areas at high risk.”⁶⁴

U.N. doctrine documents confirm this. The 2011 Framework for Drafting Comprehensive Protection of Civilians (POC) Strategies in U.N. Peacekeeping Operations counseled “[a]rticulat[ing] actual and potential POC risks in the mission area.”⁶⁵ Likewise, a Department of Peacekeeping Operations/Department of Field Support policy document speaks of “[f]orward-looking threat and risk assessment [that] will enable the mission to anticipate and prevent violence before it occurs.”⁶⁶

Beyond U.N. peacekeeping, the Security Council has also authorized states to use force in Libya where civilians were under threat of attack.⁶⁷ And, the U.N. has promulgated a human rights due diligence policy that provides that where U.N. entities are contemplating support to non-U.N. security forces, they must make an “assessment of the risks”⁶⁸ and must not provide support under certain conditions.

⁶² See, for example, S.C. Res. 2295, ¶ 19(c)(1) (June 29, 2016); S.C. Res. 2327, ¶ 7(a)(1) (Dec. 16, 2016); S.C. Res. 2301, ¶ 33(a)(i) (July 26, 2016).

⁶³ S.C. Res. 2295, *supra* note 62, at ¶ 19(c)(ii).

⁶⁴ S.C. Res. 2327, *supra* note 62, at ¶ 7(a)(ii); see also S.C. Res. 2301, *supra* note 62, at ¶ 33(a)(i) (“To protect . . . at risk communities, while mitigating risks to civilians posed by its military and police operations.”); S.C. Res. 2348, ¶ 34(i)(b) (Mar. 31, 2017) (“[I]dentify[ing] threats to civilians and implement[ing] existing *prevention* and response plans . . .”) (emphasis added).

⁶⁵ U.N. Office for the Coordination of Humanitarian Affairs, Framework for Drafting Comprehensive Protection of Civilians (POC) Strategies in UN Peacekeeping Operations, 1 (2011), <https://perma.cc/M6VB-QEDX>.

⁶⁶ U.N. Department of Peacekeeping Operations, Department of Field Support, The Protection of Civilians in United Nations Peacekeeping, ¶ 34 (Apr. 1, 2015), <https://perma.cc/C73U-YHKX>; see also Rep. of the Indep. High-Level Panel on U.N. Peace Operations, Uniting Our Strengths for Peace—Politics, Partnership and People, ¶ 37, U.N. Doc. A/70/95-S/2015/446 (June 17, 2015).

⁶⁷ S.C. Res. 1973, ¶ 4 (Mar. 17, 2011) (authorizing force “to protect civilians and civilian populated areas under threat of attack in the Libyan Arab Jamahiriya”).

⁶⁸ U.N. Secretary-General, Identical Letters Dated Feb. 25, 2013 from the Secretary-General Addressed to the President of the General Assembly and to the President of the Security Council, annex I ¶ 2(a), U.N. Doc. A/67775-S/2013/110 (Mar. 5, 2013); *id.* at ¶ 14(f).

But the Council has not only considered the question of whether to apply risk-based standards, and not only used risk to create both obligations (sanctions) and authorizations (protection of civilians), but has also had to wrestle with the question of how to scope risk analysis. That is, the Council has had to consider the question, “what risk”—posed *by whom* and *to whom*—“should matter.” Here, again, protection of civilians is a useful lens. For instance, there has long been a robust debate regarding how to address risk to civilians posed by the host government. The U.N. Operation in Cote d’Ivoire (UNOCI), for example, was authorized to use force to protect civilians, in particular from the use of heavy weapons.⁶⁹ This “effectively . . . allowed for much greater intervention by the U.N. mission in the conflict” against outgoing President Gbagbo, who refused to relinquish power.⁷⁰ We have also recently begun to see discussion of *risk to whom*, beyond simply civilians. Thus, for instance, Resolution 2304 also called for the regional protection force in South Sudan to respond to potential attacks against international and national humanitarian actors.⁷¹

III. THE BIRTH OF RISK-BASED INTERNATIONAL LAW

The Security Council practice I have described is only the tip of the iceberg. In this Part, I take a step back and offer a brief (and necessarily not exhaustive) history of risk analysis, principally through the lens of the work of the International Law Commission (ILC), focusing in particular on prevention and due diligence. In Section IV, I show how this evolving practice has culminated in the broad use of risk, in various ways, across various areas of law.

Early on, risk principally arose in two contexts. The first was state responsibility for harm to foreign nationals (as courts and tribunals wrestled with whether states had done enough to prevent such harm, that is, whether they had exercised due diligence in implementing a proto-prevention rule⁷²). The second was states’ authority to address threats, for instance when neutral states failed during armed conflict adequately to mitigate the risk of belligerent behavior in their waters. In both cases, although the relevant rules appeared facially to speak to a state’s prevention obligations, they essentially functioned as authorizations. That is, state responsibility for harm to foreign nationals fundamentally focused on the question of whether the state of nationality was entitled to bring a claim against the territorial state. Likewise, the law of neutrality was most concerned

⁶⁹ S.C. Res. 1975, ¶ 6 (Mar. 30, 2011).

⁷⁰ Wills, *supra* note 59, at 230.

⁷¹ S.C. Res. 2304, ¶ 10(c) (Aug. 12, 2016).

⁷² See Koivurova, *supra* note 19, at ¶ 4 (“[A] State could be held responsible if it was manifestly negligent, i.e. failed to exercise due diligence in trying to prevent, redress or punish the damage to the alien.”). I call it “proto-prevention” since much of the focus was in fact *ex post* rather than *ex ante*.

with whether, based on the threat presented by a belligerent operating in neutral waters, another belligerent should be authorized to use force despite the fact that force was being used on neutral territory. These two early examples of risk analysis differed, however, in that the risk element in the doctrine of state responsibility was at least in part assessed in more categorical terms, whereas the law of neutrality prescribed a more case-by-case approach.

During a second phase, which coincided with the ILC's early work on state responsibility as currently conceived (i.e., not limited to harm to foreign nationals), risk analysis began to be applied more broadly (that is, to additional areas of law). But the dominant paradigm remained one of risk as authorization, and prevention *qua* prevention was subordinate to the question of whether a claim could be brought for failure to exercise due diligence. During a third phase, however, risk as obligation began fully to emerge with a focus on prevention of transboundary harm (and, more broadly, the development of international environmental law).⁷³ At the same time, risk as authorization became perhaps less salient. During this phase, there was frequent resort to procedural obligations (such as an obligation to conduct an environmental impact assessment), which differed from earlier more substantive risk authorizations. I trace each of these three phases in the Sections that follow.

A. Phase 1: Early Due Diligence—State Responsibility and Neutrality

In this Section, I describe the early uses of risk analysis and make the case that the focus of risk analysis was on when and whether a state was authorized to act—whether to bring a claim or to use force. This origin story is twofold. The first part concerns the early law of state responsibility for harm to foreign nationals,⁷⁴ and in particular whether the lack of due diligence by one state permitted another state to pursue a claim against it, and the second part concerns the law of neutrality.⁷⁵ I will describe each in turn.

The paradigmatic example of a claim predicated upon harm by private citizens to a state's national was where the territorial state failed to offer justice in

⁷³ In part, this is the story of how due diligence in the context of state responsibility shifted from being a way to attribute conduct to a state to a primary norm of conduct. *Cf.* Koivurova, *supra* note 19, at ¶¶ 5–6.

⁷⁴ *ILA Study Group, First Report, supra* note 29, at 3 (“During the 19th and 20th centuries, due diligence had particular relevance in the context of the protection of aliens.”).

⁷⁵ As Justice Moore said in the *S.S. Lotus Case*, as early as 1927, “[i]t [was] well settled that a State [was] bound to use due diligence to prevent the commission within its dominions of criminal acts against another nation or its people.” *The Case of the S.S. Lotus (Fr. v. Turk.)*, Judgment, 1927 P.C.I.J. (ser. A) No. 10, ¶ 269 (Sept. 7, 1927), <https://perma.cc/A9JA-RQRP>.

the wake of the harm.⁷⁶ Thus, for instance, in a claim brought by a U.S. national arising from the death of her husband and son in Mexico, Mexico was found liable “by its failure to put the perpetrators to justice.”⁷⁷ This was not risk-based.⁷⁸

But this was not the only question relevant to such inter-state claims. Also relevant were: (1) whether the territorial state knew of a risk to the foreign national⁷⁹; and (2) whether the territorial state had the capacity to address the risk. These were more risk-based, although the former only insofar as knowledge could

⁷⁶ As Dr. Robert Barnidge has put it, “[t]he *Janes* claim [which was based on failure to respond to murders of Americans] ‘may be considered as the prototype.’” Robert P. Barnidge, Jr., *The Due Diligence Principle Under International Law*, 8 INT’L COMMUNITY L. REV. 81, 93 (2006) (citing *Janes v. United Mexican States* (U.S. v. Mex.), 4 R.I.A.A. 82 (1925)) (internal quotation marks omitted). *Cf. id.* at 94 (labeling this the “nonrepression” theory). See also Clyde Eagleton, *Denial of Justice in International Law*, 22 AM. J. INT’L L. 538, 540 (1928); F.V. García Amador (Special Rapporteur on State Responsibility), *Rep. on International Responsibility*, 173, 222, U.N. Doc. A/CN.4/96 (Jan. 20, 1956) (quoting the Sub-Committee report of the League of Nations Committee of Experts for the Progressive Codification of International Law) [hereinafter García Amador, *First Rep.*]. For instance, the Harvard Draft Convention on Responsibility of States for Damage Done in their Territory to the Person or Property of Foreigners stated that state responsibility may be incurred where the state failed to prevent injury and “local remedies have been exhausted without adequate redress.” Edwin M. Borchard, *The Law of Responsibility of States for Damage Done in their Territory to the Person or Property of Foreigners*, 23 AM. J. INT’L L. 131, 134 (1929).

⁷⁷ KULESZA, *supra* note 29, at 66. Many of the seminal cases of the U.S.-Mexico Claims Commission concerned this kind of “denial of justice.” Edwin M. Borchard, *Important Decisions of the Mixed Claims Commission United States and Mexico*, 21 AM. J. INT’L L. 516, 521 (1927). For a good example in another context, see Poggioli (It. v. Venez.), 10 R.I.A.A. 669 (1903), in which the umpire concluded that Venezuela was responsible where “the local government failed to take ordinary and necessary precautions and allowed the offenses complained of to go unpunished after becoming known.” *Id.* at 690. See also KULESZA, *supra* note 29, at 69 (discussing Poggioli and describing “the inaction of state bodies resulting in a gross denial of justice”).

⁷⁸ In this regard, I am not fully persuaded by the characterization by the International Law Association that the U.S.-Mexico Claims Commission articulated a set of objective factors to be taken into account in determining the content of the due diligence obligation. *ILA Study Group, First Report*, *supra* note 29, at 3.

⁷⁹ Thus, for instance, in *Boyd v. United Mexican States* (U.S.-Mex.), 4 REP. OF INT’L ARBITRAL AWARDS (1928), the U.S.-Mexico Commission relied in finding Mexico not liable on the fact that only minor crime had occurred before bandits shot and killed an American national, and no complaint of lack of protection had earlier been made to the Mexican government. *Id.* at 380. That is, under those circumstances, Mexico might not have known of the risk. By contrast, in *Chapman v. United Mexican States* (U.S.-Mex.), 4 REP. OF INT’L ARBITRAL AWARDS 632 (1930), a case where the Commission found Mexico liable, the Commission emphasized that the U.S. national who suffered harm had warned the Mexican government, but no Mexican official “had manifested more than a passing interest.” *Id.* at 633. *Cf.* Barnidge, *supra* note 76, at 96 (discussing a case where “Mexico had knowledge . . . [and how that] likely figured into the General Claims Commission’s calculus in reaching a finding of state responsibility”).

be constructive knowledge (since where the territorial state was explicitly warned of a credible threat, there was very little risk assessment for the state to make).⁸⁰

The question of state capacity as a basis for claims is perhaps most interesting for these purposes. In the *British Claims in Morocco*⁸¹ case, for instance, the arbitrator focused on what the territorial state could reasonably achieve.⁸² As Riccardo Pisillo-Mazzeschi has explained, by these lights the due diligence rule at the time concerned “possessing, on a permanent basis, a legal and administrative apparatus normally able to guarantee respect for the international norm on prevention.”⁸³ As another author pointed out at the time, the early doctrine of protection of nationals was “ultimately concerned with the possibility of maintaining a unified economic and social order for the conduct of international trade and intercourse among independent political units.”⁸⁴

Thus, insofar as risk featured in the early law of due diligence regarding protection of nationals, it was with respect to the risk of general lawlessness, or, occasionally, as proof of indirect knowledge. This was categorical risk assessment, in the sense that the question was whether the territorial state had structures in place to address *kinds of risk* (for example, crime). The law was little concerned with the specifics of individual cases. The focus, moreover, remained principally upon whether there were adequate local remedies.⁸⁵ As a consequence, risk ultimately played an *authorizing* function—that is, the existence of risk, often coupled with a failure to address the consequences of its materialization, authorized a state to make claims. There was little attention paid to the contours of states’ prevention obligations.

I will turn now to the law of neutrality. I contend that risk in this area of law was considered more contextually, but again it provided authorization for states

⁸⁰ Cf. Case Concerning the Corfu Channel (U.K. v. Alb.), Judgment, 1949 I.C.J. Rep. 4, 18–21 (Apr. 9).

⁸¹ Gr. Brit. v. Morocco, 2 R.I.A.A. 620 (2006) [hereinafter *British Claims in Morocco*].

⁸² See *id.* at 644 (the rule “offre en fait aux États, pour leurs ressortissants, le degré de sécurité auquel ils peuvent raisonnablement s’attendre” [the rule offers in fact to states, for their nationals abroad, the degree of security they could reasonably expect]); see also Riccardo Pisillo-Mazzeschi, *The Due Diligence Rule and the Nature of the International Responsibility of States*, 35 GER. Y.B. INT’L L. 9, 27 (1992). Cf. Case Concerning United States Diplomatic and Consular Staff in Tehran (U.S. v. Iran), Judgment, 1980 I.C.J. Rep. 3, ¶¶ 65–66 (May 24) (comparing Iran’s response to what it had done some months before in a comparable situation).

⁸³ Pisillo-Mazzeschi, *supra* note 82, at 26 (citing Gr. Brit. v. Morocco, *supra* note 81).

⁸⁴ FREDERICK S. DUNN, *THE PROTECTION OF NATIONALS: A STUDY IN THE APPLICATION OF INTERNATIONAL LAW* 1 (1932).

⁸⁵ García Amador, *First Rep.*, *supra* note 76, at 204 (calling exhaustion “[o]ne of the principles most firmly laid down in international law”). This preoccupation was driven by the view that wrongful acts were seen to “damage interests which, in the final analysis, vest in the State exclusively.” *Id.* at 181.

to act. The focus was not on what states were expected to do to address risk. The seminal early case in the law of neutrality was the Alabama Claims Arbitration of 1872. These claims involved British failure to halt construction of vessels that were armed and used by the Confederacy during the U.S. Civil War, despite U.S. warnings of the risk these vessels' construction posed. The Treaty of Washington, which established the arbitral tribunal that decided these claims, reflected agreement by the parties that a neutral state was expected to use due diligence to prevent the fitting out of a vessel it had reasonable grounds to believe was intended to cruise or carry out war.⁸⁶ The tribunal went on to hold the U.K. liable, relying in part on the warnings the U.S. had offered.⁸⁷ The tribunal specifically concluded that “‘due diligence’ . . . ought to be exercised by neutral governments in exact proportion to the risks to which either of the belligerents may be exposed, from a failure to fulfil [sic] the obligations of neutrality on their part.”⁸⁸ Thus, the tribunal appeared to require that a neutral government assess on a case-by-case basis the risk posed by particular activities. Subsequent treaties included language to similar effect.⁸⁹

But the law of neutrality was actually little concerned with glossing *ex ante* what a state was required to do to fulfill those obligations—characterized as a “comparatively simple duty”⁹⁰—and instead often focused on whether a belligerent was justified in taking action against an opposing vessel in a neutral’s territorial waters on the basis of the threat it presented where the neutral had failed

⁸⁶ THOMAS WILLING BALCH, THE ALABAMA ARBITRATION 119 (1900). The U.K. asserted that it did not accept that these principles reflected international law, but for purposes of friendly resolution of the Alabama Claims, the Tribunal should proceed as if they did. *Id.* at 120.

⁸⁷ *Id.* at 130 (“[I]t omitted, notwithstanding the warnings and official representations made by the diplomatic agents of the United States during the construction of the said number ‘290,’ to take in due time any effective measures of prevention.”).

⁸⁸ U.S. v. Gr. Brit., 29 R.I.A.A. 125, 129 (2012).

⁸⁹ Both the Hague Convention (V) Respecting the Rights and Duties of Neutral Powers and Persons in Case of War on Land art. 5, Oct. 28, 1907, 36 Stat. 2310, 1 Bevans 654, and the Hague Convention (XIII) Respecting the Rights and Duties of Neutral Powers in Naval War art. 25, Oct. 18, 1907, 36 Stat. 2415, 1 Bevans 723, included due diligence obligations. *See also* Hague Convention (XIII), *supra*, at art. 8 (“A neutral Government is bound to employ *the means at its disposal to prevent* . . . the departure from its jurisdiction of any vessel intended to cruise, or to engage in hostile operations.”) (emphasis added); Ashley Deeks, *Unwilling or Unable?: Toward a Normative Framework for Extraterritorial Self-Defense*, 52 VA. J. INT’L L. 483, 498 (2012).

⁹⁰ ROBERT W. TUCKER, THE LAW OF WAR AND NEUTRALITY AT SEA 228 (1955).

to execute its duties.⁹¹ Norway's investigation of the *Altmark*, and the U.K. action against that vessel, are good examples of this.⁹²

Thus, as one commentator has put it more generally, during the League of Nations period—and indeed, I would say, through World War II—there was “little attention given to prevention.”⁹³ Rather, to the extent risk arose, it arose principally in the context of substantive rules regarding authorization to take particular actions (whether with respect to claims or the use of force) on the basis of a failure to exercise due diligence or the resulting threat. In the next Section, I describe how the role risk played remained roughly similar through World War II and the post-war period in the sense that risk generally functioned as an authorization; I also demonstrate, however, how a predicate was being laid to risk's expansion, both with respect to its role and with respect to a broadening of the areas of law to which it was relevant.

B. Phase 2: *Trail Smelter* and the ILC's Initial Work on Modern State Responsibility

In this Section, I trace the story of due diligence through the World War II and post-war periods. This period is one of transition in that risk's role remained relatively static but two developments laid the groundwork for the subsequent dramatic expansion of risk's relevance to international law. Starting with the latter, the two key developments were: (1) the focus of state responsibility broadened, beyond exclusively harm to foreign nationals⁹⁴ and to include transboundary harm, as well as harm caused by non-state actors over which a state exercised sufficient control; and (2) increasing attention was paid to the quantum of harm (as had been the case with respect to neutrality doctrine), which started a more robust conversation about how to assess harm (and, ultimately, the risk thereof). Nevertheless, while risk began to feature more prominently, risk remained principally relevant with respect to questions of whether a state was authorized to act.

The first major change of this period was that due diligence mattered in areas of law beyond injury to foreign nationals. Perhaps the most prominent reflection

⁹¹ *Id.* at 220, 220 n.55 (noting that “a neutral state is not an insurer of fulfilment of its neutral duties” and arguing for the rights of a belligerent to take action in the event such duties are not fulfilled); *id.* at 226 & 226 n.68 (noting that the law “fails to indicate with precision the character and scope of the preventive obligation”); *see also id.* at 223 (discussing the situation where the neutral made appropriate efforts—but was unable ultimately—to suppress the threat posed by the vessel).

⁹² *Id.* at 237–38, 237–39 n. 87.

⁹³ KULESZA, *supra* note 29, at 120.

⁹⁴ *Cf. id.* at 120 (discussing League of Nations work as “limited to damages done to foreigners”).

of this is the *Trail Smelter* case.⁹⁵ That case concerned transboundary harm. Likewise, within the ILC in the early 1960s, there was robust debate about whether state responsibility should be made broader than the question of responsibility for harm to non-citizens⁹⁶ (and of course it was). Coupled with this subject-matter expansion, there was increasing focus on state support to non-state actors and when that should trigger state responsibility (as opposed simply to when it should be triggered by direct state action or state inaction). For instance, one author cites a Soviet complaint to the U.S. about the activities of anti-Castro forces in Cuba who were alleged to have shelled a Soviet merchant ship.⁹⁷ This line of logic ultimately (albeit later) culminated in the ICJ's *Nicaragua* case, in which the court focused on whether the U.S. exercised "effective control" of the contras for purposes of state responsibility.⁹⁸ These two developments opened the aperture with respect to *what* and *whose* risks were relevant.

The second major change was that attention was increasingly being paid to how to understand harm. Thus, while *Trail Smelter* is often cited in discussion of prevention of transboundary harm, the tribunal essentially assumed potential state responsibility for injurious acts by private parties.⁹⁹ Instead, its focus was on the definition of an injurious act.¹⁰⁰ Indeed, the tribunal's famous pronouncement is that the injury must be "of serious consequences and . . . established by clear and convincing evidence."¹⁰¹ This effected an important shift in focus from the conduct of the state alone to the harm. It was a predicate to a more robust use of risk analysis, which often requires understanding likely harm, and not just what a state did or did not do.

⁹⁵ *Trail Smelter Case* (U.S. v. Can.), 3 R.I.A.A. 1905 (2006).

⁹⁶ Roberto Ago (Chairman of the Sub-Committee on State Responsibility), *Rep. on State Responsibility*, [1963] 2 Y.B. Int'l L. Comm'n 253, UN Doc. A/CN.4/152 (Jan. 16, 1963).

⁹⁷ Barnidge, *supra* note 76, at 109.

⁹⁸ *Military & Paramilitary Activities in & Against Nicaragua* (Nicar. v. U.S.), Judgment, 1986 I.C.J. Rep. 14, ¶ 115 (June 27). See generally Oona A. Hathaway et al., *Ensuring Responsibility: Common Article 1 and State Responsibility for Non-State Actors*, 51 TEX. L. REV. 539, 549 (2017).

⁹⁹ Alexandre Kiss & Dinah Shelton, *Strict Liability in International Environmental Law*, in LAW OF THE SEA, ENVIRONMENTAL LAW & SETTLEMENT OF DISPUTES: LIBER AMICORUM JUDGE THOMAS A. MENSAH 1131, 1131 (Tafsir Malick Ndiaye & Rüdiger Wolfrum eds., 2007) ("The arbitral agreement itself recognized the responsibility of a State for the acts of non-State actors as well as those of the State or its organs.").

¹⁰⁰ *Trail Smelter*, *supra* note 95, at 1963 ("[T]he real difficulty often arises rather when it comes to determine what . . . is deemed to constitute an injurious act.").

¹⁰¹ *Id.* at 1965. Cf. Stephen C. McCaffrey, *Of Paradoxes, Precedents, & Progeny: The Trail Smelter Arbitration 65 Years Later*, in TRANSBOUNDARY HARM IN INTERNATIONAL LAW: LESSONS FROM THE TRAIL SMELTER ARBITRATION 34, 38 (Rebecca M. Bratspies & Russell A. Miller eds., 2006) ("The U.S. view seems to have been that if 'fumigations' sufficient to cause injury continued to occur in Washington, the United States would have grounds for complaint, no matter what remedial works had been installed by the company, and regardless of their effect.").

Despite these changes, risk analysis remained principally a source of authorization—and not just under the law of neutrality (although that continued to be an important focus¹⁰²). For example, while the theory of defense of nationals was debated by this point, any right to use force that was recognized was seen not as arising from a breach of an obligation, but rather as the exercise of a right.¹⁰³ Similarly, a focus on authorization continued to characterize the discussion of state responsibility.¹⁰⁴ Indeed, the very use of the term “responsibility” in the ILC’s papers was initially understood to mean the consequence of unlawful conduct (whereas “liability” described a primary obligation).¹⁰⁵

Another element of continuity is that risk continued to be considered generally (facially) under a variety of circumstances, rather than on a case-by-case basis. Thus, F.V. García Amador (the ILC’s first special rapporteur on state responsibility) characterized what was at issue in *Trail Smelter* as a breach of a general duty “implicit in the function of the State . . . namely, the duty to ensure

¹⁰² A key development during this period was the U.S. use of force in Cambodia. *See generally* STEPHEN C. NEFF, *THE RIGHTS & DUTIES OF NEUTRALS: A GENERAL HISTORY* 211–12 (2000) (discussing this as an example of the invocation of self-defense). Then-State Department Legal Adviser John Stevenson explained that the North Vietnamese had used Cambodian territory for attacks against South Vietnam and that while the Cambodian government had made some effort to suppress these attacks, they had failed to accomplish this end. Stevenson then said that where compensation for breach of a neutral’s duties would not be sufficient, “the injured belligerent has the right of self-help or, at a minimum, the right to exercise such self-help consistent with the right of self-defense.” John R. Stevenson, Legal Advisor, U.S. Dep’t of State, Statement to the N.Y.C. Bar Association on Legal Aspects of U.S. Military Action in Cambodia (May 28, 1970), <https://perma.cc/W6N4-6UDS>. In some sense, this could be considered a remedy for breach of a risk obligation. But the focus was sufficiently squarely on when a state was authorized to take action, that I classify this as risk as authorization. *Cf. supra* note 30.

¹⁰³ D.W. BOWETT, *SELF-DEFENSE IN INTERNATIONAL LAW* 90 (1958). As Bowett has remarked, “the essence of action in self-defence is that it should be a measure of protection, not punishment.” *Id.* at 99. Indeed, the view was taken that before seeking to take action to protect nationals, a state must exhaust local remedies. Kristen E. Eichensehr, Note, *Defending Nationals Abroad: Assessing the Lawfulness of Forcible Hostage Rescues*, 48 VA. J. INT’L L. 452, 472 (2008). Exhaustion requirements tend to deflect attention from what a state is expected to do *ex ante* and keep the focus on the circumstances under which another state is authorized to take action. *See supra* Section III(A).

¹⁰⁴ The first draft articles continued to focus on the question of local remedies (and hence authorization to bring claims). *See* F.V. García Amador (Special Rapporteur on State Responsibility), *Second Rep. on International Responsibility*, 105, UN Doc. A/CN.4/106 (Feb. 15, 1957); *see also* Roberto Ago (Special Rapporteur on State Responsibility), *First Rep. on State Responsibility*, 143, 145, [1969] 2 Y.B. Int’l L. Comm’n 125, U.N. Doc. A/CN.4/217 (May 7, 1969) (discussing the 1961 revised Harvard Draft Convention on Responsibility of States for Damage Done in their Territory to the Person or Property of Foreigners, which suggested that due diligence was only breached if the territorial state failed to apprehend the non-state actor who caused injury).

¹⁰⁵ Julio Barboza (Special Rapporteur on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law), *Second Rep. on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law*, 145, UN Doc. A/CN.4/402 (May 13, 1986). This understanding subsequently shifted. *Id.* at 146.

that in its territory conditions prevail which guarantee the safety of persons and property.”¹⁰⁶ Likewise, the prevention obligations of the Vienna Convention on Diplomatic Relations with respect to the inviolability of diplomatic missions and personnel were little considered¹⁰⁷ until a subsequent rash of kidnappings and hostage takings prompted the General Assembly to adopt a new Convention on the Prevention and Punishment of Crimes against Internationally Protected Persons, including Diplomatic Agents. Even that latter Convention focused principally on criminalization (akin to the earlier debate about whether the territorial state had seen justice done for crimes against a foreign national), rather than setting forth a more detailed set of risk-based obligations. This is also the period when there is considerable growth in treaty-based investment protections.¹⁰⁸ Many such treaties included a requirement that “[i]nvestment shall . . . enjoy full protection and security.”¹⁰⁹ During the immediately post-war period, this was generally seen as protection against risks of an unfair legal system.¹¹⁰

Thus, the role risk played remained relatively static. But as the scope of legally-relevant risk broadened, and as harm increasingly came into focus, the way was cleared for risk to play new legally-relevant roles. In the next Section, I turn to those developments.

C. The Rise of Risk as Obligation

In this Section, I outline how risk began playing different roles beginning roughly in 1970, when the ILC inaugurated its work on international liability for injurious consequences arising out of acts not prohibited by international law. In particular, this period was marked by a flowering of risk as obligation, as opposed to authorization, by virtue of a sustained focus on what prevention rules entail when married with a due diligence standard. Risk also began to give rise to *procedural* obligations and was considered more frequently on a case-by-case rather than categorical basis (although case-by-case analysis was not always a deep look).

At the same time, through roughly 2001, while the question of which risks were relevant continued to receive ever more expansive answers (for instance,

¹⁰⁶ García Amador, *Second Rep.*, *supra* note 104, at 106.

¹⁰⁷ EILEEN DENZA, *DIPLOMATIC LAW: COMMENTARY ON THE VIENNA CONVENTION ON DIPLOMATIC RELATIONS* 258 (2016); *see also* *Ignatiev v. United States*, 238 F.3d. 464 (D.C. Cir. 2001).

¹⁰⁸ *Cf. ILC Study Group, First Report*, *supra* note 29, at 6 (linking due diligence to investment law); George K. Foster, *Recovering ‘Protection and Security’: The Treaty Standard’s Obscure Origins, Forgotten Meaning, and Key Current Significance*, 45 *VAND. J. TRANSNAT’L. L.* 1095, 1126 (2012) (linking this to the protection of aliens doctrine and discussing Mexico-U.S. Mixed Claims Commission cases).

¹⁰⁹ Foster, *supra* note 108, at 1097.

¹¹⁰ *Id.* at 1133 (citing U.S. DEP’T OF STATE, PUB. NO. 6565, *COMMERCIAL TREATY PROGRAM OF THE UNITED STATES* (1958)).

private actions, and not just those of which the state had knowledge or that the state supported, were deemed to present legally relevant risks), with respect to subject matter, risk analysis stayed in a somewhat narrow lane (generally transboundary environmental harm). Likewise, while risk-based law began to move slightly away from the dyadic paradigm—which had, to a certain extent, flowed from the concept of risk as claims-authorization¹¹¹—the conversation about *which risk bearers* were relevant was only just beginning.

To illustrate these trends, in this Section I focus in particular on the evolution of the law governing transboundary harm (and related developments with regard to due diligence and prevention), the development of the precautionary approach (and its treatment in litigation, in particular before the ICJ, the WTO Appellate Body, and the ITLOS), and debate regarding the defense of nationals. This is necessarily something of a sketch, given the vast literature on the first two topics in particular.

Perhaps the most important development—and certainly the first—was that, in 1970, the ILC divided its project on state responsibility into state responsibility and “risk liability,”¹¹² which was understood to be a set of rules governing the relationship between states with respect to activities that might cause or had caused harm, but which were not internationally wrongful. A key difference between state responsibility and state liability was that state responsibility required wrongful conduct, but not necessarily harm, whereas state liability required harm (or at least a risk thereof), but not unlawful conduct.¹¹³ This

¹¹¹ XUE HANQIN, *TRANSBOUNDARY DAMAGE IN INTERNATIONAL LAW* 3 (2003); Catherine Tinker, *State Responsibility and the Precautionary Principle*, in *THE PRECAUTIONARY PRINCIPLE AND INTERNATIONAL LAW: THE CHALLENGE OF IMPLEMENTATION* at 53, 54 (David Freestone & Ellen Hey eds., 1996) (discussing “the classic model, which poses a bilateral conflict between one state as actor and another state as victim, with significant physical harm occurring across national boundaries”); see also JAMES CRAWFORD, *BROWNLIE’S PRINCIPLES OF PUBLIC INTERNATIONAL LAW* 581 (2012) (discussing the view that “only states may invoke the responsibility of other states, and only when specially affected by the breach”); Roberto Ago (Special Rapporteur on State Responsibility), *Second Rep. on State Responsibility*, [1970] 2 Y.B. Int’l L. Comm’n 177, 184, UN Doc. A/CN.4/233 (Apr. 20, 1970) (suggesting that a wrongful act gives rise to a right to reparation on the part of one specific state).

¹¹² Ago, *Second Rep.*, *supra* note 111, at 178; see also Alan E. Boyle, *State Responsibility and International Liability for Injurious Consequences of Acts Not Prohibited by International Law: A Necessary Distinction?*, 39 INT’L & COMP. L.Q. 1, 3 (1990). *Cf.* 1013th Meeting on State Responsibility, [1969] 1 Y.B. Int’l L. Comm’n 114, U.N. Doc. A/CN.4/217 (noting the suggestion by some ILC members to address risk under the rubric of state responsibility, which Special Rapporteur Ago disclaimed in his first report).

¹¹³ Mark A. Drumbl, *Trail Smelter and the International Law Commission’s Work on State Responsibility for Internationally Wrongful Acts and State Liability*, in *TRANSBOUNDARY HARM IN INTERNATIONAL LAW*, *supra* note 101, at 85, 87 (“State liability differs from state responsibility insofar as it covers situations in which no illegal or unlawful conduct has occurred, although the conduct has triggered harm.”); Sompong Sucharitkul, *State Responsibility and International Liability under International Law*, 18 LOY. L.A.

greater focus on harm, and, indeed, *risk* of harm,¹¹⁴ as opposed to the attribution of wrongful conduct,¹¹⁵ opened the door significantly to risk analysis.¹¹⁶ As Gunther Handl has said, the ILC's work exceeded "a study of reparation . . . [and began to cover] the management, in general, of transnational risks."¹¹⁷

INT'L & COMP. L.J. 821, 834 (1996) ("Injury or damage is not an element of state responsibility" but "under international liability, there is no breach of a primary obligation if no appreciable harm or injurious consequence results."). The theory at the time was that knowing transboundary harm might engage state responsibility, and so too might a breach of a state's due diligence obligations to prevent harm. Cf. Gunther Handl, *Trail Smelter in Contemporary International Environmental Law: Its Relevance in the Nuclear Energy Context*, in *TRANSBOUNDARY HARM IN INTERNATIONAL LAW*, *supra* note 101, at 125, 130, 132 ("Trail Smelter suggests that any such effects [significant transboundary effects] would constitute internationally prohibited conduct[.]" and lack of due diligence "bears on whether there has been a breach of a state's obligation entailing responsibility for the transboundary harm occasioned."). But an *accident* would not, *see Report of the International Law Commission on the Work of its Forty-Fifth Session*, U.N. Doc. A/40/10, *reprinted in* [1993] 2 Y.B. Int'l L. Comm'n 24 (part 2) ("The Special Rapporteur explained that activities involving risk were chiefly those which may cause transboundary harm due to accidents."). Gunther Handl points in particular to situations where there is a "[s]tatistical probability that given the nature of the activity concerned, harm will occur, reasonable precautionary measures notwithstanding." Gunther Handl, *Liability as an Obligation Established by a Primary Rule of International Law*, 16 NETH. Y.B. INT'L L. 49, 64 (1985).

¹¹⁴ *International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law*, [1992] 2 Y.B. Int'l L. Comm'n 42, 51, U.N. Doc. A/47/10 ("Attention should be focused at this stage on drafting articles in respect of activities having a risk of causing transboundary harm."). One of the justifications for discussing risk was that states had not consented to assume certain risks emanating from conduct on the territory of their neighbors—unlike nationals affirmatively choosing to reside on the territory of a state other than their state of nationality. *See Report of the Working Group on International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law*, [1978] 2 Y.B. Int'l L. Comm'n 151, U.N. Doc. A/CN.4/L.284 ("In the situations that fall within the present topic, there is no presumption of willingness to accept risks or harmful consequences because they are tolerated within the territory or control of the State in which those risks or harmful consequences arise.") [hereinafter *International Liability Working Group*]; KULESZA, *supra* note 29, at 170 ("[I]here is no presumed consent of the state to take upon itself the risk of dangerous acts.").

¹¹⁵ Knowledge was not required. There was some discussion of whether the territorial state must have had "means of knowing" of the risk in order for the draft articles to apply. This proposal was primarily to shelter developing countries. Julio Barboza (Special Rapporteur on International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law), *Fourth Rep. on International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law*, 262, U.N. Doc. A/CN.4/413 (Apr. 6, 1988) (A "means of knowing" test has as "its primary aim . . . to protect developing countries, which sometimes lack the means to be aware of everything that goes on within their territory"). But this concept was ultimately rejected. *Id.* at 263 (ultimately suggesting deletion of the test).

¹¹⁶ The first draft articles identified the probability of harm as one of the relevant factors to balance in a proposed balancing test. Robert Q. Quentin-Baxter (Special Rapporteur on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law), *Third Rep. on International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law*, 64, § 6(1), U.N. Doc. A/CN.4/360 (June 23, 1982).

¹¹⁷ Handl, *supra* note 113, at 50.

The state liability project relied on risk to impose prevention-type obligations, in particular not to cause harm, or to mitigate the risk thereof.¹¹⁸ As Robert Quentin-Baxter, the ILC's first special rapporteur on the subject, said, liability was meant as "a negative asset, an *obligation*, in contra-distinction to a right."¹¹⁹

The ILC also had long debates regarding how to assess risk, in particular how categorical or how contextual an approach should be taken. The ILC sought to establish a threshold of potential harm that would trigger application of what ultimately became draft articles on the prevention of transboundary harm (in other words, *de minimis* risk of harm was not foreseen as within the scope of coverage).¹²⁰ This led to questions regarding: whether risk should have a qualitative detectability;¹²¹ whether the ILC should promulgate a list of risky activities, which could then be periodically updated;¹²² and at what level of specificity risk should

¹¹⁸ Cf. International Law Commission, *Draft Articles on Prevention of Transboundary Harm from Hazardous Activities and Commentaries Thereon*, U.N. Doc. A/56/10 (2001), reprinted in [2001] 2 Y.B. Int'l L. Comm'n 153 [hereinafter *Draft Articles on Prevention of Transboundary Harm*] ("The State of origin shall take all appropriate measures to prevent significant transboundary harm or at any event to minimize the risk thereof.").

¹¹⁹ Robert Q. Quentin-Baxter (Special Rapporteur on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law), *First Rep. on International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law*, 250, U.N. Doc. A/CN.4/334 (June 24, 1980) (emphasis added); see also Robert Q. Quentin-Baxter (Special Rapporteur on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law), *Fourth Rep. on International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law*, 213, UN Doc. A/CN.4/373 (June 27, 1983).

¹²⁰ The threshold ultimately chosen was "significant" risk. *Draft Articles on Prevention of Transboundary Harm*, *supra* note 118, at 153 ("The State of origin shall take all appropriate measures to prevent significant transboundary harm . . ."); *id.* at 152 ("The obligations of prevention imposed on States are thus not only reasonable but also sufficiently limited so as not to impose such obligations in respect of virtually any activity.").

¹²¹ Before "significant risk" was chosen, Barboza had suggested that the standard be "appreciable risk," which he defined as "of some magnitude and that it must be either clearly visible or easy to deduce from the properties of the things or materials used." Julio Barboza (Special Rapporteur on International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law), *Third Rep. on International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law*, 56, U.N. Doc. A/CN.4/405 (Mar. 16, 1987). The ILC debated whether this standard, which connotes detectability, should be preferred to "significant," which connotes the quantum of risk. *International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law*, [1989] 2 Y.B. Int'l L. Comm'n 83, 91–92, U.N. Doc. A/44/10 at 91–92. (The Special Rapporteur appeared to take the view that "appreciable" meant both detectable and significant. Julio Barboza (Special Rapporteur on International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law), *Sixth Rep. on International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law*, 88, U.N. Doc. A/CN.4/428 (Mar. 15, 1990).)

¹²² *Documents of the Thirty-Ninth Session*, [1987] 2 Y.B. Int'l L. Comm'n 44, U.N. Doc. A/CN.4/SERA/1987. The draft Articles proposed by the Special Rapporteur in 1990 included an

be assessed (for example, at the level of an “activity” or as applied in particular circumstances).¹²³ All of this evidenced a critical inquiry into whether to apply a contextual or categorical approach, and what each would mean.¹²⁴

Finally, while the draft articles the ILC ultimately proposed included a due diligence obligation with respect to the prevention of harm, the ILC’s work on risk assessment *procedures* was more detailed.¹²⁵ Indeed, this period saw the

exemplary list of dangerous substances. Barboza, *Sixth Rep.*, *supra* note 121, at 105. Cf. Julio Barboza (Special Rapporteur on International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law), *Eighth Rep. on International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law*, 61, U.N. Doc. A/CN.4/443 (Apr. 15, 1992) (“The Commission and the Sixth Committee did not prove receptive to the inclusion of such a concept or, consequently, to the resulting amendments.”).

¹²³ Barboza, *Fourth Rep.*, *supra* note 115, at 256 (“[T]he risk must be general. In other words, it need not relate to specific cases, since our point of reference is no longer the act but the activity.”). Questions were also raised regarding whether certain activities should give rise to strict liability even where appropriate preventive measures were taken (because of the magnitude of the likely harm). Gunther Handl, *State Liability for Accidental Transnational Environmental Damage by Private Persons*, 74 AM. J. INT’L L. 525, 541 (1980) (“[T]he crucial element in a state’s original liability for private activities turns out to be the transnational significance of the risk.”); HANQIN, *supra* note 111, at 302 (“[J]urists propose[d] that . . . strict liability should be imposed on States . . . when transboundary damage is caused by abnormally dangerous activities.”). Compare Barboza, *Fourth Rep.*, *supra* note 115, at 254 (suggesting a standard of “highly likely to cause transboundary injury”) (emphasis added), and *Report of the Commission to the General Assembly on the Work of the Fortieth Session*, 1988 2 Y.B. INT’L L. COMM’n 14, A/CN.4/SER.A/1988 (“The Special Rapporteur admitted that the concept of risk as defined in draft article 2 (a) did not seem to cover properly activities with low risk but with the potential of great harm.”), with Julio Barboza (Special Rapporteur on International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law), *Fifth Rep. on International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law*, 134, U.N. Doc. A/CN.4/423 (1989) (defining risk to include “both the low probability of very considerable [disastrous] transboundary harm and the high probability of minor appreciable harm”). Cf. Handl, *Trail Smelter in Contemporary International Environmental Law*, *supra* note 113, at 133 (“[T]he Tribunal’s decision does not directly cast a light on the status of threatened transboundary harms when the possible consequences are extremely serious but are low probability.”).

¹²⁴ Cf. *Draft Articles on Prevention of Transboundary Harm*, *supra* note 118, at 149–50 (noting that the idea of a list had been rejected but that the word “activity” had been retained, which had been understood to be somewhat categorical). The ESPOO convention, on the other hand, includes a list of specific activities in its Appendix 1, Convention on Environmental Impact Assessment in a Transboundary Context art. 1(3), Jan. 14, 1991, 30 I.L.M. 802 [hereinafter ESPOO Convention], and has procedures for identifying additional activities that should be subject by consent of the parties to the procedures of the convention, *id.* at art. 2(5).

¹²⁵ Compare *Draft Articles on Prevention of Transboundary Harm*, *supra* note 118, at 153 (draft article 3 is “in the nature of a statement of principle”), and *id.* at 155 (discussing different due diligence owed by states of differing levels of development), with *id.* at 157–66 (draft articles of a more procedural nature). Cf. Pemmaraju Sreenivasa Rao (Special Rapporteur on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law: Prevention of Transboundary Damage from Hazardous Activity), *First Rep. on Prevention of Transboundary Damage from Hazardous Activities*, 209–18, U.N. Doc. A/CN.4/487 (Mar. 18, 1998) (identifying precautions, which may also be procedural, polluter pays, which concerns liability not risk assessment, and equity, capacity, and good governance as the “substantive” principles underlying the enterprise).

inauguration of reticulated procedural obligations. Elements of the schematic outline that the ILC originally considered in its work on the topic were entirely procedural in nature.¹²⁶ And, ultimately, commentators¹²⁷ and the ILC began to focus on environmental impact assessments.¹²⁸ As one commentator has put it, “[i]ncreasingly, the international legal community deals with the need to mitigate risks and prevent environmental harm through a sophisticated network of international procedural obligations.”¹²⁹

The focus on harm, and its prevention, not only reflected a turn to risk as obligation (rather than risk as authorization), but it also broadened the aperture to permit greater scrutiny of non-state actor conduct. That is, a greater set of risks became legally relevant. As Quentin-Baxter said in his first report, “[a] State within whose jurisdiction such an injury or danger is caused is not justified in refusing its co-operation upon the ground that the cause of the danger was not, or is not,

¹²⁶ Quentin-Baxter, *Third Rep.*, *supra* note 116, at 62–64. This is not surprising, since the core of the ILC’s early thinking on the subject had been that harm that might be caused by acts not prohibited by international law should generally be addressed by a balancing test. International Liability Working Group, *supra* note 114, at 151. The expectation was that states would agree on specific regimes to cover such activity. Quentin-Baxter, *First Rep.*, *supra* note 119, at 250.

¹²⁷ Gunther Handl, *The Principle of ‘Equitable Use’ As Applied to Internationally Shared Natural Resources: Its Role in Resolving Potential International Disputes Over Transfrontier Pollution*, 14 REVUE BELGE DE DROIT INT’L 40, 56 (1978) (“In fact they [duties to negotiate] presuppose what might be called the ‘duty to make an environmental impact assessment.’”).

¹²⁸ As early as the Secretariat’s study of 1984, the example of EIAs was discussed. *Survey of State Practice Relevant to International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law*, 12–13, U.N. Doc. A/CN.4/384 (Oct. 16, 1984). Some had, however, wished assessments to be undertaken in a more ‘objective’ manner. *See, for example*, Quentin-Baxter, *Third Rep.*, *supra* note 116, at 63, § 3(6)(a) (suggesting joint fact-finding); Barboza, *Third Rep.*, *supra* note 121, at 50 (asserting that where there are disagreements about risk, “the objective opinion of a third party is the only way out of the impasse”); Barboza, *Fifth Rep.*, *supra* note 123, at 146–47. The ILC was not alone in coming to rely on environmental impact assessments or the like. *See, for example*, U.N. Convention on the Law of the Sea art. 206, Nov. 16, 1994, 1833 U.N.T.S. 397; ESPOO Convention, *supra* note 124, at art. 1(vi); *id.* at app. 2(d), 2(f) (discussing estimation and predictions). That said, the precise legal status of such procedural obligations under general international law remained uncertain, and the ICJ did not provide clear guidance on this point. *See* Erika L. Preiss, *The International Obligation to Conduct an Environmental Impact Assessment: The ICJ Case Concerning the Gabčíkovo-Nagymaros Project*, 7 N.Y.U. ENVTL. L.J. 307, 308 (1999) (“While the case presented the Court with an opportunity to establish clearly and advocate the many emerging doctrines of international environmental law, the majority of the Court declined to utilize it.”); Request for an Examination of the Situation in Accordance with Paragraph 63 of the Court’s Judgment of 20 December 1974 in the Nuclear Tests (N.Z. v. Fr.), Judgment, 1995 IC.J. Rep. 288, 342, 344 (Sept. 22) (dissenting opinion of Weeramantry, J.). The ILC also focused considerable attention on a variety of other procedural obligations, such as notification rules, relying for instance on the seminal *Lac Lanoux* case in that regard. *See* Case Concerning Lac Lanoux (Spain v. Fr.), 12 R.I.A.A. 281, 308 (2006).

¹²⁹ CAROLINE E. FOSTER, SCIENCE AND THE PRECAUTIONARY PRINCIPLE IN INTERNATIONAL COURTS AND TRIBUNALS: EXPERT EVIDENCE, BURDEN OF PROOF AND FINALITY 7 (2011).

within its knowledge or control.”¹³⁰ Moreover, the ILC not only wrestled with the question of whose conduct should be covered, but also whose rights were implicated where harm occurred. This is the era of the ICJ’s decision in *Barcelona Traction*, in which the court appeared to move away from a necessarily dyadic, inter-state concept.¹³¹ While the ILC was hesitant to address general environmental risk,¹³² the issue had been joined, and it began to arise in other areas of risk-based law.¹³³ It has continued to grow in prominence.

Despite these profound advances, however, the ILC’s project remained tethered to a limited set of harms. For instance, the ILC explicitly restricted the coverage of its draft articles on prevention of transboundary harm to acts causing physical damage¹³⁴ emanating from the territory or areas under the jurisdiction or control of another state.¹³⁵ Even if not explicitly, the ILC’s work was also understood principally to concern environmental law.¹³⁶

The second significant development of the period was the explosive growth of the concept of precaution. This too fueled the rise of risk as procedural obligation, to be assessed contextually. There has been some question whether precaution should be understood to concern authorization¹³⁷ or obligation¹³⁸—

¹³⁰ Quentin-Baxter, *First Rep.*, *supra* note 119, at 264.

¹³¹ Case Concerning Barcelona Traction Light and Power Company, Limited (Belg. v. Spain), Judgment, 1970 I.C.J. Rep. 3, ¶ 33 (Feb. 5) (“In view of the importance of the rights involved, all States can be held to have a legal interest in their protection; they are obligations *erga omnes*.”); CRAWFORD, *supra* note 111, at 583; HANQIN, *supra* note 111, at 238.

¹³² Barboza, *Sixth Rep.*, *supra* note 121, at 101–02.

¹³³ Thus, for instance, the Bilateral Investment Treaty (BIT) program began in the late 1970s and BITs differed from FCNs in that they generally permitted *individuals* to bring claims directly. Key provisions of BITs spoke to preventive actions that states should take with regard to the risk of violence. See Christoph Schreuer, *Full Protection and Security*, 1 J. INT’L DISPUTE SETTLEMENT 1, 2 (2010) (citing *Eastern Sugar B.V. v. Czech Republic (Neth. v. Czech)*, S.C.C. Case 088/2004, Partial Award, at 42–43 (2007)).

¹³⁴ Draft Articles on Prevention of Transboundary Harm, *supra* note 118, at 151 (noting “physical consequences”); see also Rao *First Rep.*, *supra* note 125, at 194 (“[r]ejecting suggestions to expand the scope to include economic and social activities”); HANQIN, *supra* note 111, at 5 (“Th[e] first definitional element . . . serves to exclude activities which may cause consequential damage across a border, but not of a ‘physical’ character.”).

¹³⁵ *Draft Articles on Prevention of Transboundary Harm*, *supra* note 118, at 150–51; see also Rao, *First Rep.*, *supra* note 125, at 197.

¹³⁶ Cf. Rao, *First Rep.*, *supra* note 125, at 182.

¹³⁷ Peel, *Precaution*, *supra* note 21, at 491 (“One way of conceptualising what might be meant by precaution as an approach . . . is to say that it authorises or permits regulators to take precautionary measures in certain circumstances, without dictating a particular response in all cases.”).

¹³⁸ Cf. Cass R. Sunstein, *Beyond the Precautionary Principle*, 151 U. PA. L. REV. 1003, 1028 (2003) (asserting that precaution is paralyzing because “it stands as an obstacle to regulation and nonregulation, and to everything in between”). But cf. John S. Applegate, *The Taming of the Precautionary Principle*, 27 WM.

that is, does uncertainty *require* states to regulate (or prohibit) risky activity or does uncertainty *authorize* states (despite countervailing norms) to promulgate such regulations (or prohibitions). But litigation during this period tended to reject precaution as authorization in favor of precaution as obligation.¹³⁹ Thus, for instance, in the *Case Concerning the Gabčíkovo-Nagymaros Project* the ICJ considered a claim that a state of ecological necessity, or “ecological risk,”¹⁴⁰ excused abrogating a treaty. The Court concluded, however, that because the risk was insufficiently certain, it did not give rise to a state of necessity.¹⁴¹ Around the same time, the question of precaution as authorization was joined in litigation under the WTO Agreement on the Application of Sanitary and Phytosanitary Measures, which requires that WTO members ensure that measures “are based on an assessment . . . of the risks.”¹⁴² The U.S. and Canada challenged European prohibitions on importing beef from cows treated with certain growth hormones, arguing that European regulations had not relied on a risk assessment. The European Communities argued on the other hand that “[t]he precautionary principle is . . . a general customary rule of international law” and asserted that it permitted them to rely on the possibility of risk to regulate in advance of a full understanding of the risks of the hormones.¹⁴³ The Appellate Body concluded that “the precautionary principle does not, by itself . . . relieve a panel from the duty of applying the normal (that is, customary international law) principle of treaty

& MARY ENVTL. L. & POL’Y REV. 13, 15 (2002) (arguing that strong versions of the precautionary principle “have been systematically tamed”).

¹³⁹ I distinguish authorization from the classical formulation of the precautionary principle (a potential third way of understanding the precautionary approach), which provides that lack of scientific certainty should *not preclude* certain decisions. *See, for example, Rio Declaration, supra* note 21. I also consider European litigation regarding mad cow disease, sometimes cited for the proposition that precaution acted as authorization, *see FOSTER, supra* note 129, at 24 (“EU institutions are *empowered* to take protective measures . . .”) (emphasis added), not entirely apposite, since precaution entered the equation with respect to the court’s proportionality calculation regarding the specific restrictions imposed, *see* Case C-180/96, *United Kingdom v. Comm’n of the European Cmtys.*, 1998 E.C.R. I-02265, ¶¶ 98–99, 103.

¹⁴⁰ *Gabčíkovo-Nagymaros Project* (Hung.-Slovak.), Judgment, 1997 I.C.J. Rep. 7, ¶ 37 (Sept. 25).

¹⁴¹ *Id.* at ¶ 54 (discussing the “*objective* existence of a ‘peril’”) (emphasis added).

¹⁴² Agreement on the Application of Sanitary and Phytosanitary Measures art. 5.1, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, 1867 U.N.T.S. 3 [hereinafter SPS Agreement].

¹⁴³ E.C. Measures Concerning Meat and Meat Products (Hormones), Rep. of the Appellate Body, ¶ 16, U.N. Doc. WT/DS26/AB/R, (Jan. 16, 1998); *see also id.* at ¶ 29 (“‘Risk,’ for the purposes of the SPS Agreement, is the ‘potential’ for the harm or adverse effects . . . and, therefore, the mere possibility of risk arising suffices for the purposes of Articles 5.1 and 5.2.” (citing SPS Agreement, *supra* note 142)). *But see id.* at ¶ 43 (describing the U.S. view that precautionary principle “cannot create a risk assessment where there is none”).

interpretation . . . [and] the precautionary principle does not override the provisions of Articles 5.1 and 5.2 of the *SPS Agreement*.”¹⁴⁴

Courts proved (at least somewhat) more sympathetic to claims that precaution *required* state action.¹⁴⁵ For instance, in the *New Zealand v. France*¹⁴⁶ case before the ICJ, while the court did not reopen its 1974 dismissal of New Zealand’s claim, in a much cited dissent Judge Weeramantry characterized the “precautionary principle” as a rule to help parties who lack sufficient information to show a threat nevertheless to litigate whether an opposing party, who might have greater access to information, has indeed done enough to avert the potential risk.¹⁴⁷ The concept of precaution as obligation was also raised in a dispute between Ireland and the U.K. regarding potential radioactive discharge from a mixed oxide (MOX) nuclear reprocessing plant in the U.K.¹⁴⁸ Ultimately, the Tribunal gave Ireland some measure of satisfaction by requiring that the U.K. and Ireland continue to exchange further information (although it did not necessarily rely on precaution to do so).¹⁴⁹ Thus, to the extent one can detect trends in the interpretation of the precautionary approach during this period, they would favor reading it in the vein of risk as obligation, rather than risk as authorization.

What was clear, however, was that precaution included procedural elements (and did not concern only substance). Thus, for instance, Jacqueline Peel has persuasively argued in favor of precaution as a process providing for the taking

¹⁴⁴ *Id.* at ¶¶ 124–25; *see also* TROUWBORST, EVOLUTION AND STATUS, *supra* note 21, at 169 (“[T]he approach taken by the Appellate Body . . . appears to be somewhat inconsistent with its recognition that national governments may legitimately act in a cautious manner in the face of risk.”).

¹⁴⁵ Precaution as obligation is also evidenced for instance by the Fish Stocks Agreement, The U.N. Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks art. 6(3)(b), 2167 U.N.T.S. 3 (entered into force Dec. 11, 2001); *id.* at Annex II(2); *see also* 1996 Protocol to the London Convention on the Prevention of Marine Pollution by Dumping of Waste and Other Matters arts. 3(1), 4(1), 36 I.L.M. 1 (entered into force Mar. 24, 2006).

¹⁴⁶ *N.Z. v. Fr.*, 1995 I.C.J. Rep. 288.

¹⁴⁷ *Id.* at 342 (Weeramantry, J., dissenting). I do not find the argument that the precautionary approach entails a reversal of the burden of proof persuasive.

¹⁴⁸ *Compare* MOX Plant (Ir. v. U.K.), Case No. 10, Request for Provisional Measures and Statement of Case of Ireland of Nov. 9, 2011, ¶ 101, 4 ITLOS Pleadings 5, *with* MOX Plant, (Ir. v. U.K.), Case No. 10, Written Response of the United Kingdom of Nov. 15, 2011, ¶ 134, 4 ITLOS Pleadings 361. *Cf.* MOX Plant (Ir. v. U.K.), Case No. 10, Order of Dec. 3, 2001, ¶ 71, 5 ITLOS Rep. 95 (“Considering that Ireland argues that the precautionary principle places the burden on the United Kingdom to demonstrate that no harm would arise from discharges and other consequences of the operation of the MOX plant.”).

¹⁴⁹ MOX Plant (Ir. v. U.K.), Order of Dec. 3, 2001, ¶ 89, 5 ITLOS Rep. 95, 107–08. Likewise, in the Southern Bluefin Tuna Cases, the ITLOS applied provisional measures after hearing arguments that precaution served as obligation. *See* Southern Bluefin Tuna (N.Z. v. Japan; Austl. v. Japan), Case Nos. 3 & 4, Order of August 27, 1999, ¶¶ 80, 85, 3 ITLOS Rep. 280, 293–94.

into account “of scientific uncertainty in decision-making.”¹⁵⁰ Indeed, a number of the litigated cases ultimately resulted in orders to exchange information (this was true of the MOX plant case as well as an ITLOS dispute between Singapore and Malaysia regarding a Singaporean land reclamation project.¹⁵¹). The precautionary approach also operated both in contextual and categorical terms.¹⁵²

Finally, states also appeared to become increasingly skeptical of risk as authorization for the use of force, at least with respect to the defense of nationals. The theory of defense of nationals dates to the pre-U.N. Charter era¹⁵³ and its legal underpinnings appear not to have been much considered at the time.¹⁵⁴ But in the post-Charter period, there began to be robust debates about when the risk to one’s nationals might justify the use of force on the territory of another state. While the U.S. invoked defense of nationals to justify (at least in part) the use of force in the Dominican Republic, Grenada and Panama,¹⁵⁵ and while John Dugard sought to include in the ILC’s draft articles on diplomatic protection a reference to the possibility of using force under limited circumstances to defend nationals,¹⁵⁶ states were leery.¹⁵⁷

¹⁵⁰ Peel, *supra* note 21, at 497.

¹⁵¹ Land Reclamation in and around the Straits of Johor (Malay. v. Sing.), Case No. 12, Order of Oct. 8, 2003, ¶ 106, 7 ITLOS Rep. 10, 47.

¹⁵² Consider, for instance, the Stockholm Convention on Persistent Organic Pollutants, which provides for listing of chemicals and stipulates that lack of scientific certainty shall not prevent a listing proposal from proceeding. Stockholm Convention on Persistent Organic Pollutants art. 8(7)(a), 2256 U.N.T.S. 119 (entered into force May 22, 2001).

¹⁵³ See Security Council Official Records, 1939th Mtg., U.N. Doc. S/PV.1939, ¶ 106 (July 9, 1976) (citing Judge Huber’s decision in Spanish Zone of Morocco Claims (Gr. Brit. v. Spain), 2 R.I.A.A. 615 (Perm. Ct. Arb. 1925)).

¹⁵⁴ Andrew W.R. Thomson, *Doctrine of the Protection of National Abroad: Rise of the Non-Combatant Evacuation Operation*, 11 WASH. U. GLOBAL STUD. L. REV. 627, 630 (2012).

¹⁵⁵ Tom Ruys, *The Protection of Nationals’ Doctrine Revisited*, 13 J. CONFLICT & SEC. L. 233, 244–45 (2008); see Adlai Stevenson, Letter Dated Apr. 29, 1965 from the Permanent Representative of the United States of America Addressed to the President of the Security Council, U.N. Doc. S/6310 (Apr. 29, 1965) (“American lives were in danger.”); U.N. SCOR, 2491st mtg. at 7, U.N. Doc. S/PV.2491 (Oct. 27, 1983) (“Those circumstances included danger to innocent United States nationals, the absence of a minimally responsible Government in Grenada and the danger posed to the OECS by the relatively awesome military might that those responsible for the murder of the Bishop Government how had their disposal.”); *id.* at 8 (“[I]t was fully reasonable for the United States to conclude that these madmen might decide at any moment to hold hostage the 1,000 American citizens on that island.”); U.N. SCOR, 44th Sess., 2899th mtg. at 31, U.N. Doc. S/PV.2899 (Dec. 20, 1989) (“designed to protect American lives”); *id.* at 32 (quoting President George H.W. Bush that Noriega had “created an imminent danger to the 35,000 American citizens in Panama”).

¹⁵⁶ John R. Dugard (Special Rapporteur on Diplomatic Protection), *First Rep. on Diplomatic Protection*, 218, U.N. Doc. A/CN.4/506 (Apr. 7, 2000).

¹⁵⁷ See Ruys, *supra* note 155, at 267.

This then was the state of play at the end of the twentieth century—a marrying of due diligence and prevention, which led to the rise of risk as obligation as opposed to authorization, coupled with the ability to see it both as procedural or substantive, something to be considered by category or on a case-by-case basis, and an expanding, but as yet limited, scope. The last fifteen or so years, however, have seen the use of risk truly flower, with risk analysis deployed across a wide variety of fields and in myriad ways. It is to this I turn in the next Section.

IV. THE RISE OF RISK

In this Section, I describe the role of risk in international law (and soft-law commitments) since 2001.¹⁵⁸ That role has increased dramatically, not only in that risk is now used in many ways, but also with respect to risk’s scope of application. In the first Section below, I show how risk has become relevant to new actors, new harms, and new areas of law. In the Section that follows, I describe how risk is now the subject of increasingly sophisticated analysis.

A. New Actor, New Harm

In this Section, I assess in turn two expansions of the role of risk in international law—the first concerning who should undertake risk analysis and the second regarding new types of harm and areas of law to which risk has become legally relevant. Prior to the recent developments I describe here, risk was something states were expected to assess, even where it was the conduct of non-state actors that gave rise to the risk of harm and “harm” was (in the context of environmental law, which was the principal area of law where risk played a role) physical, transboundary harm to (the territory of) another state.¹⁵⁹ But as Rebecca Bratspies and Russell Miller note in the introduction to their useful volume on the *Trail Smelter* case, “[r]edefining ‘harm’ also means confronting new actors and new victims.”¹⁶⁰ Thus, for instance, as John Ruggie has said of corporate human rights due diligence, which I discuss in greater detail below, “[human rights impact assessments] should deviate from the [environmental impact assessments] approach of examining a project’s direct impacts, and instead force consideration

¹⁵⁸ I choose this year somewhat arbitrarily but it was when the ILC completed its Draft Articles on Prevention of Transboundary Harm from Hazardous Activities, *see supra* note 118.

¹⁵⁹ Compare with the sources listed in note 111, *supra*, which speak to the earlier “dyadic” approach to harm. There, harm was something that occurred to a single other or identified set of states, as opposed to something that could be claimed by any state.

¹⁶⁰ Rebecca M. Bratspies & Russell A. Miller, *Introduction* to TRANSBOUNDARY HARM IN INTERNATIONAL LAW, *supra* note 101, at 1, 8.

of how the project could possibly interact with each and every right.”¹⁶¹ In the next two sub-sections, I describe how such an expansion has occurred—covering new actors, new acts, and new victims.

1. New Actors

The first expansion concerns *who* should undertake risk analysis. Increasingly, there is an international normative expectation that non-state actors will also do so. This is evidenced by the widespread uptake of the U.N. Guiding Principles on Business and Human Rights (GPs),¹⁶² which are a non-binding set of guidelines for states and businesses endorsed by the U.N. Human Rights Council and constructed around a “protect, respect, and remedy” framework.¹⁶³ Under the U.N. GPs, businesses are expected to “respect” human rights. Specifically, Guiding Principle 15 asserts that businesses should have a “human rights due diligence process to identify prevent, mitigate and account for how they address their impacts on human rights,”¹⁶⁴ and Guiding Principle 17 recommends that businesses evaluate both actual and “potential human rights impacts.”¹⁶⁵ I discuss the substance of human rights due diligence by businesses in greater detail below but suffice it to say that an international expectation that non-state actors themselves undertake risk assessments and seek to prevent harm reflects a dramatic expansion in the role of risk at the international level.

The flip side is that states are also increasingly expected to assess the risk posed by the conduct of a variety of other actors, beyond just private actors on their territory whose conduct may have transboundary effects (that is, the question of ‘risk *by whom* posed’ now has a more expansive set of answers). First, states are supposed to evaluate the risk that other states, or armed groups with which they may engage extraterritorially, may present. For instance, in the *Genocide Convention*¹⁶⁶ case, the ICJ held that Serbia had a due diligence obligation with regard to the risk of genocide being perpetrated by Bosnian Serb forces, which

¹⁶¹ Report of the Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises, Human Rights Impact Assessments—Resolving Key Methodological Questions, ¶ 26, U.N. Doc. A/HRC/4/74 (Feb. 5, 2007).

¹⁶² Guiding Principles, *supra* note 22.

¹⁶³ See John Ruggie, *Report of the Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises*, § I, U.N. Doc. A/HRC/8/5 (Apr. 7, 2008).

¹⁶⁴ Guiding Principles, *supra* note 22, at 15–16.

¹⁶⁵ *Id.* at 18–19.

¹⁶⁶ Application of the Convention on the Prevention and Punishment of Crime of Genocide (Bosn. & Herz. v. Serb. & Montenegro), Judgment, 2007 I.C.J. 43, 183 (Feb. 26) [hereinafter *Genocide Convention* case].

Serbia was then supporting.¹⁶⁷ Perhaps even more broadly, the International Committee of the Red Cross (ICRC) has recently¹⁶⁸ adopted a new interpretation of Common Article 1 of the Geneva Conventions to the effect that states have an obligation to “do everything reasonably in their power” to ensure respect for IHL by third parties¹⁶⁹ on the basis of risk analysis.¹⁷⁰

A similar due diligence principle is also increasingly applied to the risks posed by non-state actors operating around the world where they may have a territorial link to the state but their conduct occurs principally extraterritorially, such as with respect to terrorists, or where their link may be contractual rather than territorial, such as with respect to private security contractors.¹⁷¹ Thus, for instance, there has been considerable debate about whether to consider self-defense against non-state actors under the rubric of attribution (in other words, a state may invoke self-defense to respond to an attack by a non-state actor under circumstances where that attack is attributable to the territorial state, which would require a greater

¹⁶⁷ The court stated that this obligation “arise[s] at the instant that the State learns of, or should normally have learned of, the existence of a *serious risk* that genocide will be committed.” *Id.* at ¶ 431 (emphasis added).

¹⁶⁸ This is a change from earlier iterations of the commentary. *See, for example*, Carlo Focarelli, *Common Article 1 of the 1949 Geneva Conventions: A Soap Bubble?*, 21 EUR. J. INT’L L. 125, 134 (2010); Oona A. Hathaway et al., *supra* note 98, at 28 (“These revised commentaries adopt a broader vision.”). It has occasioned considerable debate. *Cf.* Oona Hathaway & Zachary Manfredi, *The State Department Adviser Signals a Middle Road on Common Article 1*, JUST SECURITY (Apr. 12, 2016) <https://perma.cc/HU42-ZYGK>.

¹⁶⁹ *See* ICRC REVISED COMMENTARY, *supra* note 24, at 118; *see also id.* at 150.

¹⁷⁰ *See* Knut Dormann & Jose Serralvo, *Common Article 1 to the Geneva Conventions and the Obligation to Prevent International Humanitarian Law Violations*, 96 INT’L REV. OF THE RED CROSS 707, 729–30 (2014) (discussing action “where the risk of such violations can be reasonably foreseen”). Previously, in *Military and Paramilitary Activities (Nicar. v. U.S.)*, 1986 I.C.J. Rep. 14, 104 ¶ 220 (June 27) [hereinafter *Nicaragua*], the ICJ had focused on a negative obligation not to assist in IHL violations. *See id.* (stating that the U.S. was “under an obligation not to encourage persons or groups engaged in the conflict in Nicaragua to act in violation of [IHL]”) (emphasis added). By the time of the *Wall* advisory opinion, *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, Advisory Opinion, 2004 I.C.J. Rep. 136, 200 (July 9), the ICJ was speaking of a (not defined) positive prevention obligation (it said—quite opaquely—that “all the States parties to the [Geneva Conventions] are under an obligation . . . to ensure compliance by Israel with international humanitarian law”). *Id.* at 200, ¶ 159. *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, Advisory Opinion, 2004 I.C.J. Rep. 136, 200 ¶ 159 (July 9). But even that is not equivalent to an obligation to act where there is a *risk* of unlawful conduct.

¹⁷¹ I do not engage here the question of the extraterritorial scope of human rights obligations. *Compare* Oona A. Hathaway et al., *Human Rights Abroad: When Do Human Rights Treaty Obligations Apply Extraterritorially?*, 43 ARIZ. STATE L.J. 389, 390 (2011), *with* DIGEST OF UNITED STATES PRACTICE IN INTERNATIONAL LAW 173 (CarrieLyn D. Guymon ed., 2014) (“The United States continues to believe that its interpretation—that the Covenant applies only to individuals that are both within the territory of a State Party and within its jurisdiction—is the most consistent with the Covenant’s language and negotiating history.”) (emphasis in original).

quantum of control by the state over the non-state actor) or under a due-diligence-like rubric (that is, a state may invoke self-defense to respond to an attack by a non-state actor where the territorial state is unable or unwilling to address the threat).¹⁷² The latter is increasingly the dominant paradigm,¹⁷³ and turns on risk (both with respect to expectations of conduct by the territorial state¹⁷⁴ and the question of when a state threatened by a non-state actor may exercise its right of self-defense). Likewise, the Montreux Document on Pertinent International Legal Obligations and Good Practices for State Related to Operations of Private Military and Security Companies During Armed Conflict provides that states have an obligation to “take appropriate measures to prevent[] any violations of international humanitarian law by personnel of [private military and security companies].”¹⁷⁵

With respect to this broader range of actors, risk is relevant both as obligation and as authorization. For instance, due diligence with respect to the conduct of an armed group on a state’s territory involves both risk as obligation and risk as authorization (insofar as if the state is unwilling or unable to suppress a threat, it may give rise to a right of self-defense on the part of another state on that state’s territory¹⁷⁶). Risks posed by these various actors may also give rise to both procedural and substantive obligations. Thus, for instance, the Arms Trade Treaty requires risk assessments (procedural) and prohibits transfers (substantive)

¹⁷² Risk is also increasingly relevant to questions of *jus in bello*. Thus, for instance, while risk (in the sense of threat) has long been relevant under the Fourth Geneva Convention to interment decisions, Geneva Convention Relative to the Protection of Civilian Persons in Time of War art. 42(1), Aug. 12, 1949, 6 U.S.T. 3516, 75 U.N.T.S. 287, risk was also made relevant—whether as a legal matter or as a policy matter—to detention of belligerents during the Obama Administration. Periodic Review of Individuals Detained at Guantánamo Bay Naval Station Pursuant to the Authorization for Use of Military Force, Exec. Order No. 13,567, § 2, 76 Fed. Reg. 13,277 (Mar. 7, 2011).

¹⁷³ See Elena Chachko & Ashley Deeks, *Who is on Board with “Unwilling or Unable”?*, LAWFARE (Oct. 10, 2016), <https://perma.cc/RG33-D4GZ>. But see Kevin Jon Heller, *The Absence of Practice Supporting the “Unwilling or Unable” Test*, OPINIO JURIS (Feb. 17, 2015), <https://perma.cc/TNQ7-LZ7D>.

¹⁷⁴ See, for example, Vincent-Joel Proulx, *Babysitting Terrorists: Should States Be Strictly Liable for Failing to Prevent Transborder Attacks*, 23 BERKELEY J. INT’L L. 615, 652–53 (2005) (discussing strict liability with a due diligence defense).

¹⁷⁵ INTERNATIONAL COMMITTEE OF THE RED CROSS, THE MONTREUX DOCUMENT ON PERTINENT INTERNATIONAL LEGAL OBLIGATIONS AND GOOD PRACTICES FOR STATE RELATED TO OPERATIONS OF PRIVATE MILITARY AND SECURITY COMPANIES DURING ARMED CONFLICT 11, ¶ 3 (2009) <https://perma.cc/ZNK2-L9ZP> [hereinafter MONTREUX DOCUMENT].

¹⁷⁶ The “unwilling or unable” test speaks to the question of whether the use of force is lawful *on the territory of a particular state*. The antecedent question of whether force may lawfully be used against a particular armed group turns on (among other factors) whether that armed group has attacked the state wishing to use force (or whether there is an imminent threat of such an attack).

under certain circumstances.¹⁷⁷ And finally, risk may be assessed contextually or categorically. Consider the question of whether certain activities of private security contractors are inherently risky¹⁷⁸ or whether certain business conduct should be likewise so considered (such as transactions involving minerals from the Democratic Republic of the Congo).¹⁷⁹

2. New Harm

The second expansion is that a risk-based approach is also increasingly being applied to non-physical, territorially-diffuse harms. For instance, a large number of commentators have begun suggesting that due diligence norms be applied to cyberspace.¹⁸⁰ While in some cases, cyber activity could produce physical effects that would bring cyber within the realm of what the ILC historically focused upon,¹⁸¹ in many cases cyber activities would not have such effects.¹⁸² Moreover, cyber activities also pose challenging questions of geography insofar as their effects may not be transboundary (meaning crossing a border shared by two states) (and cyber activities may transit the territory of uninvolved states).¹⁸³

This concept of due diligence with respect to cyber activities is increasingly risk-oriented. The Cybercrime Convention reflects a traditional approach to deterring the use of a state's territory for malicious activities (harkening back to the earlier concept of due diligence)—that is, a requirement to criminalize.¹⁸⁴ But

¹⁷⁷ See Arms Trade Treaty, G.A. Res. 67/234 B arts. 7(1)(b)(i), 7(3), Apr. 2, 2013, <https://perma.cc/48KT-H4XV>. The Arms Trade Treaty explicitly goes beyond the doctrine of state responsibility. Alexandra Boivin, *Complicity and Beyond: International Law and the Transfer of Small Arms and Light Weapons*, 87 INT'L REV. OF THE RED CROSS 467, 469, 493 (2005).

¹⁷⁸ MONTREUX DOCUMENT, *supra* note 175, at 11, ¶ 2 (suggesting that states when contracting should “tak[e] into account the inherent risk associated with the services to be performed”).

¹⁷⁹ See, for example, S.C. Res. 1857, ¶ 15 (Dec. 22, 2008); see also *Final Rep. of the Group of Experts on the Democratic Republic of the Congo*, ¶¶ 306, 308, U.N. Doc. S/2010/596 (Nov. 29, 2010) (discussing “red flag” locations). Cf. OECD DUE DILIGENCE GUIDANCE FOR RESPONSIBLE SUPPLY CHAINS OF MINERALS FROM CONFLICT-AFFECTED AND HIGH RISK AREAS, ANNEX I 18 (2d ed. 2013) (discussing specific-mineral-based risk analyses).

¹⁸⁰ See generally note 23, *supra*, collecting sources.

¹⁸¹ Schmitt, *In Defense of Due Diligence in Cyberspace*, *supra* note 23, at 75.

¹⁸² Walton, *supra* note 23, at 1472–73.

¹⁸³ Scott J. Shackelford et al., *Unpacking the International Law on Cybersecurity Due Diligence: Lessons from the Public and Private Sectors*, 17 CHI. J. INT'L L. 1, 22 (2016) (distinguishing *Trail Smelter* as it involved a “geographical constraint”).

¹⁸⁴ Matthew J. Sklerov, *Solving the Dilemma of State Response to Cyberattacks: A Justification for the Use of Active Defenses Against States Who Neglect Their Duty to Prevent*, 201 MIL. L. REV. 1, 64 (2009) (“[I]t demonstrates state recognition of both the need to criminalize cyberattacks, and the duty of states to prevent their territory from being used by non-state actors to conduct cyberattacks against other states.”).

an obligation to prosecute—standing alone—may be insufficient.¹⁸⁵ Thus, scholars are increasingly focused on strictly preventative measures, such as risk-evaluation procedures¹⁸⁶ and notice and consultation provisions.¹⁸⁷ And, Beatrice Walton has proposed to import the ILC’s concept of liability for transboundary harm to the world of low-intensity cyber conduct.¹⁸⁸

Nor is the debate confined to cyber activities. Some, for instance, have sought to apply due diligence norms to the development and potential deployment of autonomous weapons systems, seeking to analogize to the due diligence standard applicable to ultra-hazardous environmental activities.¹⁸⁹

B. Enhanced Obligations and Particularized Risk

In this Section, I make the case that risk has not just propagated to other actors and other topics, but it is increasingly reticulated. That is, obligations that were uncertain (and in particular procedural obligations) have been firmed up; and areas of law that had a risk element have begun to require more detailed risk analyses.

1. Deeper Acceptance of Risk

The first development has been the clarification of uncertain risk-based obligations. While in 2003, Xue Hanqin stated that “it is questionable whether [a duty to undertake environmental impact assessments] can be claimed on the basis of customary international law,”¹⁹⁰ matters have advanced considerably since

¹⁸⁵ *Id.* at 9 (“[D]espite Chinese and Russian pledges to crackdown on their attackers, no one has been brought to justice for any of the attacks discussed.”).

¹⁸⁶ Ziolkowski, *supra* note 23, at 169; Ortner, *supra* note 23, at 208 (“[T]he government should independently seek to measure and evaluate its progress by conducting impact assessments.”); see also Benedikt Pirker, *Territorial Sovereignty and Integrity and the Challenges of Cyberspace*, in PEACETIME REGIME, *supra* note 23, at 189, 208 (asserting that there “may be a certain minimum standard of control over cyber activities that needs to be respected”). *But see* TALLINN MANUAL, *supra* note 23, at 44–45; Schmitt, *In Defense of Due Diligence in Cyberspace*, *supra* note 23 (“[T]here was no agreement as to whether the due diligence obligation applies when a state knows that such activities will be launched but they have not yet materialized.”). For an interesting recent development, see Kristen Eichensehr, *Would the United States be Responsible for Private Hacking*, JUST SECURITY (Oct. 17, 2017), <https://perma.cc/QZD8-HR2B> (discussing voluntary review by the U.S. government of proposed cyber actions and the consequences thereof).

¹⁸⁷ Jason Healey & Hannah Pitts, *Applying International Environmental Legal Norms to Cyber Statecraft*, 8 I/S: J.L. & POL’Y FOR INFO. SOC’Y 356, 376 (2012).

¹⁸⁸ Walton, *supra* note 23, at 1465 (suggesting “applying this liability approach to low-intensity state-sponsored cyber attack”).

¹⁸⁹ Nehal Bhuta & Stavros-Evdokimos Pantazopoulos, *Autonomy and Uncertainty: Increasingly Autonomous Weapons Systems and the International Legal Regulation of Risk*, in AUTONOMOUS WEAPONS SYSTEMS: LAW, ETHICS, POLICY at 284, 291 (Nehal Bhuta et al. eds., 2016).

¹⁹⁰ HANQIN, *supra* note 111, at 167.

then.¹⁹¹ Indeed, in two recent decisions of the ICJ and a decision of the Seabed Disputes Chamber of the ITLOS, tribunals have asserted such an obligation.¹⁹²

Not only have the ICJ and ITLOS suggested that environmental impact assessments should be seen as on a sturdier footing,¹⁹³ they have also given some guidance regarding when in their view such assessments are required, beginning the work of identifying the level of risk that necessitates more careful scrutiny,¹⁹⁴ which has further contributed to the firming up of what the ICJ has said is an obligation.¹⁹⁵ In *Certain Activities and Construction of a Road*, the court examined “the nature and magnitude of the project and the context in which it was to be carried out” and concluded that there was a sufficient risk that Costa Rica should have carried out an environmental impact assessment.¹⁹⁶ Litigation between Malaysia and Singapore before ITLOS also yielded useful practice on bilateral environmental factfinding,¹⁹⁷ especially as prompted by an ITLOS provisional measures order.¹⁹⁸ Finally, the South China Sea arbitral award glossed Article 206 of the U.N. Convention on the Law of the Sea in evaluating whether China had

¹⁹¹ Moreover, instruments requiring or purporting to require EIAs continue to proliferate. The 2008 Draft Articles on the Law of Transboundary Aquifers, like the Watercourses Convention, provides that states shall share “available technical data and information, including any environmental impact assessment,” where “planned activities . . . may affect a transboundary aquifer or aquifer system and thereby may have a significant adverse effect upon another State.” *Draft Articles on the Law of Transboundary Aquifers, with Commentaries*, U.N. Doc. A/63/10, at 65 (2008).

¹⁹² See *supra* note 17. The ICJ has been somewhat unclear whether in its view the requirement of an EIA derives from states’ due diligence obligations or is free-standing. Compare *Nicar. v. Costa Rica*, 2015 I.C.J. Rep. 665, ¶¶ 18–22 (separate opinion of Owada, J.), and *Nicar. v. Costa Rica*, 2015 I.C.J. Rep. 665, ¶ 9 (separate opinion of Donoghue, J.), with *Nicar. v. Costa Rica*, 2015 I.C.J. Rep. 665, ¶ 9 (separate opinion of Dugard, J.). The Seabed Disputes Chamber has been much clearer. *Responsibilities and Obligations of States, Advisory Opinion, supra*, ¶ 145 (“It should be stressed that the obligation to conduct an environmental impact assessment is a . . . general obligation under customary international law.”).

¹⁹³ I take no position on the substantive question of whether environmental impact assessments are required by customary or general international law, and, if so, why. My point here is descriptive.

¹⁹⁴ Under corollary U.S. law, the first question an agency must address is whether the risk of affecting the environment is sufficient to require an environmental impact statement in the first place (if not, the federal agency issues a finding of no significant impact). See, for example, *Sierra Club v. U.S. Dep’t of Transp.*, 753 F.2d 120, 126 (D.C. Cir. 1985).

¹⁹⁵ This kind of guidance is significant in light of the differences John Knox has identified at the domestic level regarding how states undertake EIAs. John H. Knox, *Assessing the Candidates for a Global Treaty on Transboundary Environmental Impact Assessment*, 12 N.Y.U. ENVTL. L.J. 153, 156–57 (2003).

¹⁹⁶ *Nicar. v. Costa Rica, supra* note 17, at 720–21, ¶ 155. Cf. *id.* at 707, ¶ 105 (concluding that Nicaragua was not required to carry out an EIA).

¹⁹⁷ FOSTER, *supra* note 129, at 36 (describing the case as representing “a high-water mark in the cooperative settlement of international disputes involving scientific uncertainty”).

¹⁹⁸ *Land Reclamation in and around the Straits of Johor, supra* note 151, at ¶ 106.

in fact carried out an EIA.¹⁹⁹ One commentator has argued that the Panel's emphasis on the importance of a "comprehensive" assessment provides important guidance.²⁰⁰

2. Risk Specificity

The second development has been that even where risk had previously been relevant, the expectation is now that a harder look will be taken at *particular risks*, in both categorical and contextual analyses.²⁰¹ This can most clearly be seen in the context of human rights due diligence, both by states and by corporations.

Human rights due diligence has principally developed through instruments and international case law regarding violence against women.²⁰² Early on, the focus was on having the appropriate laws²⁰³ and on the need to investigate potential abuses.²⁰⁴ This paralleled the way due diligence was conceived with respect to the

¹⁹⁹ The South China Sea Arbitration (Phil. v. China), PCA Case No. 2013-19, Award of Jul. 12, 2016, ¶ 989 (Perm. Ct. Arb. 2016).

²⁰⁰ Makane Moise Mbengue, *The South China Sea Arbitration: Innovations in Marine Environmental Fact-Finding and Due Diligence Obligations*, 110 A.J.I.L. UNBOUND 285, 286–87 (2016).

²⁰¹ By this I mean that specific risks are identified, which could be presented either by a category of activities or a specific act.

²⁰² Most trace these developments to the decision of the Inter-American Court of Human Rights in *Velasquez Rodriguez v. Honduras*, Merits, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 4 (July 29, 1988), although a case involving disappearances not domestic violence, in which the court held that "[t]he State has a legal duty to take reasonable steps to prevent human rights violations and to use the means at its disposal to carry out a serious investigation of violations committed within its jurisdiction, to identify those responsible, to impose the appropriate punishment and to ensure the victim adequate compensation." *Id.* at ¶ 174. For the relationship between subsequent jurisprudence on domestic violence and this case, see, for example, Patricia Tarre Moser, *The Duty to Ensure Human Rights and Its Evolution in the Inter-American System: Comparing Maria Da Penha v. Brazil with Lenahan (Gonzales) v. United States*, 21 J. GENDER, SOC. POL'Y & L. 437, 437 (2012). The Committee on the Elimination of Discrimination Against Women (the CEDAW Committee) also relied on this logic in adopting its General Recommendation 19. Committee on the Elimination of Discrimination Against Women, General Recommendation No. 19: Violence Against Women, *supra* note 35, at ¶ 24(a). The U.S. has expressed some skepticism regarding the scope of due diligence obligations, *see Lenahan v. United States*, Merits, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 80/11 ¶ 3 (Aug. 17, 2011) ("The State moreover claims that the petitioners cite no provision of the American Declaration that imposes on the United States an affirmative duty, such as the exercise of due diligence."), and I take no position on the merits of their view as my argument here is descriptive.

²⁰³ *Velasquez Rodriguez v. Honduras*, *supra* note 202, at ¶ 175 ("This duty to prevent includes all those means of a legal, political, administrative and cultural nature that promote the protection of human rights and ensure that any violations are considered and treated as illegal acts."). For instance, the CEDAW Committee specifically recommended certain forms of legislation, such as making available the equivalent of restraining orders. General Recommendation No. 19, *supra* note 35, at ¶ 24(t)(ii).

²⁰⁴ *Velasquez Rodriguez v. Honduras*, *supra* note 202, at ¶ 176 ("The State is obligated to investigate every situation involving a violation of the rights protected by the Convention."); Declaration on the

protection of foreign nationals. As the then-Special Rapporteur on Violence Against Women said, “the application of the due diligence standard, to date, has . . . [been] limited to responding to violence when it occurs, largely neglecting the obligation to prevent”²⁰⁵ Likewise, one commentator contrasted the Inter-American Commission’s recent casework with earlier cases, saying that the latter “only explored how the lack of an official investigation violated the victim’s right to judicial remedy and to a fair trial . . . [and not] the State’s obligation to prevent the severe domestic violence.”²⁰⁶

More recently, however, the focus has truly turned to *preventing* risk, including by analyzing risk more closely. Thus, a 2005 Council of Europe recommendation requested states to “ensure that measures are taken to protect victims effectively against *threats and possible acts of revenge*.”²⁰⁷ The recommendation went beyond earlier recommendations regarding legislation and gave specificity to calls for the availability of restraining orders, suggesting “enabl[ing] the judiciary to adopt . . . interim measures aimed at protecting the victims, the banning of a perpetrator from contacting, communicating with or approaching the victim, residing in or entering defined areas.”²⁰⁸ Most recently, the Council of Europe adopted a convention on violence against women and domestic violence that includes specific preventive obligations,²⁰⁹ predicated upon risk assessments.²¹⁰ Likewise, the European Court of Human Rights has recently begun to take this

Elimination of Violence against Women art. 4(c), U.N. Doc. A/RES/48/104 (Dec. 20, 1993) (“[P]revent, investigate and, in accordance with national legislation, punish acts of violence against women, whether those acts are perpetrated by the State or by private persons.”); Inter-American Convention on the Prevention, Punishment and Eradication of Violence Against Women, *supra* note 35, at art. 7(b) (“[A]pply due diligence to prevent, investigate and impose penalties for violence against women”). Thus in the *Maria da Penha Maia Fernandes* case, *Maria da Penha Maia Fernandes v. Brazil*, Merits, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 54/01, (Apr. 16, 2001), before the Inter-American Commission on Human Rights, the question was whether the state was responsible for having condoned domestic violence under circumstances where “for more than 15 years, it has failed to take the effective measures required to prosecute and punish the aggressor, despite repeated complaints.” *Id.* at ¶ 2; *see also id.* at ¶ 44 (“The Commission holds the view that the domestic judicial decisions in this case reveal inefficiency, negligence, and failure to act on the part of the Brazilian judicial authorities and unjustified delay in the prosecution of the accused.”).

²⁰⁵ Yakin Ertürk (Special Rapporteur on Violence Against Women), *The Due Diligence Standard as a Tool for the Elimination of Violence Against Women*, 2, U.N. Doc. E/CN.4/2006/61 (Jan. 20, 2006).

²⁰⁶ Moser, *supra* note 202, at 438.

²⁰⁷ Eur. Consult. Ass’n, Recommendation Rec(2002)5 of the Committee of Ministers to Member States on the Protection of Women Against Violence app. ¶ 44, 794th Sess. (Apr. 30, 2002) (emphasis added).

²⁰⁸ *Id.* at ¶ 58(b).

²⁰⁹ Council of Europe Convention on Preventing and Combating Violence against Women and Domestic Violence art. 5(2), Apr. 7, 2011, C.E.T.S. No. 210.

²¹⁰ *Id.* at art. 51(1). This is an emerging field at the domestic level. *See generally, for example*, Jacquelyn C. Campbell et al., *Assessing Risk Factors for Intimate Partner Homicide*, 250 NAT’L INST. JUST. J. 14 (2003).

approach²¹¹ in, for instance, *Opuz v. Turkey*.²¹² While *Opuz* applied an attribution test turning on knowledge, as Cheryl Hanna has put it, “*Opuz* provides a useful starting point for framing the affirmative duty to undertake a risk assessment in all cases made known to state authorities.”²¹³ Courts and other bodies have also focused recently on the specifics of laws regarding restraining orders,²¹⁴ which in effect reflect judicial judgments regarding risk.²¹⁵ As one commentator has put it, the “evolution in case law . . . [has been moving toward] the theory of foreseeable risk.”²¹⁶

With respect to corporate human rights due diligence, while the concept is new, and therefore this is not an evolution, the expectation has been similar: that corporations will look at *very particular* risks. The concept of corporate human rights due diligence has been shaped by analogous domestic law,²¹⁷ which is

²¹¹ For very useful surveys of this jurisprudence, see generally Lee Hasselbacher, *State Obligations Regarding Domestic Violence: The European Court of Human Rights, Due Diligence, and International Legal Minimums of Protection*, 8 NW. J. INT'L HUM. RTS. 190 (2009) and Benedetta Faedi Duramy, *Judicial Developments in the Application of International Law to Domestic Violence*, 21 AM. U. J. GENDER SOC. POL'Y & L. 413 (2012).

²¹² *Opuz v. Turkey*, 2009-III Eur. Ct. H.R. 107, 144.

²¹³ Cheryl Hanna, *Health, Human Rights, and Violence Against Women and Girls: Broadly Redefining Affirmative State Duties after Opuz v. Turkey*, 34 HASTINGS INT'L & COMP. L. REV. 127, 145 (2011).

²¹⁴ In *Beracqua v. Bulgaria*, Eur. Ct. H.R. App. No. 71127/01, ¶ 83 (2008), for instance, the European Court suggested that the preventive measures set forth in the Council of Europe's recommendation might be required. (“[T]he Court considers that certain administrative and policing measures—among them, for example, those mentioned in Recommendation Rec(2002)5 . . . would have been called for.”). And in *A.T. v. Hungary*, CEDAW Comm., No. 2/2003, ¶ 2.1, U.N. Doc. CEDAW/C/32/D/2/2003 (2005), the Committee on the Elimination of Discrimination Against Women considered an allegation that Hungary had inadequate preventive measures because there were “no protection orders or restraining orders available under Hungarian law.”

²¹⁵ *Lenahan v. United States*, *supra* note 202, at ¶ 145 (noting “judicial recognition of risk”).

²¹⁶ Moser, *supra* note 202, at 439; see also Rashida Manjoo (Special Rapporteur on Violence Against Women), *Rep. of the Special Rapporteur on Violence Against Women, Its Causes and Consequences*, ¶¶ 70–71, U.N. Doc. A/HRC/23/49 (May 4, 2013) (suggesting that it might be useful to distinguish “systemic” due diligence from “individual” due diligence). This way of approaching due diligence stands in some contrast to the earlier jurisprudence of the European Court of Human Rights, which tended not to look deeply into how domestic authorities considered risk on the front end; see *Osman v. U.K.*, Judgment, Eur. Ct. H.R. at ¶ 116 (Oct. 28, 1998) (explaining that the “obligation must [not] be interpreted in a way which . . . impose[s] an impossible or disproportionate burden on the authorities.”).

²¹⁷ See, for example, Report of the Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises, Protect, Respect and Remedy: A Framework for Business and Human Rights ¶ 56, U.N. Doc. A/HRC/8/5 (Apr. 7, 2008) (“Comparable processes are typically already embedded in companies because in many countries they are legally required to have information and control systems in place to assess and manage financial and related risks.”); Mark B. Taylor et al., *Due Diligence for Human Rights: A Risk Based Approach* at 2 (Corporate Social Responsibility Initiative, Working Paper No. 53, 2009), <https://perma.cc/ZT6W-YZEP>; Olga Martin-Ortega, *Human Rights Due Diligence for Corporations:*

decidedly specific.²¹⁸ And, this concept of specific due diligence has been replicated at the international level.²¹⁹ Indeed, one prominent report seeking to gloss due diligence under the U.N. Guiding Principles has specifically argued that “an investigative process must be undertaken for the purpose of preventing harm,”²²⁰ including such specific measures as field visits under certain circumstances.²²¹ The same has been true of recent OECD work on the subject.²²²

V. REASONS FOR RISK’S RISE AND CONSEQUENCES THEREOF

A. Why Risk?

In this Section, I seek to offer potential reasons for the trend I have sought to identify. I offer six such potential reasons. First, as I have sought to show, risk-based obligations may be (and often are) procedural (e.g., a requirement to undertake an environmental impact assessment); if substantive, the obligation is

From Voluntary Standards to Hard Law at Last?, 32 NETH. Q. OF HUM. RTS. 44, 51 (2014) (“[Ruggie] translated the due diligence that companies were accustomed to performing in commercial relations and transactions into the sphere of human rights.”); Robert McCorquodale, *Social Responsibility and International Human Rights Law*, 87 J. BUS. OF ETHICS 385, 392 (2009) (“This concept of due diligence appears to be an integration of the human rights obligation . . . and the general business practice of due diligence.”); *ILA Study Group, First Report*, *supra* note 29, at 20 (“This appears to be an integration of the international human rights legal obligation of due diligence . . . and the general voluntary business practice of due diligence.”).

²¹⁸ Take due diligence in the context of the Foreign Corrupt Practice Act (FCPA). The Department of Justice and Securities Exchange Commission have indicated they will consider the existence and extent of compliance programs in deciding what cases to pursue. U.S. DEPARTMENT OF JUSTICE AND SECURITIES AND EXCHANGE COMMISSION, A RESOURCE GUIDE TO THE FOREIGN CORRUPT PRACTICES ACT 56 (Nov. 14, 2012), [https://perma.cc/7S\]G-QXTR](https://perma.cc/7S]G-QXTR) [hereinafter FCPA RESOURCE GUIDE] (“DOJ and SEC also consider the adequacy of a company’s compliance program when deciding what, if any, action to take.”). Compliance programs are risk based. FCPA RESOURCE GUIDE, *supra*, at 58 (“Assessment of risk is fundamental to developing a strong compliance program”). Indeed, under the U.S. Sentencing Guidelines, an effective compliance program is defined as one where the corporation “exercise[s] due diligence to prevent and detect criminal conduct.” U.S. SENTENCING GUIDELINES Chapter 8 § 8B2.1(a)(1). Specifically, for a program to be deemed effective “the organization [is expected] periodically [to] assess the risk of criminal conduct.” *Id.* at § 8B2.1(c). And DOJ and SEC assert that “each compliance program should be tailored to an organization’s specific needs, risks, and challenges.” FCPA RESOURCE GUIDE, *supra*, at 57.

²¹⁹ Martin-Ortega, *supra* note 217, at 56–57 (stating that it includes “the flexibility of the concept according to size and activity”).

²²⁰ Taylor et al., *supra* note 217, at 2.

²²¹ *Id.* at 11–12.

²²² See, for example, Organisation for Economic Co-operation and Development, *Recommendation of the Council for Further Combating Bribery of Foreign Public Officials in International Business Transactions*, Annex II, § A(6) (Nov. 26, 2009); Organisation for Economic Co-operation and Development, *Guidelines for Multinational Enterprises*, at 47 (2011).

usually one of conduct and not of result (e.g., due diligence). These kinds of obligations are attractive because they permit meaningful legal development without being overly prescriptive. Consider for instance the Security Council resolutions on the DPRK. A requirement to prohibit transactions that are likely to benefit the DPRK's nuclear and ballistic missile programs is a useful compromise between states with different perspectives: Those states that wish to further constrain the DPRK are able to make incremental progress (insofar as such a provision provides a hook to lobby other states regarding pending transactions with a view to getting them to prohibit them and, in some cases, may provide a domestic legal basis for those states to act); at the same time, such a provision leaves a margin of discretion for states that may be less willing to take significant steps (to the extent those states are prepared to argue that risky transactions are not sufficiently likely to benefit the DPRK's prohibited programs as to come within the ambit of the resolution). Likewise, where risk plays a role in authorization, it tends to be self-judging, which is appealing to states, especially in the national security space.

Lest this appear too cynical an account, risk can also permit states to "legalize" desirable caution (along the lines of the precautionary approach, but also more broadly). Take, for example, recent developments with respect to proportionality and precautions in the conduct of hostilities. Scholars have increasingly asserted the importance of robust assessments of the risk of civilian casualties²²³ and the Obama administration issued presidential policy guidance (what one commentator has called "folk law"²²⁴), which required that "direct action will be taken only if there is near certainty that the action can be taken without injuring or killing non-combatants."²²⁵ Moreover, whatever one thinks of precaution, it is undoubtedly true that traditional treaty-making may be an imperfect fit for situations where our collective understanding of the problem is

²²³ Geoffrey Corn, *War, Law, and Oft Overlooked Value of Process as a Precautionary Measure*, 42 PEPP. L. REV. 419, 455 (2015) ("[T]he scope of intelligence collection and analysis must be understood to include a continuing obligation to assess civilian considerations of the military operation in order to facilitate the commander's assessment of civilian risk associated with targeting decisions."); Gregory S. McNeal, *Targeted Killing and Accountability*, 102 GEO. L.J. 681, 745 (2014) ("Perhaps the simplest way to understand the mitigation process is to think of it as a series of tests based on risk."). That precautions in attack involves risk assessment is not of course new, *see, for example*, MICHAEL BOTHE ET AL., NEW RULES FOR VICTIMS OF ARMED CONFLICTS: COMMENTARY ON THE TWO 1997 PROTOCOLS ADDITIONAL TO THE GENEVA CONVENTIONS OF 1949 363 (1982), but it has gained increased salience.

²²⁴ *See generally* Naz K. Modirzadeh, *Folk International Law: 9/11 Lawyering and the Transformation of the Law of Armed Conflict to Human Rights Policy and Human Rights Law to War Governance*, 5 HARV. NAT'L SEC. J. 225 (2014).

²²⁵ *See Procedures for Approving Direct Action Against Terrorist Targets Located Outside the United States and Areas of Active Hostilities* (May 22, 2013), <https://perma.cc/N53N-NWJH>.

subject to rapid change.²²⁶ Thus, risk assessment, which is a static principle with dynamic output based on probabilities, may be useful. The bottom line is that risk can be very helpful to policymaking insofar as it can facilitate solving a variety of problems that require carefully calibrated responses.

A second potential reason for the rise of risk may be related to a broader shift toward *ex ante* compliance rather than *ex post* reparation (a shift described in part above as well). As Dinah Shelton has pointed out, “[b]reach[es] [today are] unlikely to injure another state directly or give rise to a classic claim for reparations.”²²⁷ Part and parcel with this change in the nature of disputes, as she argues, is that we tend increasingly to see *ex ante* compliance mechanisms.²²⁸ Risk fits neatly within that paradigm, both because risk (assessed *ex ante*) helps to identify situations where non-compliance may occur (before it does) and because it can be harnessed to the broader array of modes of compliance that different bodies are now pioneering (as opposed to more traditional inter-state litigation after the fact). More broadly, at the domestic level, the increasing use of risk assessments has characterized the rise of modern administration, and there is a colorable argument that states are increasingly acting as regulators at the international level (whether through international organizations²²⁹ or simply by virtue of the extraterritorial effects that their decisions may have). On this account, risk analysis is increasing because of the kinds of decisions states are now taking, which may also lend themselves to risk analysis.²³⁰

Third, a risk-based approach accounts for the multiplicity of actors relevant to international decision-making, both actors potentially involved in causing harm and actors who may be victims of harm. Risk-based norms, of course, better account for the potential harms caused by non-state actors than do state-attribution rules; risk also has a flexible aperture and is readily susceptible to being widened to capture as many or as few as may be desired with respect to the

²²⁶ FOSTER, *supra* note 129, at 9 (discussing the “difficulty with keeping international standards up to date with scientific developments”); David A. Wirth, *Examining Decision-Making Processes in International Environmental Law*, 79 IOWA L. REV. 769, 792 (1994) (“Unfortunately, the fit between the law and many environmental problems is poor [because] [s]cientific knowledge . . . can change rapidly.”).

²²⁷ Dinah Shelton, *Righting Wrongs: Reparations in the Articles on State Responsibility*, 96 AM. J. INT’L L. 833, 834 (2002).

²²⁸ *Id.* at 854–55.

²²⁹ Cf. Daniel C. Esty, *Good Governance at the Supranational Scale: Globalizing Administrative Law*, 115 YALE L.J. 1490, 1494 (2006) (analogizing views of international organization policy-making to “suspicions that accompanied the founding of the American administrative state”).

²³⁰ See, for example, Proulx, *supra* note 174, at 644 (“The global effort against terrorism is an exercise in risk assessment.”).

question of *whose* exposure to risk is relevant.²³¹ In a world where “interdependence . . . has become painfully evident,”²³² risk may play a useful role in calibrating the scope of a state’s response to a particular issue. (In fact, the concept of adaptive management, pioneered in environmental law but susceptible of application elsewhere, presupposes that risk assessments may change over time and contemplates a continual process of adjustments.²³³)

Fourth, a risk-based approach also can facilitate engagement by a broader array of actors with respect to state conduct. Smaller states and civil society are increasingly clamoring to have their voices heard. Thus, for instance, Micronesia recently sought an environmental impact statement from the Czech Republic,²³⁴ and civil society is heavily engaged on numerous issues, such as participating in the governance of mechanisms for evaluating and assessing risk presented by particular forms of corporate conduct.²³⁵ Risk-based analysis may facilitate such participation. To the extent it is procedural or turns on expertise, states may more readily heed outside inputs. This has certainly been the experience of international environmental law. (To give one example, the Aarhus Convention Compliance Committee has suggested that foreign nationals should be permitted to engage a state’s domestic environmental decision-making.²³⁶ And as one commentator has put it, it is undoubtedly the case that “procedure serves to enable, guide and at

²³¹ Cf. Eyal Benvenisti, *Sovereigns as Trustees of Humanity: On the Accountability of States to Foreign Stakeholders*, 107 AM. J. INT’L L. 295, 317 (2013) (“[C]ontemporary circumstances . . . require the recognition of a fundamental legal obligation upon sovereigns to note the interests of others when making policy choices that directly affect them.”).

²³² Esty, *supra* note 229, at 1493.

²³³ See, for example, Cooney & Lang, *supra* note 13, at 534.

²³⁴ Jutta Brunée, *International Environmental Law and Community Interests: Procedural Aspects* 13, in COMMUNITY OBLIGATIONS IN INTERNATIONAL LAW (Eval Benvenisti & Georg Nolte eds., forthcoming 2017).

²³⁵ See, for example, *Articles of Association, International Code of Conduct for Private Security Service Providers’ Association* art. 3.3.3, INT’L CODE OF CONDUCT ASSC’N, <https://perma.cc/Q8YZ-BMDJ> (last visited Oct. 9, 2017); *Voluntary Principles Initiative—Guidance on Certain Role [sic] and Responsibilities of NGOs*, VOLUNTARY PRINCIPLES, <https://perma.cc/EEP4-RJNE> (last visited Oct. 9, 2017); see also *Articles of Association, supra*, at art. 11, (permitting ICOCA to certify companies); *International Code of Conduct for Private Security Service Providers* ¶ 6(d), INT’L CODE OF CONDUCT ASSC’N, <https://perma.cc/95CH-RVGJ> (last visited Oct. 9, 2017) (discussing “deter[ing]” abuses); *Voluntary Principles on Security and Human Rights*, VOLUNTARY PRINCIPLES, <https://perma.cc/8BXH-F5QU> (last visited Oct. 9, 2017) (discussing “accurate, effective risk assessments”).

²³⁶ Meeting of the Parties to the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, Compliance Committee, Report on the Seventh Meeting, Addendum, ¶ 28, UN Doc. ECE/MP.PP/C.1/2005/2/Add.3 (Mar. 14, 2005); see also *Rio Declaration, supra* note 21, at 5, Principle 10 (“States shall facilitate and encourage public awareness and participation.”).

times even compel interaction between states and other international actors, including non-state actors.”²³⁷)

There are a number of reasons why the tandem of risk assessment and greater engagement by outside actors may be appealing for states. “Recent work on the legitimacy of international institutions has highlighted the importance of ‘input legitimacy,’ as well as ‘output legitimacy.’”²³⁸ Engagement by non-traditional actors may also produce better results.²³⁹ In this regard, many of the arguments made regarding civil society engagement with “global governance” institutions obtain here, too, in that state action increasingly affects a range of actors that the acting state may not represent.²⁴⁰

Fifth, states and other actors have access to much greater amounts of data and may feel confidence in making decisions on the basis of risks they discern from that data. The impact of (and potential hidden problems with) “Big Data” have been discussed in a variety of domestic law areas, from anti-discrimination

²³⁷ Brunée, *supra* note 234, at 7; *see also* David Gartner, *Beyond the Monopoly of States*, 32 U. PA. J. INT’L L. 595, 616–17 (2010) (“[T]here is an important literature on global administrative law, which focuses on the role of procedural requirements within international institutions as a means to improving [sic] responsiveness and accountability.”).

²³⁸ Gartner, *supra* note 237, at 604; *see also* Kal Raustiala, Note, *The ‘Participatory Revolution’ in International Environmental Law*, 21 HARV. ENVTL. L. REV. 537, 539 (1997) (“NGO participation does not undermine but rather *strengthens* the regulatory powers of states and the state system. The benefits states accrue from NGO participation allow them to regulate ecologically harmful activities with greater efficiency, effectiveness, and legitimacy.”) (emphasis in original). *Cf.* *Sierra Club v. Costle*, 657 F.2d 298, 400–01 (D.C. Cir. 1981) (“[T]he very legitimacy of general policymaking performed by unelected administrators depends in no small part upon the openness, accessibility, and amenability of these officials to the needs and ideas of the public.”); *The Idea of Risk Characterization*, in UNDERSTANDING RISK, *supra* note 10, at 24 (“The instrumental rationale for broad public participation is that it may decrease conflict and increase acceptance of or trust in decisions by government.”).

²³⁹ Wirth, *supra* note 226, at 770 (“[P]ublic participation in defining, implementing, and applying international environmental law can facilitate the twin goals of accountability and efficacy.”); Raustiala, *supra* note 238, at 557 (“Th[e] growth in the complexity, scope, and regulatory nature of international environmental law has fostered the expansion of private sector participation . . . [including] [b]ecause non-state actors frequently possess better (and different) information than governments.”). *Cf. Summary*, in UNDERSTANDING RISK, *supra* note 10, at 4 (“[A]lthough potentially more time-consuming and cumbersome in the near term, it is often wiser to err on the side of too-broad rather than too-narrow participation.”).

²⁴⁰ Daniel M. Bodansky, *The Legitimacy of International Governance: A Coming Challenge for International Environmental Law?*, 93 AM. J. INT’L L. 596, 606 (1999). For instance, NGOs can act as compliance monitors, which creates a legitimacy feedback loop. *See* Steve Charnovitz, *Nongovernmental Organizations and International Law*, 100 AM. J. INT’L L. 348, 355 (2006) (asserting that NGOs “supply the personnel and resources for managing compliance that states have become increasingly reluctant to provide”) (quoting ABRAM CHAYES & ANTONIA HANDLER CHAYES, *THE NEW SOVEREIGNTY: COMPLIANCE WITH INTERNATIONAL REGULATORY AGREEMENTS* 250–51 (1995)).

law²⁴¹ to policing.²⁴² But states may nevertheless feel like they can harness data to make better-informed decisions at the international level.²⁴³ The first turn to risk was prompted by technology²⁴⁴ and risk analysis lends itself to reliance on data because it is essentially an exercise in forecasting. Moreover, grounding a claim in empiricism can amplify its perceived legitimacy. For many, decisions based on data are inherently more trustworthy than those predicated upon other factors, because an empirical approach (it is argued) screens out politics and other preferences that might reduce the likelihood of the “right” decision being taken.²⁴⁵ Indeed, some have argued that risk-based action can help to address a legitimacy deficit in international law for this reason.²⁴⁶ And “concepts of ‘threats’ and ‘risk’ have become closely associated with scientific knowledge.”²⁴⁷

Sixth, use of risk assessments may create greater vertical congruence—that is, between domestic and international approaches. As David Wirth has noted, the “‘internationalization’ of environmental law . . . raised expectations of congruence between the international system and national decision-making procedures.”²⁴⁸ The uptake of environmental impact assessments from the national to the international level is a good example of this phenomenon.²⁴⁹ But the vector can

²⁴¹ See, for example, Solon Barocas & Andrew D. Selbst, *Big Data’s Disparate Impact*, 104 CAL. L. REV. 671 (2016).

²⁴² See, for example, Andrew Guthrie Ferguson, *Big Data and Predictive Reasonable Suspicion*, 136 U. PA. L. REV. 327 (2015).

²⁴³ Cf. Annecoos Wiersema, *Uncertainty, Precaution and Adaptive Management in Wildlife Trade*, 36 MICH. J. INT’L L. 375, 418 (2015) (“[E]nough data can give rise to sufficient levels of certainty to inform decisions using modeling and extrapolations.”).

²⁴⁴ *Report of the Working Group on International Liability*, *supra* note 114, at 150 (“A revolution in technology . . . has extended dramatically man’s power to control his environment, creating a corresponding need for the urgent development of legal norms.”).

²⁴⁵ *But cf. Judgment in the Risk Decision Process*, in UNDERSTANDING RISK, *supra* note 10, at 39 (“Individuals and groups that do not share the judgments and assumptions about the problem formulation that underlie a risk characterization may well see the information it provides as invalid, illegitimate, or not pertinent.”); PEEL, THE PRECAUTIONARY PRINCIPLE IN PRACTICE, *supra* note 21, at 65 (“[I]here may be a divergence in the way risks are perceived between ‘experts’ and the ‘lay public.’”); Vern R. Walker, *The Myth of Science as a ‘Neutral Arbiter’ for Triggering Precautions*, 26 B.C. INT’L & COMP. L. REV. 197, 198 (2003) (making “a risk determination cannot be a matter of ‘pure science’”).

²⁴⁶ PEEL, THE PRECAUTIONARY PRINCIPLE IN PRACTICE, *supra* note 21, at 48–50.

²⁴⁷ *Id.* at 65.

²⁴⁸ Wirth, *supra* note 226, at 770.

²⁴⁹ See, for example, *Draft Articles on Prevention of Transboundary Harm*, *supra* note 118, at 158 (“The legal obligation to conduct an environmental impact assessment under national law was first developed in the United States.”); NEIL CRAIK, THE INTERNATIONAL LAW OF ENVIRONMENTAL IMPACT ASSESSMENT: PROCESS, SUBSTANCE AND INTEGRATION 23 (2008) (“EIA norms have not only spread horizontally to other states, but they have also spread vertically, influencing the development of EIA norms in international law and within international organizations.”); Charles M. Kersten,

go both ways. Thus, for instance, the regulations implementing the Dodd-Frank provisions on conflict minerals required that companies follow a nationally *or internationally* recognized due diligence framework, and the OECD's Due Diligence Guidance was deemed to satisfy this.²⁵⁰

B. Is Risk Risky?

While the prior Section highlighted potential reasons (many of them salutary) for risk's rise, in this Section, I explore ways in which risk may not be an unalloyed good. To that end, I offer a preliminary assessment of the consequences of the increasing use of risk in international law. At least two sets of questions can be asked: (1) how risk-based decisions can be and are reviewed; and (2) whether risk analysis promotes horizontal harmonization or fragmentation.

The first consequence of the rise of risk is the corollary to a number of the reasons I have adduced for why it has occurred—that is, while risk-based decisions may be easier for external actors to shape, and may have (or be perceived to have) a certain objectivity to the extent decisions are predicated upon assessments of risk (or based on empirics), they may also be less susceptible to judicial review. For one thing, courts tend to be more deferential with respect to procedural law than they are with respect to substantive law.²⁵¹ Moreover, empirical claims regarding risk are fundamentally difficult to adjudicate. Consider for instance the long-standing and thorny domestic law conversation about how to analyze risks under the National Environmental Policy Act (NEPA),²⁵² including in particular high-impact, low-probability events,²⁵³ or the way courts

Note, *Rethinking Transboundary Environmental Impact Assessment*, 34 YALE J. INT'L L. 173, 173 (2009) (“The theory of EIA emerged in the domestic context.”).

²⁵⁰ Conflict Minerals Final Rule, 17 C.F.R. §§ 240, 249(b) (2012) (“The OECD’s ‘Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas’ satisfies our criteria and may be used as a framework for purposes of satisfying the final rule’s requirement that an issuer exercise due diligence in determining the source and chain of custody of its conflict minerals.”); *see also* Martin-Ortega, *supra* note 217, at 66.

²⁵¹ *Cf.* Vermont Yankee Nuclear Power Corp. v. Nat. Res. Def. Council, 435 U.S. 519, 546 (1978) (“[I]f courts continually review agency proceedings to determine whether the agency employed procedures which were, in the court’s opinion, perfectly tailored to reach what the court perceives to be the ‘best’ or ‘correct’ result, judicial review would be totally unpredictable.”).

²⁵² National Environmental Policy Act of 1969, 42 U.S.C. § 4321 (1969).

²⁵³ *See, for example*, Carla Mattix & Kathleen Becker, *Scientific Uncertainty Under the National Environmental Policy Act*, 54 ADMIN. L. REV. 1125, 1133, 1142 (2002); Irene Weintraub, Note, *NEPA and Uncertainty in Low Impact, High Risk Scenarios: Nuclear Energy as a Case Study*, 37 CARDOZO L. REV. 1565, 1567–68 (2016) (“[C]ourts have continued to interpret NEPA’s requirements in areas of uncertainty in different ways.”); Michael Hill, Note, *NEPA at the Limits of Risk Assessment: Whether to Discuss a Potential Terrorist Attack on a Nuclear Power Plant Under the National Environmental Policy Act*, 78 FORDHAM L. REV. 3007, 3025–28 (2010). Indeed, the Council on Environmental Quality (CEQ) initially required federal agencies to take a “worst-case” approach, before subsequently revising its

have struggled with scientific evidence. As Robert McCorquodale has asserted with respect to one risk-based area at the international level, “it is difficult to establish a clear standard of business due diligence that is adjudicated by dispute settlement bodies.”²⁵⁴ A further difficulty is that science, which underlies many risk claims, changes quickly, but judgments do not—that is, even if one were able to obtain reliable judgments, would one really want to revisit them every few years if the underpinnings have fallen away?²⁵⁵

These difficulties are compounded before international bodies that tend to be less experienced with—and may have fewer authorities to engage in—rigorous factfinding, which in turn may be necessary for a true evaluation of a risk-based claim.²⁵⁶ Thus, for instance, while there have been some recent positive examples of judicial engagement with scientific questions,²⁵⁷ the ICJ’s treatment of science in the *Pulp Mills* and *Certain Activities and Construction of a Road* cases has been roundly criticized. For instance, in *Pulp Mills*, the court considered an argument that Uruguay was not required to consider remote risks²⁵⁸ and did appear not to delve deeply into certain evidentiary questions.²⁵⁹ Sophie Schiettekatte has summarized that the “ICJ [was] heavily criticized for its deference when it comes to evidence of a highly scientific or technical matters [sic]”²⁶⁰ Even in the ICJ’s recent decision in the *Certain Activities and Construction of a Road* cases, which marked a certain amount of progress in my view, Judge *ad hoc* Dugard expressed

regulation in favor of analysis of “reasonably foreseeable significant adverse impacts.” Todd S. Aagaard, *A Functional Approach to Risks and Uncertainties Under NEPA*, 1 MICH. J. ENVTL. & ADMIN. L. 87, 97 (2012); Charles F. Weiss, Note, *Federal Agency Treatment of Uncertainty in Environmental Impact Assessments Under the CEQ’s Amended NEPA Regulation § 1502.22: Worst Case Analysis or Risk Threshold*, 86 MICH. L. REV. 777, 778 (1988). Compare 40 C.F.R. § 1502.22(b) (1979), with 40 C.F.R. § 1502.22(b).

²⁵⁴ Robert McCorquodale, *Corporate Social Responsibility and International Human Rights Law*, 87 J. BUS. ETHICS 385, 392 (2009).

²⁵⁵ Cf. FOSTER, *supra* note 129, at 317.

²⁵⁶ Some states may even take the view that scientific disputes are non-justiciable at international law. See *Southern Bluefin Tuna (N. Z. v. Japan, Austl. v. Japan)*, 23 R.I.A.A. 1, 28 (2006) (“questions of scientific judgment . . . are not justiciable.”); see also JAMES GERARD DEVANEY, *FACT-FINDING BEFORE THE INTERNATIONAL COURT OF JUSTICE* 74 (2016).

²⁵⁷ Some have cited the South China Sea arbitration as a model. See, for example, Sophie Schiettekatte, *Building the Bridge Between Science and Law at the International Court of Justice: From Ex Parte to Ex Curia Experts* at 9 (forthcoming 2017) (manuscript at 9), <https://perma.cc/5BDN-MJUG>; Mbengue, *supra* note 200, at 287; see generally FOSTER, *supra* note 129, at 131 (asserting that there are a “diversity of procedures” now used by courts and tribunals to undertake scientific fact-finding).

²⁵⁸ *Arg. v. Uru.*, *supra* note 17, at ¶ 203.

²⁵⁹ *Id.* at 86 ¶ 213; see also *id.* at ¶ 6 (Yusuf, J., concurring); Schiettekatte, *supra* note 257, at 7. Cf. *Arg. v. Uru.*, *supra* note 17, at 111, ¶ 6 (Al-Khasawneh J. & Simma J., dissenting). For criticism of the ICJ for failing to articulate standards to guide EIAs, see Plakokefalos, *supra* note 34, at 14–15.

²⁶⁰ Schiettekatte, *supra* note 257, at 3.

concerns²⁶¹ and Diane Desierto argued that “the Court ultimately remained opaque on the method and criteria it used to assess the degree of ‘risk of transboundary harm’ that would be sufficient to trigger a State’s obligation to conduct an EIA.”²⁶² Moreover, while in theory a ‘public accountability’ mechanism could be effective at the international level, there are significant differences between NEPA practice in the U.S. and international decision-making. For one thing, the Aarhus Convention notwithstanding, those across a border who are affected by potential decisions may have few rights to intervene.²⁶³

Second, risk-based law may be unevenly applied, both as a matter of principle and as a matter of practice. This may or may not be a good thing. For instance, risk-based law tends to distinguish between states based on their capacity to detect risk.²⁶⁴ Such differentiation would in the case of human rights, for example, be problematic. Moreover, to the extent that risk assessments disguise underlying value judgments,²⁶⁵ risk-based law may polarize states. Further, the risk threshold remains substantially uncertain. Consider for instance the many standards for when to apply a precautionary approach, ranging from “reasonable scientific plausibility” to “credible” to “non-negligible.”²⁶⁶

States may also simply judge risk in specific cases differently and risk may be a vehicle for biases and exaggerations. Thus, for instance, any number of the disputes to which I have referred in this Article evidence that states may reach different conclusions regarding risk (e.g., whether Japanese fishing plans were hazardous to bluefin tuna stocks). There are also many ways to get risk “wrong” or ways in which individuals’ biases may be manifest in their identification of risks

²⁶¹ *Certain Activities and Construction of a Road* (separate opinion of Dugard, J.), *supra* note 34, at ¶ 34 (“The fact-finding of the Court cannot be substantiated. To make matters worse the decision of the Court cannot be reconciled either with the reasoning on the obligation to conduct an environmental impact assessment employed by the Court in *Construction of a Road* or with the rules relating to environmental impact assessments expounded by the Court.”); *see also* DEVANEY, *supra* note 256, at 27 (“A number of commentators have argued that the Court has traditionally employed a number of different tactics in order to avoid engaging with complex factual and scientific determinations.”); Schiettekatte, *supra* note 257, at 8.

²⁶² Diane Desierto, *Evidence but not Empiricism? Environmental Impact Assessments at the International Court of Justice in Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua) and Construction of a Road in Costa Rica Along the San Juan River (Nicaragua v. Costa Rica)*, EJIL TALK (Feb. 16, 2016), <https://perma.cc/F5YN-JW2>.

²⁶³ Kersten, *supra* note 249, at 187.

²⁶⁴ KULESZA, *supra* note 29, at 73.

²⁶⁵ Bodansky, *supra* note 240, at 621 (“Assessing risk is a scientific task, but determining what to do in response requires value judgments about what levels of risk are acceptable.”). *Cf.* Tara Parker-Pope, *Wrong About Risk? Blame Your Brain*, N.Y. TIMES (Jan. 16, 2008), <https://perma.cc/ZCT4-Q53G>.

²⁶⁶ *See* FOSTER, *supra* note 129, at 257.

to evaluate.²⁶⁷ This suggests that the possibility that states will increasingly disagree regarding what risk-based law is telling them to do—at least to the extent it is substantive and not only procedural. Moreover, it even suggests that states could invoke risk to overreact to particular phenomena.

VI. CONCLUSION

In this Article, I have sought to show that risk-based law is on the rise. It has enormous potential to help frame solutions to today's most difficult problems. That said, there are significant enough differences in the way risk analysis is formulated outside the environmental law area that much work remains to be done if the trend I have identified is truly to bear fruit. This is not just a matter of selecting the right tool from the tool set I have sought to depict—obligation versus authorization, substantive versus procedural, contextual versus categorical. It is also a more specific question about how to construct the risk-based rule.

²⁶⁷ This includes whether individuals can bring an example of the forecast harm to mind (the availability heuristic), what Cass Sunstein calls probability neglect (overestimation of a harm because of how awful it would be if it materialized), see Cass R. Sunstein, *Probability Neglect: Emotions, Worst Cases and Law*, 112 *YALE L.J.* 61, 63 (2002), and loss aversion. See also Kahan et al., *supra* note 26, at 1077–78; *Analysis*, in *UNDERSTANDING RISK*, *supra* note 10, at 112–13.